COASTAL RESILIENCE MASTER PLAN PHASE 1: PRIORITIZING NATURE-BASED SOLUTION PILOTS DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT SAN DIEGO, CALIFORNIA

SCH #2023050148

Prepared for:

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November 2024



DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT

SCH No. 2023050148

SUBJECT: Coastal Resilience Master Plan

Applicant: City of San Diego City Planning Department

DRAFT DOCUMENT - November 22, 2024

PROJECT DESCRIPTION:

Climate change increasingly puts the City and its critical built and natural resources at risk of coastal flooding and erosion due to sea-level rise. The proposed Coastal Resilience Master Plan (CRMP) Phase 1 will identify specific resilience and conservation needs along the coastline and develop a portfolio of nature-based solutions to promote resilience, protect critical coastal habitats, support coastal access, and protect the City against the risk of climate change, in line with the Climate Resilient SD Plan (Policy TNE-3). Nature-based solutions evaluated by CRMP Phase 1 include both green and natural infrastructure. Green infrastructure encompasses a wide range of built or engineered solutions modeled after nature, while natural solutions often refer to restoration activities. Both green infrastructure and natural infrastructure support purposes such as stormwater management, flood mitigation, urban heat island reduction, and climate adaptation. While the focus of the CRMP Phase 1 is on feasibility of nature-based solutions to adapt to the effects of climate change on the City's coastline, in some situations, nature-based solutions are most successful in providing risk mitigation when designed with a hybrid approach, including some more typical engineered gray infrastructure components such as underground storage tanks or seawalls. The CRMP Phase 1 presents a combination of solutions that may offer greater shoreline protection while maintaining focus on nature-based solutions. Nature-based solutions that achieve multiple benefits, such as habitat and wildlife protection, water quality improvements, flood storage, resilience from potential upstream impacts, recreational opportunities, and increased coastal access for Communities of Concern, would be prioritized.

PROJECT LOCATION:

The CRMP Phase 1 area includes six separate project sites along the City of San Diego's coastline: La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs. Additional sites (Torrey Pines State Beach – Los Peñasquitos Lagoon, Black's Beach, Marine Street Beach, Windansea Beach, and the Naval Training Center Park) were evaluated in the CRMP for potential nature-based coastal resilience projects; however, these sites were ultimately scoped out of the CRMP Phase 1 due to factors such as site conditions, feasibility of nature-based solutions, and ease of implementation.

The CRMP Phase 1 area is entirely in the Coastal Overlay Zone. Additionally, portions of the Ocean Beach Dog Beach and Sunset Cliffs project sites are in or adjacent to the Multi-Habitat Planning Area of the City's Multiple Species Conservation Program Subarea Plan.

The CRMP Phase 1 area consists of approximately 60.42 acres of land and approximately 0.26 acre of open water for a total of 60.68 acres. According to the City's General Plan Land Use and Street System Map (Figure LU-2; City of San Diego 2020a), the majority of the CRMP Phase 1 area's western and central portions are designated as Park, Open Space, and Recreation, and the eastern edges are designated as Residential.

ENVIRONMENTAL DETERMINATION:

The purpose of this document is to inform decision-makers, agencies, and the public of the significant environmental effects that could result if the project is approved and implemented, identify possible ways to minimize the significant effects, and describe a reasonable range of alternatives to the project.

Based on the analysis conducted for the project described above, the City of San Diego has prepared the following Draft PEIR in accordance with CEQA. The analysis conducted identified that the proposed project could result in significant and unavoidable impacts in the areas of **Biological Resources, Cultural Resources, Noise, and Tribal Cultural Resources. All other impacts analyzed in this Draft PEIR were found to be less than significant.**

This document has been prepared by the City of San Diego's City Planning Department and is based on the City's independent analysis and determinations made pursuant to Section 21082.1 of the California Environmental Quality Act (CEQA) and Section 128.0103(a) and (b) of the San Diego Municipal Code.

RESULTS OF PUBLIC REVIEW:

- () No comments were received during the public input period.
- () Comments were received but did not address the accuracy or completeness of the draft environmental document. No response is necessary and the letters are incorporated herein.
- () Comments addressing the accuracy or completeness of the draft environmental document were received during the public input period. The letters and responses are incorporated herein.

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Rebecca Malone, AICP, Program Manager City Planning Department

<u>November 22, 2024</u> Date of Draft Report

Date of Final Report

Analyst: Jordan Moore, City Planning Department

PUBLIC REVIEW DISTRIBUTION:

The following agencies, organizations, and individuals received a copy or notice of the Draft PEIR and were invited to comment on its accuracy and sufficiency. Copies of the Draft PEIR and any technical appendices may be reviewed in the office of the City Planning Department or purchased for the cost of reproduction.

Federal Government

U.S. Environmental Protection Agency (19) U.S. Fish and Wildlife Service (23) U.S. Army Corps of Engineers (26) U.S. Department of the Navy

State of California

Caltrans District 11 (31) California Dept. of Fish & Wildlife (32) California Environmental Protection Agency (37A) Department of Toxic Substance Control (39) California Natural Resources Agency (43) Regional Water Quality Control Board, Region 9 (44) State Clearinghouse (46) California Coastal Commission (47/48) California Air Resources Board (49) California Transportation Commission (51) California Department of Transportation (51A) California Boating and Waterways (52) California State Coastal Conservancy (54) State Water Resources Control Board (55) Native American Heritage Commission (56/222) California Department of Conservation (60) California State Lands Commission (62) University of California Natural Reserve System California Ocean Protection Council

County of San Diego

County Vector Control (63) Air Pollution Control District (65) Department of Planning and Development Services (68) Water Authority (73) Department of Environmental Health – Land and Water Division (76)

City of San Diego

Mayor's Office (91) Council President Elo-Rivera, District 9 Council President Pro Tem LaCava, District 1 Councilmember Campbell, District 2 Councilmember Whitburn, District 3 Councilmember Foster, District 4 Councilmember von Wilpert, District 5 Councilmember Lee, District 6 Councilmember Campillo, District 7 Councilmember Moreno, District 8

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Fire-Rescue Department

Chief James Gartland, Lifeguard Chief Captain Maureen Hodge, Marine Safety Captain

Library Department

Library Department-Gov. Documents (81) Central Library (81A) La Jolla/Riford Branch Library (81L) Ocean Beach Branch Library (81V) Pacific Beach/Taylor Branch Library (81X) Point Loma/Hervey Branch Library (81Z)

Parks & Recreation Department

Andy Field, Director Karen Dennison, Assistant Director Michael Tully, Deputy Director Michelle Abella-Shon, Program Manager Mark Berninger, Senior Planner Cherlyn Cac, Senior Planner Gretchen Eichar, Senior Planner Mayra Medel, Senior Planner Paul Jacob, Associate Engineer

Stormwater Department

Alex Gostomelskiy, Senior Civil Engineer, Floodplain Manager Emir Williams, Associate Civil Engineer Michelle Hallack Alegria, Associate Civil Engineer Kevin Anub, Associate Civil Engineer

Sustainability & Mobility Department

Sarah Pierce, Senior Planner

Transportation Department

Maggie McCormick, Deputy Director Patrick Hadley, Deputy Director

City Advisory Boards and Commissions

Park & Recreation Board (83) Historical Resources Board (87) Park Development (93) Mission Bay Park Committee (318A)

Other Governments

City of Chula Vista (94) City of Coronado (95) City of Del Mar (96) City of El Cajon (97) City of Escondido (98) City of Imperial Beach (99) City of La Mesa (100) City of Lemon Grove (101) City of National City (102) City of Poway (103) City of Santee (104) City of Solana Beach (105) San Diego Association of Governments (108) San Diego Unified Port District (109) San Diego County Regional Airport Authority (110) Metropolitan Transit System (112) San Diego Gas & Electric (114)

School Districts

San Diego Unified School District (132) San Diego Community College District

Community Groups, Town and Community Councils

Community Planning Committee (194) La Jolla Community Planning Association (275) Mission Beach Precise Planning Board (325) Ocean Beach Planning Board (367) Pacific Beach Planning Group (375) Town Council Presidents Association (197) La Jolla Parks and Beaches La Jolla Shores Association La Jolla Community Planning Association La Jolla Community Planning Group La Jolla Recreation Advisory Group Bird Rock Community Council La Jolla Town Council Enhance La Jolla Pacific Beach Planning Group Pacific Beach Town Council Beautiful PB Discover PB Ocean Beach Town Council Ocean Beach Planning Group Ocean Beach Main Street Association OB Community Development Corp Mission Beach Planning Group Mission Beach Town Council Sunset Cliffs Natural Park Council Peninsula Planning Group Point Loma Association

Native American

Native American Heritage Commission (222) Kuumevaav Cultural Heritage Preservation (223) Kuumeyaay Cultural Repatriation Committee (225) Barona Group of Capitan Grande Band of Mission Indians (225A) Campo Band of Mission Indians (225B) Ewiiaapaayp Band of Mission Indians (225C) Inaja Band of Mission Indians (225D) Jamul Indian Village (225E) La Posta Band of Mission Indians (225F) Manzanita Band of Mission Indians (225G) Sycuan Band of Mission Indians (225H) Viejas Group of Capitan Grande Band of Mission Indians (225I) Mesa Grande Band of Mission Indians (225J) San Pasqual Band of Mission Indians (225K) Ipai Nation of Santa Ysabel (225L) La Jolla Band of Mission Indians (225M) Pala Band of Mission Indians (225N) Pauma Band of Mission Indians (2250) Pechanga Band of Mission Indians (225P) Rincon Band of Luiseno Indians (225Q) San Luis Rey Band of Luiseno Indians (225R) Los Covotes Band of Mission Indians (225S)

Other Interested Agencies, Organizations and Individuals

San Diego Unified School District (132) San Diego County Regional Airport Authority (110) Metropolitan Transit System (112/115) Naval Facilities Engineering Command Southwest San Diego Gas & Electric (114) Sarah Hudson (132A) University of California San Diego Library – Government Document Unit (134) UCSD Physical & Community Planning (277) San Diego Daily Transcript (135) San Diego Chamber of Commerce (157) The San Diego River Park Foundation (163/333/335) The San Diego River Coalition (164/334/337) Sierra Club (165) Neighborhood Canyon Creek and Park Groups (165A) San Diego Audubon Society (167) Mr. Jim Peugh (167A/324) San Diego River Conservancy (168) Environmental Health Coalition (169) California Native Plant Society (170) San Diego Coastkeeper (173/319) Citizens Coordinate for Century 3 (179/324A) Endangered Habitats League (182A) San Diego Tracking Team (187) League of Women Voters (192) Carmen Lucas (206) South Coastal Information Center (210) San Diego Archaeological Center (212) San Diego History Center (211) San Diego Natural History Museum (213) Save Our Heritage Organization (214) Ron Christman (215) Frank Brown, Inter-Tribal Cultural Resources Council (216) San Diego County Archaeological Society, Inc. (218) **Beautiful Pacific Beach Discover Pacific Beach** The San Diego Foundation Friend of Mission Bay Marshes Surfrider Foundation – San Diego Chapter **ReWild Mission Bay** Fiesta Island Dog Owners Association (FIDO) Pat Gallagher (322A) San Diego County Democrats for Environmental Action Sustainability Matters Handa Ornithology Lab Environmental Center of San Diego San Diego Regional Climate Collaborative Scripps Institute of Oceanography **Climate Action Campaign** SD 350 Wildcoast **Circulate SD Other Interested Parties**

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Acronyms and Abbreviations

$\mu g/m^3$	micrograms per cubic meter	
°F	degrees Fahrenheit	
AB	Assembly Bill	
ADA	Americans with Disabilities Act	
ADT	average daily trips	
AFY	acre-feet per year	
ALUCP	Airport Land Use Compatibility Plan	
amsl	above mean sea level	
Basin Plan	Water Quality Control Plan for the San Diego Basin	
BCC	Bird of Conservation Concern	
BMP	best management practice	
BRTR	Biological Resources Technical Report	
CAAQS	California Ambient Air Quality Standards	
CALFIRE	California Department of Forestry and Fire Protection	
CalEEMod	California Emissions Estimator Model	
CALGreen	California Green Building Standard Code	
Caltrans	California Department of Transportation	
CAP	Climate Action Plan	
CARB	California Air Resources Board	
CCA	California Coastal Act	
CCC	California Coastal Commission	
CCR	California Code of Regulations	
CDFW	California Department of Fish and Wildlife	
CEQA	California Environmental Quality Act	
CESA	California Endangered Species Act	
CFC	chlorofluorocarbon	
CFR	Code of Federal Regulations	
CH ₄	methane	
City	City of San Diego	
CNEL	community noise equivalent level	
CNRA	California Natural Resources Agency	
СО	carbon monoxide	
CO_2	carbon dioxide	
CO ₂ e	carbon dioxide equivalent	
COC	Community of Concern	
CRHR	California Register of Historical Resources	
CRMP Phase 1	Coastal Resilience Master Plan, Phase 1:	
	Prioritizing Nature-Based Solution Pilots	
CRPR	California Rare Plant Rank	
CRTR	Cultural Resources Technical Report	
CWA	Clean Water Act	
dB	decibel	
dBA	A-weighted decibel	
DPM	diesel particulate matter	

DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EO	Executive Order
EOC	Emergency Operations Center
FC	Federal Candidate
FE	Federally Endangered
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHSZ	Fire Hazard Severity Zone
FMMP	Farmland Mapping and Monitoring Program
FP	Fully Protected
FRAP	Fire and Resource Assessment Program
GHG	greenhouse gas
GWP	global warming potential
H ₂ CO ₃	carbon acid
H ₂ S	hydrogen sulfide
НА	hydrologic area
HU	hydrologic unit
I-	Interstate
IFS	Impact Fee Study
IPCC	Intergovernmental Panel on Climate Change
La Jolla Community Plan	La Jolla Community Plan and LCP Land Use Plan
LCP	Local Coastal Program
LDC	Land Development Code
LEED	Leadership in Energy and Environmental Design
L _{eq}	equivalent sound level
$L_{eq}(h)$	A-weighted equivalent sound level
LEV III	Low Emission Vehicle III standard
LID	Low Impact Development
LOS	level of service
MBPMP	Mission Bay Park Master Plan
mg/m ³	milligrams per cubic meter
mgd	million gallons per day
MHPA	Multi-Habitat Planning Area
Mission Beach Precise Plan	Mission Beach Precise Plan and LCP Land Use Plan
MMT	million metric tons
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSCP	Multiple Species Conservation Program
MT	metric tons
MTS	Metropolitan Transit System
MWD	Metropolitan Water District of Southern California
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	California Native American Heritage Commission
NAVD 88	North American Vertical Datum of 1988

NBS	nature-based solution
NCCP	Natural Community Conservation Planning
NCWRP	North City Water Reclamation Plant
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
NRHP	National Register of Historic Places
O ₃	ozone
Ocean Beach Community Plan	Ocean Beach Community Plan and LCP Land Use Plan
OES	Office of Emergency Services
Pacific Beach Community Plan	Pacific Beach Community Plan and LCP Land Use Plan
Pb	lead
PEIR	Program Environmental Impact Report
Peninsula Community Plan	Peninsula Community Plan and LCP Land Use Plan
PLWTP	Point Loma Wastewater Treatment Plant
PM ₁₀	particulate matter less than 10 microns
PM _{2.5}	particulate matter less than 2.5 microns
pph	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	California Public Resources Code
PUD	City of San Diego Public Utilities Department
Pure Water	Pure Water San Diego program
RAOS	Regional Air Quality Strategy
Regional Bike Plan	Riding to 2050: San Diego Regional Bike Plan
RPS	Renewable Portfolio Standard
RWOCB	Regional Water Quality Control Board
San Diego Lifeguards	San Diego Lifeguard Services
SANDAG	San Diego Association of Governments
SAP	Subarea Plan
SB	Senate Bill
SBWRP	South Bay Water Reclamation Plant
SCAOMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SDBG	San Diego Biology Guidelines
SDCWA	San Diego County Water Authority
SDIA	San Diego International Airport
SDMC	San Diego Municipal Code
SDUSD	San Diego Unified School District
SE	State Endangered
SF ₆	sulfur hexafluoride
SIP	State Implementation Plan

SLR	sea-level rise
SO_2	sulfur dioxide
SO _x	sulfur oxides
SR-	State Route
SRA	State Responsibility Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCR	Tribal Cultural Resource
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	volatile organic compound
VPHCP	Vernal Pool Habitat Conservation Plan
WL	Watch List
WSA	Water Supply Assessment

Adaptation	"Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which minimizes harm or takes advantage of beneficial opportunities" (CCC 2024).
Adaptive Capacity	"The ability of a system to respond to climate change (including climate variability and extremes), to moderate potential damages, to take advantage of opportunities, and to cope with the consequences" (CCC 2024; Willows and Connell 2003).
Assets	People, resources, ecosystems, infrastructure and the services they provide. Assets are the tangible and intangible things people or communities value" (U.S. Climate Resilience Toolkit 2021).
Berm	A raised bank or terraced embankment used for erosion control and flood protection.
Consequence	The effect of climate change exposure on community structures, functions and populations and on the asset owner or service providers' ability to maintain a standard condition or level of service (sometimes referred to as impacts) (CEMA and CNRA 2012).
Exposure	"The presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm" (Bedsworth et al. 2018; IPCC 2012).
Extreme Events	The frequency of extreme events refers to how often these events occur over a certain time period. This frequency is usually described based on historical observations or return periods. For example, a 100-year event has a 1 in 100 (or 1 percent) chance of occurring in any given year.
Groin	A purpose-built structure used to protect a shoreline from coastal erosion by retaining sand.
Hard (Gray) Infrastructure	Engineered structures that typically rely on concrete, steel, and other human-made materials, focusing on control and mitigation of natural processes rather than working with them.
Hazard	"An event or condition that may cause injury, illness, or death to people or damage to assets" (U.S. Climate Resilience Toolkit 2021).
Impact	"Effects on natural and human systems that result from hazards" (U.S. Climate Resilience Toolkit 2021).

Indigenous Knowledge	Traditional tribal knowledge for the protection, management and monitoring of tribal cultural resources.
Nature-Based Solutions	Sustainable planning, design, environmental management, and engineering practices that incorporate or mimic natural features or processes into the built environment to promote climate adaptation and resilience (FEMA 2024).
Outfalls	Where stormwater and wastewater are discharged into bodies of water.
Resilience	"The capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption" (U.S. Climate Resilience Toolkit 2021).
Risk	The potential consequences if an asset, resource or community is damaged or lost, considered together with the likelihood of that loss occurring.
Sensitivity	"The degree to which a system is affected, either adversely or beneficially, by climate-related stimuli. The effect may be direct (e.g., a change in crop yield in response to a change in the mean, range, or variability of temperature) or indirect (e.g., climatic or non-climatic stressors may cause people to be more sensitive to additional extreme conditions from climate change than they would be in the absence of these stressors)" (CCC 2024).
Vulnerability	"The extent to which a species, habitat, ecosystem, or human system is susceptible to harm from climate change impacts. More specifically, the degree to which a system is exposed to, susceptible to, and unable to cope with, the adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, as well as of non-climatic characteristics of the system, including its sensitivity, and its coping and adaptive capacity" (CCC 2024).
Wave Runup	The height above stillwater elevation reached by a wave along a beach or structure (FEMA 2023). This is typically the highest elevation along the shoreline that the wave reaches.

Executive Summary

S.1 Proposed Project

S.1.1 Project Location and Setting

The Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area includes six separate project sites along the City of San Diego's coastline: La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs (Figures 2-2 through 2-14). These project sites are discussed in greater detail in Sections 2.3.1 through 2.3.6. Additional sites (Torrey Pines State Beach – Los Peñasquitos Lagoon, Black's Beach, Marine Street Beach, Windansea Beach, and the Naval Training Center Park) were evaluated in the Coastal Resilience Master Plan (CRMP) for potential nature-based coastal resilience projects; however, these sites were ultimately scoped out of the CRMP Phase 1 due to factors such as site conditions, feasibility of nature-based solutions, and ease of implementation. Refer to Section 3.4.2, Site Selection, in Chapter 3.0, Project Description, of this Program Environmental Impact Report (PEIR) for further discussion of the comprehensive site selection process.

The CRMP Phase 1 area is entirely in the Coastal Overlay Zone. Additionally, portions of the Ocean Beach Dog Beach and Sunset Cliffs project sites are in or adjacent to the Multi-Habitat Planning Area of the City's Multiple Species Conservation Program Subarea Plan.

The CRMP Phase 1 area consists of approximately 58.38 acres of land and approximately 0.26 acre of open water for a total of 58.64 acres. According to the City's General Plan Land Use and Street System Map (Figure LU-2; City of San Diego 2020a), the majority of the CRMP Phase 1 area's western and central portions are designated as Park, Open Space, and Recreation, and the eastern edges are designated as Residential.

S.1.2 Project Description

The proposed project will identify specific resilience and conservation needs along the coastline and develop a portfolio of nature-based solutions to promote resilience, protect critical coastal habitats, support coastal access, and protect the City against the risk of climate change, in line with the Climate Resilient SD Plan (Policy TNE-3). Nature-based solutions evaluated by CRMP Phase 1 include both green and natural infrastructure. Green infrastructure encompasses a wide range of built or engineered solutions modeled after nature, while natural solutions often refer to restoration activities. Both green infrastructure and natural infrastructure support purposes such as stormwater management, flood mitigation, urban heat island reduction, and climate adaptation. While the focus of the CRMP Phase 1 is on feasibility of nature-based solutions to adapt to the effects of climate change on the City's coastline, in some situations, nature-based solutions are most successful in providing risk mitigation when designed with a hybrid approach, including some more typical engineered gray infrastructure components such as underground storage tanks or seawalls. CRMP Phase 1 presents a combination of solutions that may offer greater shoreline protection while maintaining focus on nature-based solutions. Nature-based solutions that achieve multiple benefits, such as habitat and wildlife protection, water quality improvements, flood storage, resilience from potential upstream impacts, recreational opportunities, and increased coastal access for Communities of Concern, would be prioritized.

S.2 Project Objectives

The underlying fundamental purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The primary objectives of the CRMP Phase 1 are as follows:

- Prioritize the implementation of nature-based climate change solutions wherever feasible (Climate Resilient SD Plan Policy TNE-3).
- Address the effects of sea-level rise and coastal flooding while leveraging additional co-benefits of nature-based solutions.
- Protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change.
- Protect and enhance recreational opportunities.
- Increase coastal access for all community members, with prioritization of Communities of Concern.¹

S.3 Areas of Controversy

Areas of controversy include potential impacts to coastal views, recreational facilities, biological resources, and surrounding neighborhoods.

S.4 **Project Alternatives**

To fully evaluate the environmental effects of proposed projects, the California Environmental Quality Act (CEQA) mandates that alternatives to a proposed project be analyzed. CEQA Guidelines, Section 15126.6, requires the discussion of "a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" and the evaluation of the comparative merits of the alternatives. The alternatives discussion is intended to "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.

¹ The City's term for communities with low to moderate access to opportunity based on the City's Climate Equity Index. The Climate Equity Index was developed in 2019, and revised in 2021, to measure the level of access to opportunity residents have within a census tract and assess the degree of potential impact from climate change to these areas.

Alternatives to the CRMP Phase 1 are evaluated in Chapter 8.0, Alternatives, of this PEIR. The evaluations analyze the ability of each alternative to further reduce or avoid the significant effects of the CRMP Phase 1. The PEIR evaluates three alternatives to the CRMP Phase 1: No Project Alternative, Increased Sand Dune Height/Width Alternative, and Reduced Ground Disturbance Alternative.

S.4.1 No Project Alternative

In accordance with CEQA, the PEIR includes a No Project Alternative. Under the No Project Alternative, the proposed projects identified in the CRMP Phase 1 would not be developed at the six priority project sites. The Climate Resilient SD Plan (Policy TNE-3) would not be implemented, and the City's coastal assets (e.g., recreational facilities, utilities, and transportation infrastructure) at the six project sites would see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion (City of San Diego 2019, 2020b).

Improvements at the Ocean Beach – Dog Beach project site, including construction of an elevated sand dune, construction of a multi-use path, and restoration of the existing dunes north of the parking lot, included as part of the Pilot Project would not occur. Additionally, the optional restroom relocation and express shuttle stop would not be implemented under the No Project Alternative. The parking lot and existing restroom facilities at the Ocean Beach – Dog Beach project site would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms (City of San Diego 2019, 2020b).

At the La Jolla Shores project site, construction of the earthen dikes along the western border of the grassy recreational areas at La Jolla Shores and Kellogg parks would not occur under an Amphitheater Design Option. The terraced seatwall along the western border of the existing parking lot would also not be constructed under this design option. There would also be no Reconfigured Park Design Option for a reconfigured waterfront park and reconfigured parking lot. The existing parks and parking lot at the La Jolla Shores project site would see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms (City of San Diego 2019, 2020b).

At the Pacific Beach – Tourmaline Surf Park site, the sand and cobble dune would not be constructed and the existing vegetated median that is covered with invasive ice plant would not be restored with native plant species. Implementation of the optional pedestrian pathway that would be located along the northern border of the existing parking lot would not occur. The beach, parking lot, and existing restroom facilities at the Pacific Beach – Tourmaline Surf Park project site would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms (City of San Diego 2019, 2020b).

The Mission Beach project site would not be improved with an elevated sand dune along the back of the beach, and there would be no Perched Beach Design Option to convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. The existing seawall and Ocean Front Walk would remain exposed to coastal flooding and overtopping during heavy storms (City of San Diego 2019, 2020b).

Improvements at the Ocean Beach – Pier project site, including construction of an elevated sand dune and multi-use path, would not occur. Saratoga Park, the northern parking lot, the Ocean Beach Lifeguard Station, Ocean Beach Veterans Plaza, and the Ocean Beach community east of the beach would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms (City of San Diego 2019, 2020b).

At the Sunset Cliffs project site, the road reconfiguration program, trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site would not be implemented. Additionally, the optional components, including realigning parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur. This site would continue to be susceptible to coastal bluff erosion and coastal squeeze due to the eroding cliffs and existing development east of Sunset Cliffs Boulevard (City of San Diego 2019, 2020b).

S.4.2 Increased Sand Dune Height/Width Alternative

Under this alternative, the elevated sand dune proposed as part of the Pilot Project at Ocean Beach – Dog Beach would remain approximately 1,200 feet long and would be 70 feet wide, which would be 10 feet wider than the sand dune proposed for the CRMP Phase 1 Pilot Project. The crest level of the sand dune would be 22 feet NAVD88, which would be 4 feet taller than the sand dune proposed for the Pilot Project. The footprint of the sand dune under this alternative would increase by 12,000 square feet compared to the Pilot Project. The purpose of increased height and width of the sand dune under this alternative would be to provide greater coastal flood protection to coastal infrastructure inland of the project site and to the Ocean Beach community.

The site designs described for the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Pier, and Sunset Cliffs project sites would be planned and implemented as described in Section 3.4.4, Site Solutions.

S.4.3 Reduced Ground Disturbance Alternative

Under this alternative, the proposed projects identified for the La Jolla Shores and Sunset Cliffs project sites would be replaced with alternate project concepts that would not require grounddisturbing construction activities and, therefore, would not disturb cultural and Tribal Cultural Resources located within these culturally sensitive areas. At the La Jolla Shores project site, construction of the earthen dikes along the western border of the grassy recreational areas at La Jolla Shores and Kellogg parks and construction of the terraced seatwall along the western border of the existing parking lot would not occur under an Amphitheater Design Option. There would also be no Reconfigured Park Design Option for a reconfigured waterfront park and reconfigured parking lot. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. This type of construction would be considered "capping," as defined by CEQA Statute 21083.2 and the City of San Diego's Land Development Manual for Historical Resources Guidelines, and it can help preserve the cultural site (City of San Diego 2022). At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur, first involving the use of temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers) and later, once the road design is finalized, involving restriping and installing barriers. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities would not be implemented, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site. Additionally, the optional components, including realigning parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, which could also require the use of heavy construction equipment and ground-disturbing construction activities would not occur.

The site designs described for the Ocean Beach – Dog Beach, Pacific Beach – Tourmaline Surf Park, Mission Beach, and Ocean Beach – Pier project sites would be planned and implemented as described in Section 3.4.4, Site Solutions.

S 4.4 Environmentally Superior Alternative

Based on a reduction of short-term construction-related impacts to potentially significant impacts under the CRMP Phase 1, including impacts to biological resources, cultural resources, noise, and Tribal Cultural Resources, the environmentally superior alternative is the No Project Alternative. However, as previously mentioned, the CEQA Guidelines require that, if the No Project Alternative is identified as the environmentally superior alternative, then another environmentally superior alternative must be identified.

Based on a comparison of the alternatives' overall environmental impacts and their compatibility with the CRMP Phase 1's goals and objectives, the Reduced Ground Disturbance Alternative is the environmentally superior alternative for this PEIR. The Reduced Ground Disturbance Alternative would result in less than significant impacts related to both cultural resources and Tribal Cultural Resources, the only two issue areas that would have potentially significant impacts after mitigation under the CRMP Phase 1. However, while all impacts under the Reduced Ground Disturbance Alternative would remain less than significant after mitigation, this alternative does

have greater impacts than the CRMP Phase 1 in several issue areas, as demonstrated in Table S-2, Summary of Impacts for Alternatives Compared to the Project.

The Reduced Ground Disturbance Alternative would attain all of the project objectives outlined in Section 8.1.1.1. Project Objectives. However, this alternative would not meet several project objectives to the same extent as the CRMP Phase 1. The vegetated sand dune proposed at the La Jolla Shores project site under the Reduced Ground Disturbance Alternative would have greater impacts to biological resources than the project concepts proposed for this site under the CRMP Phase 1. As a result, this alternative would not meet the objective to protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change to the same extent as the CRMP Phase 1. The Reduced Ground Disturbance Alternative would also not meet the project objective to protect and enhance recreational opportunities to the same extent as the CRMP Phase 1 because many of the proposed project components that would protect and enhance the existing recreational spaces at the Sunset Cliffs project site would not be implemented under this alternative as they require potentially ground-disturbing activities. Similarly, other potentially grounddisturbing activities at the Sunset Cliffs project site that would not be implemented under this alternative include trail enhancements and improvements and the optional realignment of parking lots. As a result, the Reduced Ground Disturbance Alternative would not meet the project objective to increase coastal access for all community members, with prioritization of Communities of Concern, to the same extent as the CRMP Phase 1.

S.5 Summary of Impacts of the Project

Table S-1, Summary of Significant Environmental Impacts, summarizes the results of the environmental analyses in Chapter 5.0, Environmental Analysis, and Chapter 6.0, Cumulative Impacts, of this PEIR, including the potentially significant environmental impacts of the CRMP Phase 1 and proposed mitigation measures to reduce or avoid these impacts.

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	Section 5.1, Aesthetics		
Issue 1: Scenic Vistas	Implementation of the CRMP Phase 1 would not result in a substantial adverse effect on a scenic vista or view from a public viewing area.	None required	Less than significant
Issue 2: Scenic Resources Within a Scenic Highway	Implementation of the CRMP Phase 1 would not substantially damage scenic resources within a state scenic highway.	None required	Less than significant
Issue 3: Visual Character or Quality	Implementation of the CRMP Phase 1 would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.	None required	Less than significant

 Table S-1. Summary of Significant Environmental Impacts

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Zoning and Regulations Governing Scenic Quality	Implementation of the CRMP Phase 1 would not conflict with applicable zoning and other regulations governing scenic quality.	None required	Less than significant
Issue 5: Light and Glare	Implementation of the CRMP Phase 1 would not create substantial light or glare that would adversely affect daytime and nighttime views in the area.	None required	Less than significant
	Section 5.2, Air Quality	1	1
Issue 1: Consistency with Applicable Air Quality Plan	Implementation of the CRMP Phase 1 would not conflict with an applicable Air Quality Plan.	None required	Less than significant
Issue 2: Cumulative Increase in Emissions/Air Quality Standards	Implementation of the CRMP Phase 1 would not result in significant criteria air pollutant emissions.	None required	Less than significant
Issue 3: Sensitive Receptors	Implementation of the CRMP Phase 1 would not expose sensitive receptors to significant air pollutant concentrations.	None required	Less than significant
Issue 4: Odors	Implementation of the CRMP Phase 1 would not generate substantial odors adversely affecting a substantial number of people.	None required	Less than significant
Section 5.3, Biological Resources			
Issue 1: Candidate, Sensitive, or Special- Status Species	Implementation of the CRMP Phase 1 would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special-status species.	MM BIO-1 through MM BIO-6	Less than significant with mitigation
Issue 2: Riparian Habitat and Sensitive Natural Communities	Implementation of the CRMP Phase 1 would have the potential to result in a substantial adverse impact on any riparian habitat or other sensitive natural community.	MM BIO-2, MM BIO- 5, and MM BIO-6	Less than significant with mitigation
Issue 3: Wetlands	Implementation of the CRMP Phase 1 would have the potential to result in a substantial adverse impact on wetlands.	MM BIO-2, MM BIO- 5, MM BIO-6, and MM BIO-7	Less than significant with mitigation
Issue 4: Native Resident or Migratory Fish or Wildlife Species	Implementation of the CRMP Phase 1 would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites.	None required	Less than significant
Issue 5: Conflict with a Habitat Conservation Plan	Implementation of the CRMP Phase 1 would have the potential to result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances.	MM BIO-6	Less than significant with mitigation

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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
	Section 5.4, Cultural Resourc	es	
Issue 1: Historical Resources	Implementation of the CRMP Phase 1 would result in a substantial adverse change in the significance of a historical resource at the Mission Beach project site.	MM CUL-1	Less than significant with mitigation
Issue 2: Archaeological Resources	Implementation of the CRMP Phase 1 would have the potential to result in a substantial adverse change in the significance of an archaeological resource or disturbance of human remains.	MM CUL-2	Significant and Unavoidable
	Section 5.5, Geology and So	ils	
Issue 1: Seismic Hazards	Implementation of the CRMP Phase 1 would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards.	None required	Less than significant
Issue 2: Erosion or Loss of Topsoil	Implementation of the CRMP Phase 1 would not result in a substantial increase in wind or water erosion of soils, beyond that which presently exists.	None required	Less than significant
Issue 3: Geologic Instability	Implementation of the CRMP Phase 1 would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the CRMP Phase 1, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.	None required	Less than significant
Section 5.6, Greenhouse Gas Emissions			
Issue 1: Generation of Greenhouse Gas Emissions	Implementation of the CRMP Phase 1 would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	None required	Less than significant
Issue 2: Conflict with Applicable Plan	Implementation of the CRMP Phase 1 would not conflict with the City's Climate Action Plan or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	None required	Less than significant
Section 5.7, Hydrology and Water Quality			
Issue 1: Water Quality Standards	Implementation of the CRMP Phase 1 would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	None required	Less than significant
Issue 2: Groundwater Supplies	Implementation of the CRMP Phase 1 would not substantially deplete groundwater supplies or interfere with groundwater recharge such that the CRMP Phase 1 may impede sustainable groundwater management of the basin.	None required	Less than significant

Table S-1. Summary of Significant Environmental Impacts
Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Site Drainage and Hydrology	Drainage y Drainage addition of the CRMP Phase 1 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.		Less than significant
Issue 4: Flood Hazard, Tsunami, or Seiche Zones	Implementation of the CRMP Phase 1 would not risk release of pollutants due to CRMP Phase 1 inundation in flood hazard, tsunami, or seiche zones.	None required	Less than significant
Issue 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan	Implementation of the CRMP Phase 1 would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	None required	Less than significant
	Section 5.8, Land Use and Plan	ning	
Issue 1: Physical Division of Established Community	Implementation of the CRMP Phase 1 would not physically divide an established community.	None required	Less than significant
Issue 2: Conflict with Applicable Land Use Plans, Policies, and Regulations	Implementation of the CRMP Phase 1 would not 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
Issue 3: Deviation or Variance	Implementation of the CRMP Phase 1 would not require a deviation or variance that would in turn result in a physical impact on the environment.	None required	No impact
	Section 5.9, Noise	1	1
Issue 1: Exceedance of Noise Standards	Implementation of the CRMP Phase 1 would have the potential to result in construction noise levels that would exceed the SDMC noise level limit of 75 dBA.	MM NOI-1	Less than significant with mitigation
Issue 2: Excessive Groundborne Vibration or Noise	Implementation of the CRMP Phase 1 would not generate excessive groundborne vibration or groundborne noise levels.	None required	Less than significant
	Section 5.10, Public Services and Re	ecreation	
Issue 1: Fire Protection, Police Protection, Schools, and Libraries	Implementation of the CRMP Phase 1 would not result in substantial adverse physical impacts associated with the construction of new or physically altered fire protection, police protection, schools, and libraries, which could cause significant environmental impacts.	None required	No impact
Issue 2: Parks	Implementation of the CRMP Phase 1 would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.	None required	Less than significant

	Table S-1.	Summary	of	Significant	Environmental	Impacts
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Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 3: Recreational Facilities	al Implementation of the CRMP Phase 1 would not include recreational facilities or require the construction or expansion of recreational facilities which would have an adverse physical effect on the environment.		Less than significant
	Section 5.11, Transportation	n	
Issue 1: Transportation System Performance	Implementation of the CRMP Phase 1 would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities.	None required	Less than significant
Issue 2: Vehicle Miles Traveled	Implementation of the CRMP Phase 1 would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual.	None required	Less than significant
Issue 3: Hazardous Design Features	Implementation of the CRMP Phase 1 would not substantially increase hazards due to a design feature or incompatible uses.	None required	Less than significant
Issue 4: Emergency Access	Implementation of the CRMP Phase 1 would not result in inadequate emergency access.	None required	Less than significant
	Section 5.12, Tribal Cultural Reso	ources	
Issue 1: Tribal Cultural Resources	Implementation of the CRMP Phase 1 would have the potential to result in a substantial adverse change in the significance of a Tribal Cultural Resource.	MM CUL-2	Significant and Unavoidable
	Section 5.13, Utilities and Service S	Systems	
Issue 1: New or Expanded Utilities	Implementation of the CRMP Phase 1 would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects.	None required	Less than significant
Issue 2: Water Supply Availability	Implementation of the CRMP Phase 1 would have sufficient water supplies available to serve the CRMP Phase 1 projects and reasonably foreseeable future development during normal, dry, and multiple dry years.	None required	Less than significant
Issue 3: Wastewater Treatment Capacity	Implementation of the CRMP Phase 1 would result in a determination by the wastewater treatment provider which serves or may serve the CRMP Phase 1 that it has adequate capacity to serve the CRMP Phase 1's projected demand in addition to the provider's existing commitments.	None required	No impact

Environmental Issue	Results of Impact Analysis	Mitigation	Impact Level After Mitigation
Issue 4: Solid Waste Generation	Implementation of the CRMP Phase 1 would not generate solid waste in excess of federal, 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
	Section 5.14, Wildfire		•
Issue 1: Emergency Response or Evacuation Plans	Implementation of the CRMP Phase 1 would not substantially impair an adopted emergency response plan or emergency evacuation plan.	None required	Less than significant
Issue 2: Pollutant Concentrations or Spread of Wildfire	Implementation of the CRMP Phase 1 would not expose CRMP Phase 1 occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	None required	Less than significant
Issue 3: Exacerbate Fire Risk	Implementation of the CRMP Phase 1 would not require the installation or maintenance infrastructure that may exacerbate fire risk or result in impacts on the environment.	None required	Less than significant
Issue 4: Flooding or Landslides	Implementation of the CRMP Phase 1 would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes.	None required	Less than significant

Table S-1. Summary of Significant Environmental Impacts

S.6 Summary of Impacts of the Alternatives Compared to the Project

As shown in Table S-2, the No Project Alternative, Increased Sand Dune Height/Width Alternative, and Reduced Ground Disturbance Alternative would result in similar impacts compared to the CRMP Phase 1. The Reduced Ground Disturbance Alternative is the environmentally superior alternative.

Table S-2. Summary	of Impacts for	Alternatives	Compared to	o the Project
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	CRMP I	Phase 1	Alternatives		
Impact	Without Mitigation	With Mitigation	Increased Red Sand Dune Gro Height/Width Distu No Project Alternative Alter		Reduced Ground Disturbance Alternative
Section 5.1, Aesthetics					
Issue 1: Scenic Vistas	LS	N/A	>	>	>
Issue 2: Scenic Resources Within a Scenic Highway	LS	N/A	=	=	=
Issue 3: Visual Character or Quality	LS	N/A	>	>	>
Issue 4: Zoning and Regulations Governing Scenic Quality	LS	N/A	>	>	>

	CRMP I	Phase 1	Alternatives		
Impact	Without Mitigation	With Mitigation	No Project	Increased Sand Dune Height/Width Alternative	Reduced Ground Disturbance Alternative
Issue 5: Light and Glare	LS	N/A	<	=	=
	Se	ction 5.2, Air Qua	ality		
Issue 1: Consistency with Applicable Air Quality Plan	LS	N/A	=	=	=
Issue 2: Cumulative Increase in Emissions/Air Quality Standards	LS	N/A	=	>	=
Issue 3: Sensitive Receptors	LS	N/A	<	>	=
Issue 4: Odors	LS	N/A	<	=	=
	Section	5.3, Biological R	esources		
Issue 1: Candidate, Sensitive, or Special-Status Species	PS	LS	<	>	=
Issue 2: Riparian Habitat and Sensitive Natural Communities	PS	LS	<	>	>
Issue 3: Wetlands	PS	LS	<	>	>
Issue 4: Native Resident or Migratory Fish or Wildlife Species	LS	N/A	=	=	=
Issue 5: Conflict with a Habitat Conservation Plan	PS	LS	<	>	=
	Sectio	n 5.4, Cultural Re	sources		
Issue 1: Historical Resources	PS	LS	<	=	=
Issue 2: Archaeological Resources	PS	SU	<	=	<
	Sectio	n 5.5, Geology ar	nd Soils		
Issue 1: Seismic Hazards	LS	N/A	<	=	=
Issue 2: Erosion or Loss of Topsoil	LS	N/A	>	=	>
Issue 3: Geologic Instability	LS	N/A	=	=	=
	Section 5.6	, Greenhouse Ga	s Emissions		
Issue 1: Generation of Greenhouse Gas Emissions	LS	N/A	=	=	<
Issue 2: Conflict with Applicable Plan	LS	N/A	=	=	>
Section 5.7, Hydrology and Water Quality					
Issue 1: Water Quality Standards	LS	N/A	=	>	=
Issue 2: Groundwater Supplies	LS	N/A	<	=	=
Issue 3: Site Drainage and Hydrology	LS	N/A	<	=	>
Issue 4: Flood Hazard, Tsunami, or Seiche Zones	LS	N/A	=	<	=

Table S-2. Summary of Impacts for Alternatives Compared to the Project

	CRMP I	Phase 1	hase 1 Alternatives		
Impact	Without Mitigation	With Mitigation	No Project	Increased Sand Dune Height/Width Alternative	Reduced Ground Disturbance Alternative
Issue 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan	LS	N/A	=	=	=
	Section	5.8, Land Use and	d Planning		
Issue 1: Physical Division of Established Community	LS	N/A	=	=	=
Issue 2: Conflict with Applicable Land Use Plans, Policies, and Regulations	LS	N/A	>	=	>
Issue 3: Deviation or Variance	NI	N/A	=	=	=
		Section 5.9, Nois	e		
Issue 1: Exceedance of Noise Standards	PS	LS	=	>	<
Issue 2: Excessive Groundborne Vibration or Noise	LS	N/A	=	=	=
	Section 5.10,	Public Services a	and Recreation		
Issue 1: Fire Protection, Police Protection, Schools, and Libraries	NI	N/A	=	=	=
Issue 2: Parks	LS	N/A	>	=	<
Issue 3: Recreational Facilities	LS	N/A	>	>	>
	Secti	on 5.11, Transpo	rtation		
Issue 1: Transportation System Performance	LS	N/A	>	=	>
Issue 2: Vehicle Miles Traveled	LS	N/A	=	=	=
Issue 3: Hazardous Design Features	LS	N/A	<	=	=
Issue 4: Emergency Access	LS	N/A	<	=	=
	Section 5.	12, Tribal Cultura	I Resources		
Issue 1: Tribal Cultural Resources	PS	SU	<	=	<
	Section 5.13	, Utilities and Ser	vice Systems		
Issue 1: New or Expanded Utilities	LS	N/A	<	=	=
Issue 2: Water Supply Availability	LS	N/A	<	=	=
Issue 3: Wastewater Treatment Capacity	NI	N/A	<	=	>
Issue 4: Solid Waste Generation	LS	N/A	<	=	=

Table S-2, Summary	v of Impacts for	Alternatives	Compared to the Project
Table 3-2. Summar	y or impacts for	Alternatives	compared to the ringect

	CRMP I	Phase 1	Alternatives Alternatives Increased Reduced Sand Dune Ground Height/Width Disturband No Project Alternative Alternative		
Impact	Without Mitigation	With Mitigation			Reduced Ground Disturbance Alternative
Section 5.14, Wildfire					
Issue 1: Emergency Response or Evacuation Plans	LS	N/A	=	=	=
Issue 2: Pollutant Concentrations or Spread of Wildfire	LS	N/A	=	=	=
Issue 3: Exacerbate Fire Risk	LS	N/A	=	=	=
Issue 4: Flooding or Landslides	LS	N/A	=	=	>

Table S-2. Summary of Impacts for Alternatives Compared to the Project

Notes: LS = Less than Significant Impact; NA = Not Applicable; NI = No Impact; PS = Potentially Significant Impact; SU = Significant & Unavoidable Impact

= Impacts would be similar to those of the CRMP Phase 1.

> Impacts would be greater than those of the CRMP Phase 1.

< Impacts would be less than those of the CRMP Phase 1.

Chapter 1.0 Introduction

This Programmatic Environmental Impact Report (PEIR) for the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1), has been prepared on behalf of the City of San Diego (City) in compliance with the California Environmental Quality Act (CEQA) (PRC Section 21000 et seq.) and the CEQA Guidelines (CCR Title 14, Section 15000 et seq.) and in accordance with the City's Environmental Impact Report (EIR) Guidelines (City of San Diego 2005) and the City's CEQA Significance Determination Thresholds (City of San Diego 2023a).

The CRMP Phase 1 analyzed in this PEIR is a comprehensive planning document that provides a policy framework to guide coastal resilience improvement projects across the coastal jurisdictional boundaries of the City in six coastal locations. Climate change increasingly puts the City and its critical built and natural resources at risk sea-level rise driven coastal flooding, particularly due to storm surge impacts, and erosion. The CRMP identifies specific resilience and conservation needs along the coastline and develops a portfolio of nature-based solutions to mitigate risk to sea-level rise, protect critical coastal habitats, and support coastal access in accordance with the City's Climate Resilient SD Plan. Finally, the CRMP recognizes the history and ancestral homelands of the Kumeyaay people, providing opportunities to partner and collaborate on the planning and restoration of the project sites. The CRMP Phase 1 seeks to identify specific resilience and conservation needs along the coastline and develop a portfolio of nature-based solutions to promote climate resilience, protect critical coastal habitats, and support coastal access. Please refer to Chapter 3.0, Project Description, for further details regarding the components of the CRMP Phase 1.

1.1 PEIR Purpose and Intended Use

In accordance with CEQA Guidelines, Section 15121, the purpose of this PEIR is to provide public agency decision makers and members of the public with adequate information regarding the potential significant environmental effects of the CRMP Phase 1, identify possible ways to minimize the significant effects, and describe reasonable alternatives that would reduce or avoid any identified significant effects of the CRMP Phase 1. This PEIR is informational in nature and is intended to provide decision makers, Responsible or Trustee Agencies as defined under CEQA, other interested agencies or jurisdictions, and the public with information about (1) the potential for significant adverse environmental impacts that would result from the development of the project, (2) possible ways to minimize any significant environmental impacts, and (3) feasible alternatives to the project (PRC Section 21002.1[a]; CCR Title 14, Section 15121[a]). Responsible Agencies will use this PEIR to fulfill their legal authority to issue permits for the CRMP Phase 1.

The City is the lead agency for this PEIR and will perform the entitlement processing of the CRMP Phase 1. When deciding whether to approve the CRMP Phase 1, the City Council will use the information in this PEIR to consider potential impacts to the physical environment associated with the CRMP Phase 1. Subsequent to the certification of the Final PEIR, agencies with permitting authority over all or portions of the CRMP Phase 1 will use the Final PEIR as the basis for their evaluation of the environmental effects related to the CRMP Phase 1 that will culminate with the approval or denial of applicable permits.

1.2 PEIR Legal Authority

1.2.1 Lead Agency

The City is the lead agency for the CRMP Phase 1 pursuant to Article 4 (Sections 15050 and 15051) of the CEQA Guidelines. The lead agency, as defined by CEQA Guidelines, Section 15367, is the public agency which has the principal responsibility for carrying out or approving a project. On behalf of the lead agency, the City Planning Department conducted a preliminary review of the CRMP Phase 1 and decided that a PEIR was required. The analysis and findings in this document reflect the independent, impartial conclusions of the City.

1.2.2 Responsible and Trustee Agencies

State law requires that all EIRs be reviewed by Responsible and Trustee Agencies. A "Responsible Agency," as defined pursuant to CEQA Guidelines, Section 15381, includes all public agencies other than the lead agency which have discretionary approval power over the CRMP Phase 1. A "Trustee Agency" is defined in CEQA Guidelines, Section 15386, as a state agency having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. Implementation of the CRMP Phase 1 would require subsequent actions or consultation from Responsible or Trustee Agencies. A brief description of some of the primary Responsible or Trustee Agencies that may have an interest in the CRMP Phase 1 is provided below.

1.2.2.1 U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) has jurisdiction over development in or affecting the navigable waters of the United States. All permits issued by the USACE are subject to consultation and/or review by the U.S. Fish and Wildlife Service (USFWS) and the U.S. Environmental Protection Agency. Drainages and open water occurring in the CRMP Phase 1 area may be classified as jurisdictional waters of the United States. A Clean Water Act Section 404 Permit would be required from the USACE.

1.2.2.2 U.S. Fish and Wildlife Service

Acting under the federal Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) is responsible for ensuring that any action authorized, funded, or carried out by a federal agency (such as the USACE) is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Accordingly, the USFWS will provide input to the USACE as part of the

Section 404 process. The role of USFWS is limited within areas covered by the City's Multiple Species Conservation Program (MSCP) Subarea Plan. For listed species covered by the Subarea Plan, the USFWS has granted take authorization to the City in accordance with the requirements of the MSCP Implementing Agreement, executed between the City, the USFWS, and the California Department of Fish and Wildlife (CDFW) in 1997. For future projects that are consistent with the City's MSCP, the City has the authority to grant permits for take of covered species, and a separate permit is not required from the wildlife agencies. For listed species not included on the MSCP covered species list, the wildlife agencies retain permit authority. No permits from the USFWS are required at this time; however, future development projects implemented under the CRMP Phase 1 may require review and/or USFWS permits.

1.2.2.3 California Coastal Commission

The California Coastal Commission (CCC) is charged with implementing the California Coastal Act of 1976. Chapter 3 of the act establishes coastal resources planning and management policies for California's Coastal Zone. The act is implemented through permitting new development and local planning and regulation. All local governments in the Coastal Zone must prepare Local Coastal Programs (LCPs), which are CCC-certified land use plans, Zoning Ordinances, and other implementing actions designed to implement the statewide policies of the act. Once an LCP is certified, most permitting review and enforcement authority of the CCC is delegated to local governments, subject to appellate review by the CCC in certain circumstances. The CCC retains permitting and enforcement jurisdiction below the mean high tide line, on public trust lands, and in areas not governed by a certified LCP. Development in the Coastal Zone must be evaluated through a permit review process for consistency with the LCPs where they are certified or the California Coastal Act where the CCC may retain permitting jurisdiction.

The open waters of the CRMP Phase 1 area fall under the jurisdiction of the CCC. Coastal Development Permits would be required by the CCC for implementation of the CRMP Phase 1.

1.2.2.4 California State Lands Commission

The California State Lands Commission protects the lands and resources entrusted to its care through balanced management, marine protection and pollution prevention, adaptation to climate change, and ensured public access to these lands and waters for current and future generations. The commission is organized into divisions that include Land Management, External Affairs, Environmental Management and Planning, Mineral Resources Management, and Marine Environmental Protection. The commission manages 4 million acres of tide and submerged lands and the beds of navigable rivers, streams, lakes, bays, estuaries, inlets, and straits. The City's granted lands run along the coastline, with the largest area concentrated in Mission Bay Park.

The California State Lands Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and beds of navigable lakes and waterways. It also has certain

residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (PRC Sections 6009[c], 6009.1, 6301, and 6306). For the CRMP Phase 1, the City is trustee of sovereign tide and submerged lands granted by the legislature pursuant to Chapter 142, Statutes of 1945, minerals reserved to the state. All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways are subject to the protections of the common law Public Trust Doctrine.

1.2.2.5 California Department of Fish and Wildlife

The CDFW has the authority to reach an agreement (Streambed Alteration Agreement) with an agency or private party proposing to alter the bed, banks, or floor of any watercourse/stream, pursuant to California Fish and Game Code, Section 1600 et seq. The CDFW generally evaluates information gathered during preparation of the environmental documentation and attempts to satisfy the permit concerns in these documents. Where state-listed threatened or endangered species not covered by the City's MSCP occur on a project site, the CDFW would be responsible for the issuance of a Memorandum of Understanding to ensure the conservation, enhancement, protection, and restoration of state-listed threatened or endangered species and their habitats. The open waters of the CRMP Phase 1 area may potentially fall under the jurisdiction of the CDFW. Section 1602 Lake and Streambed Alteration Agreements would be required from the CDFW for implementation of the CRMP Phase 1.

1.2.2.6 San Diego Regional Water Quality Control Board

The San Diego Regional Water Quality Control Board (RWQCB) regulates water quality through the Clean Water Act Section 401 certification process and oversees the National Pollutant Discharge Elimination System Permit No. CAS0109266, which consists of wastewater discharge requirements. The San Diego RWQCB is also responsible for overseeing the development and implementation of Water Quality Improvement Plans as required by the Regional Municipal Separate Storm Sewer System (MS4) Permit for the San Diego region, which includes the City, as well as ensuring that all other MS4 permit requirements are met. The open waters and other watercourses in the CRMP Phase 1 area may potentially fall under the jurisdiction of the RWQCB. Clean Water Act Section 401 Permits would be required from the San Diego RWQCB for implementation of the CRMP Phase 1.

1.3 EIR Type, Scope, Content, and Format

1.3.1 Type of EIR

This EIR has been prepared as a PEIR, as defined in Section 15168 of the CEQA Guidelines. In accordance with CEQA, this PEIR is a program-level document that examines the environmental impacts of the CRMP Phase 1, which is composed of a series of actions. The combined actions can be characterized as one large project for the purpose of this study and are herein referred to as the "CRMP

Phase 1." The PEIR focuses primarily on the physical changes to the environment that would result from the adoption and implementation of the CRMP Phase 1 and other related actions described more fully in Chapter 3.0. This PEIR evaluates all elements of the CRMP Phase 1, including the construction (short term) and operational (long term) impacts associated with its future development.

The concept level designs for the sites included in CRMP Phase 1 would be further developed over time to include precise engineering design and construction plans. These specific plans are not currently developed; however, their environmental impacts can be estimated at the program level, and a mitigation strategy can be developed that would apply to future improvements.

Additional environmental analysis will be conducted for the CRMP as the CRMP Phase 1 concept level designs are further developed. This analysis may be streamlined by tiering from this PEIR, pursuant to CEQA Guidelines Sections 15152, 15153, and 15168 (e.g., through preparation of a Mitigated Negative Declaration, Addendum, or Supplemental or Subsequent EIR).

1.3.2 PEIR Scope and Content

The scope of analysis for this PEIR was determined by the City as a result of initial project review and consideration of comments received in response to the Notice of Preparation circulated May 5, 2023, and virtual scoping meeting held on May 24, 2023. The Notice of Preparation and a recording of the virtual scoping meeting can be viewed on the City's CRMP webpage: https://www.sandiego.gov/climate-resilient-sd/projects/coastal-resilience-master-plan.

The Notice of Preparation for the analysis of the CRMP Phase 1, comment letters received, and comments made during the scoping meeting are included as Appendix A. Through these scoping activities, the CRMP Phase 1 was determined to have the potential to result in significant environmental impacts to the following subject areas:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality

- Land Use and Planning
- Noise
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The intent of this PEIR is to determine if implementation of the CRMP Phase 1 would have a significant effect on the environment through analysis of the issues identified during the scoping process. Each environmental issue area includes the thresholds of significance for the particular issue area under evaluation based on the City's CEQA Significance Determination Thresholds (City of San Diego 2023a), an issue statement, an assessment of impacts associated with implementation of the CRMP Phase 1, a summary of the significance of CRMP Phase 1 impacts, and recommendations

for mitigation measures, as appropriate. Pursuant to CEQA Guidelines, Section 15126, all discretionary actions associated with the CRMP Phase 1 are considered in this PEIR when evaluating its potential impacts on the environment, including the construction and operation of future development. Impacts are identified as direct or indirect and short term or long term and assessed on a plan-to-ground basis. The plan-to-ground analysis addresses the changes or impacts that would result from implementation of the CRMP Phase 1 compared to existing ground conditions.

1.3.3 PEIR Format

1.3.3.1 Organization

The format and order of contents of this PEIR follow the City's EIR Guidelines. A brief overview of the various chapters of this PEIR is provided below:

- Executive Summary (CEQA Guidelines, Section 15123). Provides a summary of the PEIR; a brief description of the CRMP Phase 1; an identification of areas of controversy; and a summary table identifying significant impacts, proposed mitigation measures, and the significance of impacts after mitigation. A summary of the CRMP Phase 1 alternatives and a comparison of the potential impacts of the alternatives with those of the CRMP Phase 1 are also provided.
- **Chapter 1.0, Introduction.** Contains an overview of the purpose, intended uses, and legal authority of the PEIR, as well as its type, scope, content, and format. It also provides a discussion of the CEQA environmental review process, including public involvement.
- Chapter 2.0, Environmental Setting (CEQA Guidelines, Section 15125). Provides a description of the project background, regional location, the six project sites, and existing physical characteristics and land uses in the CRMP Phase 1 area.
- Chapter 3.0, Project Description (CEQA Guidelines, Section 15124). Provides a detailed discussion of the CRMP Phase 1, including its relationship to other documents, objectives, description of the nature-based solutions being considered, scope of the CRMP Phase 1, and future actions associated with the CRMP.
- **Chapter 4.0, Regulatory Framework.** Summarizes federal, state, and local regulatory documents, plans, and policies relevant to each issue area.
- Chapter 5.0, Environmental Analysis (CEQA Guidelines, Section 15126). Provides a detailed evaluation of the potential environmental impacts associated with the CRMP Phase 1 for environmental and land use issues. The analysis begins with a summary of existing conditions and a statement of specific thresholds used to determine the significance of impacts, followed by an evaluation of potential impacts. If significant impacts are identified, feasible mitigation measures to avoid or reduce any significant impacts are identified. Where mitigation measures are required, a statement regarding the significance of the impact after mitigation is provided.

- Chapter 6.0, Cumulative Impacts (CEQA Guidelines, Section 15130). Provides an analysis of the impacts of the CRMP Phase 1 in combination with other planned and future development in the region. According to CEQA Guidelines, Section 15065, "cumulatively considerable" means the incremental effects of an individual project are considerable when viewed in connection with the effect of past projects, effect of other current projects, and effects of probable future projects as defined in CEQA Guidelines, Section 15130.
- Chapter 7.0, Other Mandatory Discussion Areas.
 - Growth Inducement (CEQA Guidelines, Section 15126.2[e]). Evaluates the potential influence the CRMP Phase 1 may have on economic or population growth in the CRMP Phase 1 area, as well as in the region, either directly or indirectly.
 - Effects Found Not to Be Significant (CEQA Guidelines, Section 15128). Identifies the issues determined in the scoping and preliminary environmental review process not to be significant for the CRMP Phase 1, and briefly summarizes the basis for these determinations. For the CRMP Phase 1, it was determined that environmental issues associated with agriculture and forestry resources, energy, hazards and hazardous materials, mineral resources, paleontological resources, and population and housing would not be significant and, therefore, are summarized in Chapter 7.0.
 - Significant Unavoidable Environmental Impacts and Significant Irreversible Environmental Changes (CEQA Guidelines, Sections 15126.2[c] and 15126.2[d]).
 Provides a summary of any significant unavoidable impacts of the CRMP Phase 1 as detailed in Chapter 5.0. This chapter also describes the potentially significant irreversible changes that may be expected and addresses the use of nonrenewable resources and energy use anticipated during CRMP Phase 1 implementation.
- Chapter 8.0, Alternatives (CEQA Guidelines, Section 15126.6). Provides a description of alternatives to the CRMP Phase 1: No Project Alternative, Increased Sand Dune Height/Width Alternative, and Reduced Ground Disturbance Alternative.
- Chapter 9.0, References Cited (CEQA Guidelines, Section 15150). Lists the reference materials cited in the PEIR.
- Chapter 10.0, Individuals and Agencies Consulted (CEQA Guidelines, Section 15129). Identifies the agencies, other organizations, and private individuals consulted in preparing the PEIR and the agencies, other organizations, and individuals responsible for the preparation of the PEIR.
- Chapter 11.0, Certification. Includes the document certifying the PEIR.

1.3.3.2 Technical Appendices

Technical reports, used as a basis for much of the environmental analysis in the PEIR, have been summarized in the PEIR and are included as appendices to this PEIR. The technical reports prepared for the CRMP Phase 1 and their location in the PEIR are listed in the Table of Contents.

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1.3.3.3 Incorporation by Reference

As permitted by CEQA Guidelines, Section 15150, this PEIR references several planning documents, studies, and reports. Information from these documents is briefly summarized in this PEIR, and their relationship to this PEIR is described in the respective chapters. All reference materials are included in Chapter 9.0, References Cited, and are hereby incorporated by reference. The documents are available for review at the City Planning Department, located at 202 C Street, San Diego, California 92101:

- City of San Diego MSCP Subarea Plan (City of San Diego 1997)
- City of San Diego Final PEIR for the Draft General Plan (City of San Diego 2007)
- City of San Diego Climate Action Plan (City of San Diego 2022)
- City of San Diego Climate Resilient SD Plan (City of San Diego 2021)
- City of San Diego Municipal Code, including the Land Development Code (Chapters 11–15) (City of San Diego 2024)
- City of San Diego General Plan (City of San Diego 2023b)

1.4 PEIR Process

The City, as the lead agency, is responsible for the preparation and review of this PEIR. The PEIR review process occurs in two basic stages. The first stage is the Draft PEIR, which offers the public the opportunity to comment on the document, and the second stage is the Final PEIR.

1.4.1 Draft PEIR

In accordance with the City of San Diego Municipal Code, Section 128.0306, and CEQA Guidelines, Section 15105, the Draft PEIR is distributed for review to the public and interested and affected agencies for a review period of 45 days. The purpose of the review period is to allow the public an opportunity to provide comments "on the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the CRMP Phase 1 might be avoided and mitigated" (CEQA Guidelines, Section 15204). In accordance with CEQA Guidelines, Sections 15085 and 15087(a)(1), upon completion of the Draft PEIR, a Notice of Completion will be filed with the California Governor's Office of Planning and Research, and a Notice of Availability of the Draft PEIR will be issued in a newspaper of general circulation in the area.

The Draft PEIR and all related technical studies are available for review at the City Planning Department located at 202 C Street, San Diego, California 92101, and on the City Planning Department's CEQA Policy and Review webpage: https://www.sandiego.gov/planning/work/ceqa.

The CRMP can be viewed on the City Planning Department webpage: https://www.sandiego.gov/ climate-resilient-sd/projects/coastal-resilience-master-plan.

1.4.2 Final PEIR

Following the end of the public review period, the City, as the lead agency, will provide written responses to comments received on the Draft PEIR per CEQA Guidelines, Section 15088. All comments and responses will be considered in the review of the PEIR. Detailed responses to the comments received during public review, a Mitigation Monitoring and Reporting Program, Findings of Fact, and a Statement of Overriding Considerations for impacts identified in the PEIR as significant and unavoidable will be prepared and compiled as part of the PEIR finalization process. The Final PEIR will address any revisions to the Draft PEIR made in response to public or public agency comments. The culmination of this process is a public hearing where the City Council will determine if to certify the Final PEIR, which includes adoption of the Mitigation Monitoring and Reporting Program, Findings of Fact, and Statement of Overriding Considerations, as being complete and in accordance with CEQA. The Final PEIR will be available for public review at least 10 days before the City Council public hearing to provide commenters the opportunity to review the written responses to their comment letters.

Chapter 2.0 Environmental Setting

This chapter provides a "description of the physical environmental conditions in the vicinity of the project" (CEQA Guidelines, Section 15125). The environmental setting provides the baseline physical conditions from which the lead agency "determines whether an impact is significant" (CEQA Guidelines, Section 15125). Further details regarding the existing settings within the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area as it relates to individual environmental topics can be found in the Existing Conditions sections of Chapter 5.0, Environmental Analysis, of this Program Environmental Impact Report (PEIR).

2.1 Project Background

In 2021, the City of San Diego (City) applied for and was awarded the National Fish and Wildlife Foundation National Coastal Resilience Fund 2021 Grant. The National Coastal Resilience Fund invests in and supports the implementation of nature-based solutions to enhance the resilience of coastal communities and ecosystems from the threat of rising sea levels, more intense storms, and changing rainfall patterns. The City is using these grant funds to prepare the CRMP Phase 1 and PEIR to support community resilience, protect endangered species and habitat, and reduce risk to coastal storms and flooding in accordance with the objectives of the National Coastal Resilience Fund.

2.2 Regional Location

The City of San Diego covers 342.5 square miles and stretches nearly 40 miles from north to south (Figure 2-1, Regional Location). There are 93 miles of shorelines including bays, lagoons, and the Pacific Ocean. Elevations mostly range from sea level to 600 feet above sea level. High points include Mount Soledad in La Jolla and Cowles Mountain in the eastern part of the City, which is nearly 1,600 feet high (City of San Diego 2023). Major transportation corridors connect communities in the City and region, such as Pacific Highway (north to south), Interstate (I-) 5 (north to south), I-8 (east to west), I-805 (north to south), I-15 (north to south), State Route (SR-) 163 (north to south), SR-52 (east to west), and SR-56 (east to west).

The CRMP Phase 1 area spans the coastal jurisdictional boundaries of the City at six separate project sites.

2.3 **Project Locations**

The CRMP Phase 1 area includes six separate project sites along the City's coastline: Pilot Project: Ocean Beach – Dog Beach, La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Pier, and Sunset Cliffs (Figures 2-2 through 2-14). These project sites are discussed in greater detail in Sections 2.3.1 through 2.3.6. Additional sites (Torrey Pines State Beach – Los Peñasquitos Lagoon, Black's Beach, Marine Street Beach, Windansea Beach, and the Naval Training Center Park) were evaluated in the Coastal Resilience Master Plan for potential naturebased coastal resilience projects; however, these sites were ultimately scoped out of the CRMP Phase 1 due to factors such as site conditions, feasibility of nature-based solutions, and ease of implementation. Refer to Section 3.4.2, Site Selection, in Chapter 3.0, Project Description, of this PEIR for further discussion of the comprehensive site selection process.

The CRMP Phase 1 area is entirely in the Coastal Overlay Zone. Additionally, portions of the Ocean Beach – Dog Beach and Sunset Cliffs project sites are in or adjacent to the Multi-Habitat Planning Area of the City's Multiple Species Conservation Program Subarea Plan.

The CRMP Phase 1 area consists of approximately 58.38 acres of land and approximately 0.26 acre of open water for a total of 58.64 acres. According to the City's General Plan Land Use and Street System Map (Figure LU-2; City of San Diego 2020), the majority of the CRMP Phase 1 area's western and central portions are designated as Park, Open Space, and Recreation, and the eastern edges are designated as Residential. The existing land uses and associated acreages in the CRMP Phase 1 area and survey buffer (100-foot radius) are shown in Table 2-1, Existing Land Use Acreages.

	U	U	
		Acres	
Land Use	CRMP Phase 1 Area	Survey Buffer	Total Survey Area
Urban/Residential Land (Including Roads)	22.56	41.60	64.15
Vegetated Land	1.91	2.07	3.98
Shoreline	33.92	25.48	59.39
Open Water	0.26	13.86	14.12
Total	58.64	83.00	141.64

Table 2-1. Existing Land Use Acreages

Source: Appendix C.

Notes: The land uses shown are general and not representative of official land use designations established in the City's General Plan and Community Plans. Acreages rounded to one-hundredth of an acre. Totals may not sum due to rounding.

The existing setting on each of the six project sites is described in greater detail below. The Ocean Beach – Dog Beach project site is described first because this project site was determined to be implemented as the Pilot Project (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). The remaining project sites (i.e., La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Pier, and Sunset Cliffs) are described in order from north to south along the City's coastline.

2.3.1 Pilot Project: Ocean Beach – Dog Beach

Ocean Beach – Dog Beach is a curved sandy beach north of the Ocean Beach – Dog Beach project site that faces north and west along the mouth of the San Diego River (to the north), where it meets the Pacific Ocean (to the west). Immediately north of the San Diego River is the Quivira Jetty, an approximately 0.9-mile-long rock jetty that separates the mouth of the San Diego River south of the jetty and the entrance channel to Mission Bay to the north. The northwestern portion of the beach is a wide and sandy beach for dogs and their owners. A smaller jetty (referred to locally as the Stub Jetty) is west of Temporary Lifeguard Tower 5 at the northern end of the Ocean Beach –

Dog Beach project site. The eastern portion of the project site meets Smiley Lagoon. The San Diego River Bikeway runs east–west south of Smiley Lagoon along the northern border of the Ocean Beach – Dog Beach project site. South of the San Diego River Bikeway is an L-shaped parking lot that serves the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites.

The Ocean Beach – Dog Beach project site is approximately 12.85 acres comprising open space beach and shoreline, a developed parking lot, and a small portion of native dune and scrub habitat in the eastern portion of the site (Figure 2-3, Ocean Beach – Dog Beach Project Site). A small sliver of the northern portion of the site is in the Multi-Habitat Planning Area of the Multiple Species Conservation Program Subarea Plan. The Ocean Beach – Dog Beach project site consists of the paved entrance to Ocean Beach – Dog Beach, a parking lot, Brighton Park, a portion of the San Diego River Bikeway, and the western-facing portion of beach between the Stub Jetty and a cobble groin at the southern end of the site (referred to locally as the Avalanche Groin).

The L-shaped parking lot provides approximately 307 vehicle parking spaces, including nine Americans with Disabilities Act (ADA) accessible parking spaces. The parking lot is a one-way flow lot that is often congested with drivers searching for parking. The northern and western borders of the parking lot are lined with approximately 3-foot-tall concrete k-rails that prevent sand from blowing into the parking lot and provide limited coastal flood protection. Along the eastern border of the parking lot is Brighton Park, a grassy landscaped area interspersed with concrete picnic benches. A public restrooms facility with water fountains and outdoor beach showers is provided south of the parking lot and west of Spray Street. Several volleyball courts are along the back of the beach at the southern end of the Ocean Beach – Dog Beach project site. Temporary Lifeguard Tower 4 near the restrooms is outside the project site boundaries. The Ocean Beach – Dog Beach project site is bordered to the southeast by single-family and multi-family residential development and to the west by the Pacific Ocean. The Ocean Beach – Dog Beach project site is directly adjacent to the Ocean Beach – Pier project site to the south, separated by the Avalanche Groin (refer to Section 2.3.5, Ocean Beach – Pier).

A winter berm is constructed on the Ocean Beach – Dog Beach project site every fall and maintained throughout the winter season to provide coastal flood protection. Refer to Section 2.3.2, La Jolla Shores, for a complete discussion of the City's winter berm program. Approximately 75 truckloads of material are used to construct the winter berm along Ocean Beach (including the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites).

According to the U.S. Geological Survey's Coastal Storm Modeling System (CoSMoS),¹ the Ocean Beach – Dog Beach project site is vulnerable to the annual storm flood at 3.3 feet (1 meter)

¹ CoSMoS 3.0 is the best available modeling data to prepare quantitative geospatial assessments of future projected sea-level rise and storm surge impacts (USGS 2019). CoSMoS is a publicly available, federally supported system and the primary model used by coastal jurisdictions and agencies along the California coast to assess vulnerabilities from potential inundation and temporary coastal flooding from a 100-year storm event. CoSMoS flood maps illustrate the potential extent of inundation and/or temporary

of sea-level rise and to coastal erosion (without storm) at 4.1 feet (1.25 meters) of sea-level rise. The site is particularly vulnerable near the public restrooms at the southern end of the site. Existing site considerations include the following:

- Space tradeoffs such as wildlife habitat, dog use areas, volleyball courts, fire pits, grassy areas, and vehicular use/parking.
- The current winter berm program to protect inland areas from coastal flooding.

2.3.2 La Jolla Shores

The La Jolla Shores project site is approximately 21.02 acres and extends from the intersection of Paseo Del Ocaso and El Paseo Grande at the northern boundary to Avenida De La Playa at the southern end. The site includes open space beach, shoreline, parkland, and the La Jolla Shores parking lot, which provides approximately 378 vehicle parking spaces, including three lifeguard parking spaces, eight ADA accessible parking spaces, and five parking spaces for "Authorized Vehicles Only" (Figure 2-5, La Jolla Shores Project Site). The La Jolla Shores project site consists of two grassy park areas (La Jolla Shores Park to the north and Kellogg Park to the south) separated by a paved parking lot immediately east of a boardwalk (La Vereda pedestrian path) and sandy beach area to the west. The two park areas are interspersed with concrete picnic tables; fire pits; large eucalyptus, palm, and other trees; and green hedges. A playground structure is at the southwest corner of Kellogg Park. Each park area includes public restrooms and showers near the southwest corners of the parks. The La Jolla Shores Lifeguard Station, a permanent lifeguard facility, is in the southwest corner of the parking lot.

The La Vereda pedestrian path separates the sandy beach to the west and the parks and parking lot to the east. Along the western border of the pedestrian path is a 2-foot-tall seawall, and concrete benches line the eastern border of the pedestrian path. Temporary Lifeguard Towers 31, 32, and 33 are encompassed by the project site. The site is bordered to the east by residential development and to the west by the open waters of the Pacific Ocean.

According to CoSMoS, the La Jolla Shores project site is vulnerable to storm flooding at 2.5 feet (0.75 meter) of sea-level rise and coastal erosion at 3.3 feet (1 meter) of sea-level rise. Existing site considerations include the following:

- The La Jolla Shores project site is a high-use recreational area due to the presence of two parks and a parking lot.
- The existing seawall currently provides a sea-level rise and coastal flooding buffer for land uses to the east of the beach. The seawall could be incorporated into the nature-based design for the project site.

coastal flooding from a 100-year storm event resulting from projected sea-level rise for specific water elevations to measure impacts to assets and operations.

• The area currently experiences flooding during extreme storm events that reach the parking lot and the low-lying Camino Del Oro roadway.

2.3.3 Pacific Beach – Tourmaline Surf Park

The approximately 3.66-acre Pacific Beach – Tourmaline Surf Park project site is along and at the end of Tourmaline Street, west of La Jolla Boulevard. The stretch of beach at this project site is naturally narrow due to the coastal bluff-backed setting. The project site contains open space beach and shoreline to the west, a developed parking lot and landscape areas to the east, and stormwater infrastructure along the northern perimeter of the project site boundary (Figure 2-7, Pacific Beach – Tourmaline Surf Park Project Site). The Pacific Beach – Tourmaline Surf Park project site is bordered to the north, south, and east by residential development and to the west by the open waters of the Pacific Ocean. The project site consists of Tourmaline Street west of La Jolla Boulevard, including the landscaped recreational area immediately north of this roadway, the Tourmaline Beach parking lot, and a ramp entrance to the beach on the west. The culvert and bluff north of the fencing along the north side of Tourmaline Street are not included on the project site. Two small grassy landscaped recreational areas are on either side (north and south) of the parking lot entrance along Tourmaline Street. The grassy area to the north of Tourmaline Street provides two picnic areas.

The parking lot is at a lower elevation than its surroundings and is bordered to the north and south by steep vegetated slopes. The parking lot provides approximately 100 vehicle spaces, including three ADA accessible parking spaces. There is also a public restroom at the southwestern end of the parking lot and a lifeguard driveway access at the northwestern end of the parking lot, which also provides a paved entrance to the beach. Tourmaline Beach, used primarily by surfers, includes a cobble berm and riprap west of the access ramp. Several informal trails and accessways to the beach are provided along the slopes south of the site. Additionally, a pump station exists at the southern end of the site, immediately east (inland) of the sandy beach area near the intersection of Pacific View Drive, Loring Street, and Ocean Boulevard.

The City's winter berm program is implemented immediately south of the project site. The City's winter berm program, which has been implemented since at least the 1940s, includes the annual installation of sand berms in the fall (generally in October) to prevent coastal flooding associated with tidal action and coastal erosion. These berms (approximately 6 to 8 feet high and 30 feet wide) are usually flattened in the spring (generally in March) to provide additional sand along the beach and help reverse the effects of sand erosion caused by heavy winter storms. Construction of the winter berms occurs during daylight hours (generally between 6:00 a.m. and 6:00 p.m.) depending on the tides. Berm maintenance and repairs occur as needed at any time of the day or night depending on the severity of the repairs needed and the tide. The winter berm is constructed over an average period of 5 days at each location in which the program is implemented. Construction of the berm involves the use of trucks and front-end loaders. This winter berm is approximately 6

to 8 feet high, up to 20 feet wide, and approximately 400 feet long. A 10-yard dump truck is used to transport material as needed to construct the berm, although the material is generally sourced from littoral (i.e., the shore of local coastal) sources near each site. Approximately 50 truckloads are used to transport material to the shores along all of Pacific Beach, including the berm south of the Pacific Beach – Tourmaline Surf Park project site.

According to CoSMoS, the Pacific Beach project site is vulnerable to the 100-year flood at 4.9 feet of sea-level rise and to shoreline and bluff erosion at 2.5 feet (0.75 meter) of sea-level rise. Existing site considerations include the following:

- Coastal flooding impacts are currently contained to the sandy beach front and do not enter elevated developed properties to the east.
- The lifeguard driveway access must be maintained.
- A 2-year Beach Bug shuttle pilot project started in summer 2023 to increase access to the beach.
- The existing cobble and riprap feature provides a good foundational support for future resilience strategies.

2.3.4 Mission Beach

Mission Beach is an approximately 2.18-mile-long west-facing beach that runs from Pacific Beach in the north to the entrance channel into Mission Bay to the south. The beach is bounded by the Pacific Ocean to the west and the Mission Beach Boardwalk (Ocean Front Walk) to the east (Figure 2-9, Mission Beach Project Site).

The approximately 8.92-acre Mission Beach project site consists of an approximately 0.3-mile stretch of Mission Beach bounded by Ventura Place to the north and San Fernando Place to the south. The project site consists primarily of the sandy beach area west of Ocean Front Walk. The project site encompasses Temporary Lifeguard Towers 13 and 14, and the Mission Beach Lifeguard Station, a permanent lifeguard facility, is east of the project site on the western side of the northern Belmont Park parking lot. The land immediately east of the project site across Ocean Front Walk includes commercial and recreational uses, such as Belmont Park, associated parking lots to the north (approximately 250 vehicle parking spaces, including three spaces reserved for delivery vehicles and seven ADA accessible parking spaces) and south (approximately 453 vehicle parking spaces, including 12 ADA accessible parking spaces), and Mission Beach Park at the southern end. A public restrooms facility is south of Belmont Park and west of the southern parking lot.

A 3-foot-tall seawall provides a border on the west side of Ocean Front Walk. There are eight beach access points along the seawall on the project site, including three with ADA accessible ramps. In addition to the permanent seawall along Ocean Front Walk, a winter berm is constructed on the Mission Beach project site every fall and maintained throughout the winter season to

provide additional coastal flood protection. Refer to Section 2.3.2 for a complete discussion of the City's winter berm program. Between 25 to 40 truckloads of sand are used to construct the winter berm along Mission Beach.

According to CoSMoS, the Mission Beach project site is vulnerable to overtopping, coastal erosion at 3.3 feet (1 meter) of sea-level rise, and coastal flooding compounded with bayshore flooding at 2.5 feet (0.75 meter) of sea-level rise. The site is also vulnerable to the 100-year flood with no (zero feet) sea-level rise. Existing site considerations include the following:

- The project site is a high-use area, with a combination of residential, recreational, and commercial surrounding uses.
- The beach width is reasonably stable.
- The site has benefited from regional sand nourishment programs.
- There is opportunity for increased habitat and dune features.

2.3.5 Ocean Beach – Pier

The Ocean Beach – Pier project site is immediately adjacent to and south of the Ocean Beach – Dog Beach project site (Figure 2-11, Ocean Beach – Pier Project Site). The approximately 11.9-acre Ocean Beach – Pier project site consists of open space beach and shoreline, as well as a developed parking lot, with a small portion of commercial development along the southeastern edge. To the north of the project site is the Ocean Beach – Dog Beach – Dog Beach project site. The site extends from the groin at the south end of the Ocean Beach – Dog Beach project site to the Ocean Beach Pier. The Ocean Beach – Pier project site primarily consists of sandy beach between small single-family residences to the east and the Pacific Ocean to the west. The beach is wide at the northern end and becomes narrower and tapers off to the south as it reaches the Ocean Beach Pier.

The northeastern part of the beach supports a number of volleyball courts used by beach volleyballers. South of the volleyball courts are two grassy landscaped areas (Saratoga Park to the north and Ocean Beach Veterans Plaza to the south) separated by a small, paved public parking lot that provides approximately 69 vehicle spaces, including three ADA accessible parking spaces. Public restrooms are provided at the southern end of the parking lot. A permanent lifeguard facility (Ocean Beach Lifeguard Station) is at the southern edge of the parking lot adjacent to the public restrooms. Additionally, Temporary Lifeguard Towers 1, 2, and 3 are on the project site. The Ocean Beach Veterans Plaza is often used by art vendors and for community events, such as silent discos, drum circles, and yoga classes. South of the Veterans Plaza and north of the pier is another paved public parking lot, which provides approximately 84 vehicle spaces and four motorcycle spaces.

An existing rock revetment protects the northern parking lot area, lifeguard station, and most of Ocean Beach Veterans Plaza from coastal impacts. Additionally, an approximately 2-foot-tall seawall lines the eastern border of the beach adjacent to a pedestrian path between the southern portion of Ocean Beach Veterans Plaza and the tidepools south of the pier. One gap in the seawall providing beach access is near the intersection of Abbot Street and Newport Avenue. In addition

to the rock revetment and seawall, a winter berm is constructed on the Ocean Beach – Pier project site every fall and maintained throughout the winter season to provide additional coastal flood protection. Refer to Section 2.3.2 for a complete discussion of the City's winter berm program. Approximately 75 truckloads of sand are used to construct the winter berm along Ocean Beach (including the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites).

According to CoSMoS, the Ocean Beach – Pier project site is vulnerable to storm flooding at 4.1 feet (1.25 meters) of sea-level rise and to coastal erosion (without storm flooding) at 3.3 feet (1 meter) of sea-level rise. This site is particularly vulnerable between the parking lot and restroom as well as at the southern end of Ocean Beach Veterans Plaza. Existing site considerations include the following:

- The site provides an opportunity to use the wide open space area as a flood barrier.
- An evaluation of seawall elevation at the southern end of Ocean Beach Veterans Plaza should be made.
- An evaluation of coastal infrastructure realignment should be made.
- There is currently a transport of sand from the southern end of the beach to the northern end.
- The connection to the Ocean Beach Pier should remain accessible.

2.3.6 Sunset Cliffs

The Sunset Cliffs project site is approximately 0.29 acre and encompasses Sunset Cliffs Boulevard, as well as all areas seaward (west) of the roadway, from Adair Street at the northern boundary to Ladera Street at the southern boundary (Figure 2-13, Sunset Cliffs Project Site). Sunset Cliffs Boulevard is a two-way, two-lane roadway that runs north–south adjacent to the Sunset Cliffs Natural Park – Linear Park. Sunset Cliffs Natural Park – Linear Park includes an approximately 1.17-mile-long stretch of open space shoreline and coastal trail adjacent to the Pacific Ocean to the west and Sunset Cliffs Boulevard to the east. To the east of Sunset Cliffs Boulevard are large single-family coastal homes that look out over the cliffs toward the ocean.

A number of informal trails break off from the main Sunset Cliffs Coastal Trail and lead toward lookout points along the cliffside. An informal beach access path leads down to No Surf Beach, and a formal accessway with stairs is provided at the southern boundary (the intersection of Sunset Cliffs Boulevard and Ladera Street). The area immediately south of this project site (Sunset Cliffs Natural Park – Hillside Park) is in the Multi-Habitat Planning Area of the Multiple Species Conservation Program Subarea Plan.

Four small parking lots that provide approximately 65 total vehicle spaces for Sunset Cliffs are west of Sunset Cliffs Boulevard and northwest of Froude Street. South of Hill Street, dispersed parallel parking spaces occur on the western side of Sunset Cliffs Boulevard from Luscomb's Point to Ladera Street. Additionally, parallel parking is available on both sides of all of the cross streets that intersect with Sunset Cliffs Boulevard.

The Sunset Cliffs project site currently experiences bluff erosion and is subject to continued bluff erosion entering the roadways at 1.6 feet (0.50 meter) of sea-level rise. Existing site considerations include the following:

- Bluff toe-fills are currently present at the project site.
- There are opportunities to increase habitat where possible and remove invasive species.
- There are concerns related to street parking.



/11/2023 - Læst saved by: Randy Deodal - Path: C:/GISProjects/CNy of San Diego/Coastal Resilience Master PlanMap Docs/P







Figure 2-4. Ocean Beach – Dog Beach Project Site – Photos

Facing west toward the Pacific Ocean along the San Diego River Bikeway (left). Facing north along the beach toward Ocean Beach – Dog Beach proper (right).




Figure 2-6. La Jolla Shores Project Site – Photos

The La Jolla Shores project site includes Kellogg Park, La Jolla Shores Park, and the La Jolla Shores parking lot, as well as a portion of La Jolla Shores beach, which is separated by the La Vereda pedestrian path.





Figure 2-8. Pacific Beach – Tourmaline Surf Park Project Site – Photos

Facing west toward the beach on Tourmaline Street near its intersection with La Jolla Boulevard (left).

Facing north along the beach at the Pacific Beach – Tourmaline Surf Park (right).





Figure 2-10. Mission Beach Project Site – Photos

Ocean Front Walk is adjacent to/east of the Mission Beach project site.





Figure 2-12. Ocean Beach – Pier Project Site – Photos

The Ocean Beach – Pier project site facing northeast toward the Ocean Beach Lifeguard Station and public restrooms.



Feet

Sunset Cliffs Project Site

Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots



Figure 2-14. Sunset Cliffs Project Site – Photos

The Sunset Cliffs Natural Park – Linear Park is a coastal trail with expansive views of the Pacific Ocean that serves as an attraction for San Diego residents and national and international visitors.

Chapter 3.0 Project Description

3.1 Introduction

This chapter provides a description of the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1), the potential environmental effects of which are evaluated in Chapters 5.0 through 8.0 of this Program Environmental Impact Report (PEIR). The CRMP Phase 1's relationship to other documents and objectives are described below, followed by a description of the site solutions considered by the CRMP Phase 1. The project description contained within this section provides the basis for the environmental analysis in this PEIR.

3.2 Relationship to Other Documents

The CRMP Phase 1 helps to address some of the City of San Diego's (City's) vulnerabilities to coastal hazards identified in the City's Sea Level Rise Vulnerability Assessment and the City's Climate Change Vulnerability Assessment and supports implementation of the Climate Resilient SD Plan.

3.2.1 Sea Level Rise Vulnerability Assessment

The City's Sea Level Rise Vulnerability Assessment, completed in 2019, is a technical report that presents key findings from the assessment of exposure, sensitivity, and adaptive capacity of critical built, natural, and cultural assets to coastal hazards. The focus of this vulnerability assessment is on City-owned assets, as the results inform the identification of adaptation measures to protect critical City assets and services. Additionally, this assessment informs the Climate Resilient SD Plan and the City's Climate Change Vulnerability Assessment, a broader Citywide multi-hazard vulnerability assessment, which includes analysis for vulnerability to additional climate hazards, including precipitation-driven flooding, extreme heat, and wildfires, as described below.

3.2.2 Climate Change Vulnerability Assessment

In 2020, the City completed a Citywide Climate Change Vulnerability Assessment to identify risks and potential impacts from climate change to the City's assets and resources. Specifically, the Climate Change Vulnerability Assessment identifies and analyzes the risks to assets and services owned or managed by the City from climate change-related hazards, such as coastal hazards (including sea-level rise and flooding), wildfires, precipitation, and extreme heat. Vulnerability to these hazards is assessed by evaluating exposure and sensitivity to the hazards and the extent that the City can adapt to the hazard (i.e., adaptive capacity). The Climate Change Vulnerability Assessment determined that several critical asset types (e.g., public safety assets, utility pipelines, transportation infrastructure, open space and recreational facilities, and historical, Tribal cultural, and archaeological resources) have a high vulnerability to coastal flooding (sea-level rise and/or storm surge with sea-level rise) and coastal erosion. The results of the 2020 Climate Change Vulnerability Assessment informed the development of the Climate Resilient SD Plan, described below.

3.2.3 Climate Resilient SD Plan

The Climate Resilient SD Plan is the City's comprehensive climate adaptation and resilience plan to identify beneficial adaptation strategies, capitalize on co-benefits, increase local resilience, and provide a framework for Citywide resilience action. The plan considers how to best plan for vibrant communities, protect the environment, and prosper in the emerging economy. The Climate Resilient SD Plan addresses the four primary climate change-related hazards for the City: extreme heat, extreme rainfall or drought, wildfires, and sea-level rise. The plan includes a suite of goals, policies, and strategies to minimize risk and increase the resilience of San Diego's people, assets, economy, and natural resources to climate change. The five main goals of the Climate Resilient SD Plan are:

- 1. Ensure communities are connected and informed to be best prepared for climate change.
- 2. Plan for and build a resilient and equitable city.
- 3. Safeguard, preserve, and protect historic and Tribal cultural resources from the effects of climate change.
- 4. Support and prioritize thriving natural environments and enhance adaptability.
- 5. Maintain and ensure minimal disruption to all critical City services in the face of climate change hazards.

Each goal includes supporting policies that reflect the City's values and priorities and help guide the implementation of the adaptation and resilience strategies. The adaptation and resilience strategies are a suite of actions that support the five goals. These strategies support and expand upon existing efforts already undertaken by the City to prepare for a changing climate, such as wildfire preparedness, increasing urban tree canopy, and increasing protected habitat areas. These strategies have also been shaped by public input. The CRMP Phase 1 uses the Climate Resilient SD Plan to inform development of nature-based coastal resilience projects to build resilience to the impacts of sea-level rise and enhance and protect the City's coastline.

3.3 **Project Objectives**

The underlying fundamental purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The primary objectives of the CRMP Phase 1 are as follows:

- Prioritize the implementation of nature-based climate change solutions wherever feasible (Climate Resilient SD Plan Policy TNE-3).
- Address the effects of sea-level rise and coastal flooding while leveraging additional co-benefits of nature-based solutions.
- Protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change.

- Protect and enhance recreational opportunities.
- Increase coastal access for all community members, with prioritization of Communities of Concern.¹

3.4 **Project Description**

Climate change increasingly puts the City and its critical built and natural resources at risk of coastal flooding and erosion due to sea-level rise. The proposed CRMP Phase 1 will identify specific resilience and conservation needs along the coastline and develop a portfolio of naturebased solutions to promote resilience, protect critical coastal habitats, support coastal access, and protect the City against the risk of climate change, in line with the Climate Resilient SD Plan (Policy TNE-3). Nature-based solutions evaluated by CRMP Phase 1 include both green and natural infrastructure. Green infrastructure encompasses a wide range of built or engineered solutions modeled after nature, while natural solutions often refer to restoration activities. Both green infrastructure and natural infrastructure support purposes such as stormwater management, flood mitigation, urban heat island reduction, and climate adaptation. While the focus of the CRMP Phase 1 is on feasibility of nature-based solutions to adapt to the effects of climate change on the City's coastline, in some situations, nature-based solutions are most successful in providing risk mitigation when designed with a hybrid approach, including some more typical engineered gray infrastructure components such as underground storage tanks or seawalls (refer to Figure 3-1, Nature-Based and Gray Infrastructure Solutions). The CRMP Phase 1 presents a combination of solutions that may offer greater shoreline protection while maintaining focus on nature-based solutions. Nature-based solutions that achieve multiple benefits, such as habitat and wildlife protection, water quality improvements, flood storage, resilience from potential upstream impacts, recreational opportunities, and increased coastal access for Communities of Concern, would be prioritized. Nature-based solutions that are evaluated by the CRMP Phase 1 are described further in Section 3.4.1, Nature-Based Solutions.

The CRMP Phase 1 evaluates feasibility, risk, and benefits of developing nature-based solutions at 11 coastal locations in the City, listed here from north to south and including Torrey Pines State Beach – Los Peñasquitos Lagoon, Black's Beach, La Jolla Shores, Marine Street Beach, Windansea Beach, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, Sunset Cliffs, and the Naval Training Center Park. However, as previously mentioned, the CRMP Phase 1 narrows the scope of the project sites down to six sites most appropriate and feasible for nature-based solutions. The six locations include Ocean Beach – Dog Beach, La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Pier, and Sunset Cliffs (refer to Figure 2-2 through Figure 2-13). These six locations are analyzed

¹ The City's term for communities with low to moderate access to opportunity based on the City's Climate Equity Index. The Climate Equity Index was developed in 2019, and revised in 2021, to measure the level of access to opportunity residents have within a census tract and assess the degree of potential impact from climate change to these areas.

in the CRMP Phase 1 at greater detail for suitability of nature-based solutions. The nature-based solutions were developed by gathering relevant data to assess each site's unique opportunities and constraints to ensure feasibility. The concepts for each site are compared in a multi-criteria decision matrix to support understanding of the proposed solutions for each site. The matrix includes an assessment of the community, resilience, economics, and ecosystem benefits.

Based on the analysis of feasibility, risk, and benefits of the nature-based solutions at each project site, the CRMP Phase 1 developed up to three concepts for further development depending on site feasibility. One location (the Pilot Project) is analyzed at the 15 percent design level (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach).

3.4.1 Nature-Based Solutions

Nature-based solutions are sustainable planning, design, environmental management, and engineering practices that incorporate or mimic natural features or processes into the built environment to promote climate adaptation and resilience. These solutions use natural features and processes to (FEMA 2023a):

- Combat climate change
- Reduce flood risk
- Improve water quality
- Protect coastal property
- Restore and protect wetlands
- Stabilize shorelines
- Reduce urban heat
- Add recreational space, among other benefits

Specific types of nature-based solutions evaluated by the CRMP Phase 1 are described below.

3.4.1.1 Wetland Creation/Restoration

The CRMP Phase 1 evaluates the potential for several of the project sites to be improved with wetland creation or restoration for ecosystems characterized by permanent or seasonal inundations. Restoring and protecting wetlands can improve water quality and reduce flooding. Wetlands also sustain healthy ecosystems by recharging groundwater and providing habitat for fish and wildlife. Coastal wetlands are found along ocean, estuary, or freshwater coastlines. They are often referred to as "sponges" because of their ability to absorb wave energy during storms or normal tide cycles (FEMA 2021).

A managed wetland is a type of natural infrastructure. Manipulating water levels and cleaning out plant growth can enhance a managed wetland's water quality, habitat, and flood storage benefits (FEMA 2021).

3.4.1.2 Living Shorelines

A living shoreline is a protected, stabilized coastal edge made of a combination of living components, such as plants, and structural elements, such as sand, rock, and other natural materials (FEMA 2021; NOAA 2023). Unlike a concrete seawall or other hard structure, which impedes the growth of plants and animals, living shorelines grow over time.

Living shorelines can help purify water, store carbon, and attract wildlife to habitat (NOAA 2023). They can also help stabilize and protect the shoreline from strong waves, minimize coastal flooding, reduce shoreline erosion, and protect coastal property (FEMA 2021). In fact, evidence shows that during major storms, a living shoreline performs better than a hardened shoreline (NOAA 2023).

3.4.1.3 Oyster Reefs

Oysters live in salty or brackish coastal waters, clustering on hard surfaces submerged below the water, such as shells, rock, or piers. As they grow, oysters fuse together, forming rock-like reefs that provide habitat for other marine animals and plants. Oysters are often referred to as "ecosystem engineers" because of their tendency to attach to hard surfaces and create large reefs made of thousands of individuals (FEMA 2021).

According to the National Oceanic and Atmospheric Administration (NOAA), oyster reefs are a crucial component of global ocean health. In addition to offering shelter and food to coastal species, oysters filter and clean the surrounding water, provide habitat, and protect coastlines from wave inundation (FEMA 2021). Because oysters feed by filtering algae from the water, they function as a natural filter and improve water overloaded with nutrients. Under certain conditions, a single oyster can filter up to 50 gallons of water per day. This cleaner water can also support underwater grasses, which can help create a stable sea floor and a safe habitat for wildlife (NOAA 2022).

Depending on where the reefs are located, they can serve as natural barriers to the shoreline and protect underwater vegetation and waterfront communities from some effects of strong waves, floods, tides, and storm surge. Well-established beds of underwater grasses help stabilize the bottom, providing additional resilience against wave action. Healthy reefs and established vegetation protect habitat and reduce wave energy and coastal erosion (NOAA 2022).

3.4.1.4 Waterfront Parks

Waterfront parks include open space parks and recreational spaces in coastal areas that are intentionally designed to flood during extreme events, minimizing flooding elsewhere. Waterfront parks can also absorb the impact from tidal or storm flooding and improve water quality (FEMA 2021).

3.4.1.5 Engineered Sand Dunes

Dunes are coastal features made of blown sand. Healthy dunes often have dune grasses or other vegetation to stabilize the sand and keep the dune's shape. Dunes can serve as a barrier between the water's edge and inland areas, buffering waves as a first line of defense against shoreline erosion and coastal flooding (FEMA 2021). Engineered dunes can be designed to combine the aesthetic and habitat benefits of a dynamic beach and dune system with the robust storm protection provided by a structural core. The CRMP Phase 1 evaluates the use of engineered dunes designed to or above the 100-year stillwater elevation.²

3.4.1.6 Earthen Dikes

A dike is a barrier constructed of earth or manufactured materials with the purpose of protecting low-lying areas against flooding. Dikes are normally constructed parallel and adjacent to a stream, river, wetland, or water body rather than across a stream, river, or water body (U.S. Department of Agriculture 2015). An earthen dike is constructed of earthen materials, such as soil and vegetation.

3.4.1.7 Landward Realignment

Landward realignment, sometimes called managed retreat, involves moving the coastline boundary inland to reduce coastal flooding and erosion and save coastal habitat, such as beaches and marshes. As sea levels rise, coastal salt marshes and beaches retreat landward; however, when their retreat path is blocked by hardened shoreline structures (e.g., seawalls or rock revetments), the wetlands and beaches are lost in what is known as "the coastal squeeze." The loss of coastal wetlands from rising sea levels and storms reduces wetland-dependent fish and invertebrates and reduces the natural protections to coastal communities (CCC 2021; NOAA 2019). A setback moves hardened infrastructure, including roads, away from the coast, providing extra space for flood water (FEMA 2023b).

3.4.1.8 Living Levees

Levees provide a vertical barrier against storm surge or river overtopping (FEMA 2023b). Instead of dropping down sharply, living levees (also called horizontal levees or ecotone slopes) slope gently downwards in the same way that the land naturally would. This allows for natural, gradual transitions (from open water to tidal mudflat, to tidal marsh, to "ecotone" or transitional upland habitat) to be re-established in these areas. Living levees provide better protection against sealevel rise, since the gradual slopes and tidal marsh vegetation act to slow storm surges and absorb floodwaters. As a result, the earthen levee system can be lower than it would otherwise have to be, saving significant costs in construction and reducing the visual barrier between the water and the

² Stillwater elevation is the elevated water level observed during a flood event. The stillwater elevation tells us how high floodwaters could rise during a flood event due to storm surge, tides, wave setup, or other factors that cause water levels to increase, such as seasonal effects. The higher the stillwater elevation, the farther inland the impacts of flooding will be felt. The stillwater elevation does not include the additional height of waves that ride on top of the water's surface (FEMA n.d.).

protected community behind the levee (Green Foothills 2016). While living levees are currently being implemented primarily in bay communities (e.g., San Francisco Bay Area and Imperial Beach), they may also be used along ocean shores.

3.4.2 Site Selection

The City originally identified the following 11 sites to be analyzed for their viability of naturebased coastal resilience solutions in the CRMP Phase 1:

- Torrey Pines State Beach Los Peñasquitos Lagoon
- Black's Beach
- La Jolla Shores
- Marine Street Beach
- Windansea Beach
- Pacific Beach
- Mission Beach
- Ocean Beach Dog Beach
- Ocean Beach Pier
- Sunset Cliffs
- Naval Training Center Park

These locations were selected after a review of the City's Climate Change Vulnerability Assessment (2020), as well as the City's Sea Level Rise Vulnerability Assessment (2019a), the City's State Lands Sea Level Rise Vulnerability Assessment (2019b), and the City's Coastal Erosion Assessment Photograph Analysis (2018). Much of the City's prior climate adaptation and resiliency efforts focused on infrastructure vulnerabilities and reducing the risks to critical facilities such as roads, bridges, and water infrastructure. As highlighted in the Climate Resilient SD Plan, nature-based solutions can protect, sustainably manage, and restore natural or modified ecosystems, while also protecting critical infrastructure, addressing societal challenges, improving human well-being, and providing biodiversity benefits. As such, this initial suite of sites was selected for feasibility of implementing a nature-based solution that supports three primary factors:

- Increases resiliency to sea-level rise
- Provides habitat enhancement and preservation opportunities
- Enhance for coastal access for Communities of Concern

These sites were investigated through a multi-criteria analysis to identify the location and site boundaries most viable for a nature-based concept. The process for this decision-making process is described below.

3.4.2.1 Priority Criteria for Site Selection

The following criteria were used to narrow the 11 original coastal sites to six priority sites chosen based on a combination of factors, including identified sea-level rise vulnerability, overall feasibility of implementation, stakeholder feedback, and existing barriers to implementation. The overarching goal is for the future projects, when implemented, to support community resilience, protect or enhance critical habitat and species, and reduce risk to coastal storms and flooding. The sites were assessed against a multi-criteria analysis that considered these factors, as described further below.

Social and Biological Criteria

To further narrow down the selection of potential projects in the CRMP Phase 1, existing social and biological designations were used as well as other general base map layers. The social and biological layers used in this analysis are described as follows:

- City ownership was a crucial factor in site selection, as any project pursued would need to fall within the City's jurisdiction with its ability to fund, plan, implement, and monitor a project largely located on City-owned property without having to coordinate with another landowner group or body.
- City's Multi-Habitat Planning Area (MHPA) was developed by the City in cooperation with the wildlife agencies (U.S. Fish and Wildlife Service and California Department of Fish and Wildlife), property owners, developers, and environmental groups. The MHPA delineates core biological resource areas and corridors targeted for conservation. Within the MHPA, limited development may occur. Currently, the MHPA is focused on terrestrial habitats and ecosystems; as the CRMP Phase 1 focuses on coastal habitats, the site selection process considered subtidal, tidal, and coastal strand ecosystems. The MHPA was included in the site selection process, as protection and enhancement of habitat for key plant and wildlife species was a stated priority of the CRMP Phase I.
- Communities of Concern is the City's term for communities with low to moderate access to opportunity based on the City's Climate Equity Index (2019c). Updated in 2021, this factor was used to help identify projects in coastal areas that could help support coastal and beach access to Communities of Concern.

Physical Criteria

The analysis of priority project sites also reviewed the physical limitations or vulnerabilities of each of the 11 sites of interest.

- The site selection analysis considered how permitting, construction, and other implementation factors would likely impact a potential project. These considerations determine a site's feasibility of implementation.
- Sea-level rise scenarios for flooding, storm surge, and coastal and cliff erosion from the Coastal Storm Modeling System were used to determine the sea-level rise

vulnerabilities, erosion thresholds, and tipping points and how the existing uses of each site would be compromised by projected coastal impacts. In combination with the data from previous vulnerability assessments, these hazard overlays helped generate sitespecific understandings of substantial loss of services, thresholds for significant impacts, and flood connectivity across a site under various sea-level rise scenarios.

• Assumptions for high-level project concepts that could be pursued at each site were necessary to evaluate the feasibility of a nature-based solution and its capacity to reduce vulnerabilities while improving access, enhancing habitat areas, and providing coastal resilience. Feasibility of nature-based solutions was considered to screen out sites that could not support nature-based solutions. Some of the project sites were determined to not have suitable features for nature-based solutions or require the use of primarily gray infrastructure solutions to improve resiliency to sea-level rise.

3.4.2.2 Scoring

A scoring matrix (Table 3-1, Site Selection Scoring Matrix Based on the Priority Criteria) was used to evaluate each potential site based on the priority criteria described above. Site selection scoring considered the following six criteria:

- City ownership of the site
- Impacts to the existing MHPA
- Potential project benefits to Communities of Concern
- Ease of implementation (e.g., permitting process, constructability of the site)
- Sea-level rise vulnerability and associated risk to habitat and public access
- Feasibility to develop nature-based solutions at the site

The scoring was designed to include scale and variation between the indicators described under the scores 0/1, 3, and 5, which is why scores 2 and 4 do not include indicator descriptions.

	Score						
Criteria	0/1		3		5		
City Ownership	Site not within City-owned area		Site mostly within City- owned area		Site fully within City- owned area		
MHPA	Project will impact existing MHPA negatively		No MHPA exists but project may provide some habitat benefits		MHPA will be protected, enhanced, or made resilient with project		
COC	Project will not benefit COC		Project will moderately support COC		Project will provide benefits to COC		
Ease of Implementation (Permitting, Constructability)	Major hurdles to implement; many permitting challenges; difficult constructability		Some hurdles to implement; some permitting challenges; moderate challenges to constructability		Little to no hurdles to implement; few permitting challenges; easily constructible		

 Table 3-1. Site Selection Scoring Matrix Based on the Priority Criteria

	Score							
Criteria	0/1	2	3	4	5			
SLR Vulnerability / Impacts to Habitat and Public Access	Site is not vulnerable to SLR		Site currently somewhat vulnerable and will exacerbate with SLR		Site currently very vulnerable and will exacerbate with SLR			
NBS Feasibility	Would need to pilot mostly untested NBS; project uncertain of providing resilience benefits		Potential NBS exist but challenging to fit site; project will likely provide moderate resilience benefits		Established NBS methods can be used; project will likely provide significant resilience benefits			

Table 3-1. Site Selection Scoring Matrix Based on the Priority Criteria

Notes: COC = Communities of Concern; MHPA = Multi-Habitat Planning Area; NBS = nature-based solution; SLR = sea-level rise

Through an iterative process, each site was reviewed and evaluated through a discussion with the CRMP Phase 1 project team. City interdepartmental feedback was considered to finalize the scores and provided key information, which led to modification of the potential project sites. For example, Marine Street Beach was removed from the list of potential nature-based project sites. While Marine Street Beach represents a unique coastal asset that supports a robust habitat area, an initial review did not provide evidence to support that implementing a nature-based solution in this area would provide substantial benefits to coastal access or the existing habitat or greatly reduce existing coastal hazard vulnerabilities. In reviewing sea-level rise flooding and erosion modeling, available habitat information, and sediment dynamics, the CRMP Phase 1 project team decided that while project concepts could be developed to enhance some of the coastal accessways, a nature-based approach would not provide significant benefits at Marine Street Beach and should not be prioritized there at this time. Nevertheless, Marine Street Beach does represent a good opportunity as a local reference site, and it is recommended that the City continues to monitor how this beach responds to storms and future sea-level rise.

After an initial screening and discussion with City departments and complementary projects in process, it was determined advantageous to add Mission Beach to the list of potential sites for nature-based solutions. The bayside of Mission Beach is vulnerable to flooding and currently has projects in development focused on increasing resilience to these hazards. Another existing project underway is evaluating updates to the Mission Beach seawall. Given the characteristics of Mission Beach's ocean side features, it was determined that investigating nature-based solution concepts for this area presents an advantageous opportunity to develop pilot concepts that could be feasible for an important recreational and commercial corridor that would also be applicable to other areas of the City's coastline.

Table 3-2, Multi-Criteria Analysis of Potential Pilot Project Sites, provides scoring information for each of the evaluated criteria considered for each of the original 11 sites in descending order of the total score. To determine specific scores for ease of implementation and feasibility of nature-based solutions, high-level project concepts were considered for each location to better rank how the six criteria described above would likely impact a potential project. Assumptions for high-level

project concepts that could be pursued at each site were necessary to evaluate the feasibility of a nature-based solution and its ability to reduce vulnerabilities meeting the priority criteria (refer to Notes column in Table 3-2). The final six sites with the highest scores were selected for inclusion in the CRMP Phase 1 and are highlighted in green in Table 3-2.

Site	сос	City Ownership	Ease of Implementation	MHPA	SLR Vulnerability and Need	NBS Feasibility	Total	Notes (basic concepts considered to provide scores)
Ocean Beach – Dog Beach	5	5	4	5	5	4	28	A dune feature and realignment of amenities – This site presents multiple opportunities to shift hardscape areas, provide additional elevation and buffer space, and enhance resilience to coastal hazards while continuing to serve diverse user groups and recreation types.
Ocean Beach – Pier	5	5	5	3	4	5	27	Segmented dune features that integrate with the existing seawall and hardscape – This site can leverage existing protective elements, integrate with the ongoing pier improvement project, and blend softened, and nature-based amenities across the project site.
Mission Beach	3.5	5	4	3	4	5	24.5	Segmented dune features that integrate with the existing seawall – This site provides the opportunity to pilot a project at a heavily used City site that includes robust commercial and lifeguard services which can be scaled up and expanded to other similar areas.
Pacific Beach – Tourmaline Surf Park	2	5	5	3	4	5	24	A dune that incorporates the existing cobble and revetment – This site has the potential to increase viable habitat area and improve resilience while preserving existing lifeguard and maintenance access. Potential redesigns of the parking lot can enhance stormwater management and ensure better access flow for visitors and the community.
La Jolla Shores	0	5	4	3	5	4	21	A waterfront park and space realignment – This site can integrate the existing seawall protection while also providing buffer space for access and recreation to persist despite sea-level rise.
Sunset Cliffs	0	5	3	3	2	4	17	A roadway reconfiguration and/or realignment – This site could increase adaptive capacity of the corridor and provide improved access elements. As coastal squeeze impacts usable beach, and erosion continues to threaten the bluff, shifting transportation patterns and increasing multimodal access amenities can offer time and space for longer-term planning.
Marine Street Beach	0	1.5	4	5	3	2	15	Dune enhancement and/or artificial reef – This site can leverage its pocket beach setting that offers natural geometry. Lack of a parking lot and a fully armored back beach with many private properties limit the opportunities to modify adjacent amenities.

 Table 3-2. Multi-Criteria Analysis of Potential Pilot Project Sites

Site	COC	City Ownership	Ease of Implementation	MHPA	SLR Vulnerability and Need	NBS Feasibility	Total	Notes (basic concepts considered to provide scores)
Naval Training Center Park	0	4	2	3	2	4	15	An ecotone project with trail realignment – The shoreline along this site can be rehabilitated to enhance wetland habitat. Additionally, the ample backshore space allows for the integration with existing visitor serving amenities. While there are challenges with contaminated sediment and coordination across jurisdictions, this site could represent a 'no regrets' demonstration project.
Torrey Pines State Beach – Los Peñasquitos Lagoon	0	3	1	4	3	4	15	A roadway realignment project – This site represents a vulnerable and important transportation corridor where tradeoffs between habitat, beach use, and access intersect. While a NBS is possible, the scale of the site requires significant multi-jurisdictional coordination and long-term visioning to be successful.
Black's Beach	0	5	3	5	1	1	15	Dune segments focused at access points – This site has minimal existing infrastructure to allow for a targeted NBS approach. As bluff retreat occurs, additional sediment will be available for the beach supporting usable space. However, the relatively narrow beach width may present inadequate space for a dune feature to provide significant resilience benefits.
Windansea Beach	0	1.5	2	4	3	1	11.5	A roadway reconfiguration and/or artificial reef – This site could buffer existing beach erosion and roadway impacts by providing more buffer space for habitat and enhance wave dampening. However, concerns over impacts to existing surf resources limit offshore options. Roadway modifications in the area present challenges and will require long-term resilience planning efforts given the residential nature of the area.

Table 3-2. Multi-Criteria Analysis of Potential Pilot Project Sites

Notes: COC = Communities of Concern; MHPA = Multi-Habitat Planning Area; NBS = nature-based solution; SLR = sea-level rise The sites are presented in descending order according to the total score obtained.

3.4.3 Pilot Project: Ocean Beach – Dog Beach

The CRMP Phase 1 analyzes six priority sites for suitability of nature-based solutions and gray infrastructure solutions. Up to three nature-based solution concepts were considered for each of the six priority sites in the CRMP.

Based on the analysis of feasibility, risk, and benefits of the nature-based and gray infrastructure solutions on each project site, the CRMP Phase 1 developed one location (the Pilot Project) at the 15 percent design level. Given the high score in the City's site selection process (refer to Section 3.4.2, Site Selection), the Pilot Project was determined to be implemented on the Ocean Beach – Dog Beach project site. The Pilot Project is described below.

3.4.3.1 Site Conditions and Constraints

Ocean Beach – Dog Beach is at the mouth of the San Diego River at the northwestern end of the community of Ocean Beach (refer to Figure 3-2, Site Selection). A very popular beach due to access, parking availability, and amenities, Ocean Beach – Dog Beach is well used by beachgoers, dog owners, volleyball players, and surfers. A large parking lot, located just behind the beach, serves the Ocean Beach – Dog Beach project site. The parking lot's northern and western perimeters are lined with concrete k-rails that block sand from being blown from the beach onto the parking lot. The project site also provides basic amenities, such as showers, water fountains, bathrooms, and a grassy park area with benches (refer to Figure 2-3, Ocean Beach – Dog Beach Project Site, and Section 2.3.1, Pilot Project: Ocean Beach – Dog Beach, for a complete description of the existing setting on this project site). The area north and east of the project site and the northern portion of the project site are within the MHPA (refer to Figure 2-3).

Due to the orientation of and wave exposure at Ocean Beach – Dog Beach, the site experiences an overall northward sediment transport. The shoreline of the Ocean Beach – Dog Beach project site is relatively stable due to the long Quivera Jetty structure (referred to locally as the Big Jetty), which separates the San Diego River channel and the Mission Bay entrance north of the project site, an existing short jetty (referred to locally as the Stub Jetty) at the northern end of the site, and a groin (referred to locally as the Avalanche Groin) at the southern end of the site. Both the jetty and groin structures assist with stabilizing the generally wide, sandy beach. However, the Ocean Beach – Dog Beach project site is currently susceptible to coastal flooding and erosion, especially during storm events, that will worsen with future sea-level rise. In particular, the restroom at the southern end of the parking lot is exposed to coastal flooding in the existing condition.

The City currently implements a linear sand berm on the project site as part of the annual winter berm program, in which a sand berm (approximately 6 to 8 feet high and 30 feet wide) is constructed in the fall (generally in October) to reduce impacts of coastal flooding to the beach amenities and Ocean Beach community during heavy winter storms. The winter berm is built along the back (landward side) of the beach from the Stub Jetty to Avalanche Groin. The winter berm is then flattened in the spring (generally in March) once the storm season ends to provide additional sediment that reduces the effects of coastal erosion. Construction of the winter berm occurs during daylight hours (generally between 6:00 a.m. and 6:00 p.m.), depending on the tides. Berm maintenance and repairs occur as needed at any time of the day or night, depending on the severity of the repairs needed and the tide. The winter berm is constructed over an average of 5 days at each location in which the program is implemented. Construction of the berm involves the use of trucks and front-end loaders. Approximately 75 truckloads of material are used to construct the winter berm along Ocean Beach (including the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites).

3.4.3.2 Pilot Project Description

The Pilot Project would include a new multi-use path for cyclists and pedestrians fronted by elevated sand dunes along the beach on the Ocean Beach – Dog Beach project site. The multi-use path and sand dunes would be along the landward edge of the beach, adjacent to the existing parking lot. The sand dunes, which are inspired by the City's existing winter berm program, would provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and providing a reservoir of sand to the beach that can be used during erosive conditions. The proposed sand dunes would make this annual feature a permanent fixture on the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. The proposed multi-use path and sand dunes would include pedestrian, ADA, and emergency access points along the project site and maintain existing parking on site (refer to Figure 3-3, Pilot Project at Ocean Beach – Dog Beach Concept Renderings).

In addition to the proposed multi-use path and sand dunes, the existing sand dunes north of the parking lot (adjacent to the north and south of the San Diego River Bikeway) would be restored with native vegetation. Two optional components of the Pilot Project include restroom relocation and an express shuttle stop on the Ocean Beach – Dog Beach project site (refer to Figure 3-4, Pilot Project at Ocean Beach – Dog Beach with the Optional Restroom Relocation).

These project features and optional components are described below.

Multi-Use Path

The Pilot Project would install a 1,200-foot multi-use path, which would extend from the existing western terminus of the San Diego River Bikeway to the Avalanche Groin (refer to Figure 3-3). In combination with the proposed improvements at the Ocean Beach – Pier project site, the combined multi-use path on both sites would connect the San Diego River Bikeway to the Ocean Beach Pier. The path would be 14 feet wide and is envisioned to include a Class I bikeway and separated pedestrian trail to reduce risk of collisions. The footprint of the path on the Ocean Beach – Dog Beach project site would be approximately 16,800 square feet.

A concrete header curb would line the entire length of the eastern edge of the multi-use path to separate the path from the landside facilities, particularly vehicles in the parking lots and park spaces. The western edge of the path is envisioned to be stabilized via a low concrete seatwall. This seatwall would lessen the amount of sand blowing from the beach and proposed sand dune and help prevent it from covering the proposed multi-use path.

Elevated Sand Dune

Along the seaward edge of the proposed multi-use path, the Pilot Project would construct an approximately 60-foot-wide and 1,200-foot-long sand dune on the beach (refer to Figure 3-3). The proposed sand dune is anticipated to occupy approximately 72,000 square feet (1.4 acres). The crest level (top) of the sand dune would be designed to mimic the elevation of the existing winter berm that is built along the beach annually at a height of approximately 5 feet above existing grades (17 feet North American Vertical Datum of 1988 [NAVD 88]³). The dune would require about 10,000 cubic yards of sand to be constructed. Sand used to construct the proposed sand dune is anticipated to be sourced from littoral (i.e., the shore of local coastal) sources in the CRMP Phase 1 area (e.g., intertidal zone or San Diego River flood shoal).

The proposed sand dune would be planted or seeded with a native mix of vegetation similar to the adjacent dunes at the mouth of the San Diego River. Vegetation may include pink sand verbena (*abronia umbellate*), red sand verbena (*abronia maritima*), beach evening primrose (*camissoniopsis cheiranthifolia*), and saltgrass (*distichlis littoralis*). Planting density is anticipated to be roughly one plant per 10 square feet, which translates to approximately 7,200 plants for the dune. Dune vegetation would be established via hand watering techniques; no fixed irrigation is proposed. These native plants would provide ecological benefits through introduction of rare plant species and habitat for threatened and endangered bird species.

Restored Dune Area

The Pilot Project would restore existing dune habitat north of the parking lot at the western terminus of the San Diego River Bikeway (refer to Figure 3-3). This restoration area would encompass two segments adjacent to the north and south of the San Diego River Bikeway within the MHPA (refer to Figure 2-3). The northward segment would be roughly 20 feet wide by 180 feet long (approximately 3,600 square feet), and the segment between the San Diego River Bikeway and parking lot would be roughly 30 feet wide by 300 feet long (approximately 9,000 square feet), comprising a total dune restoration area of 12,600 square feet. The restoration area would employ a

³ The North American Vertical Datum of 1988 (NAVD 88) is the current vertical control datum for the contiguous United States and Alaska, which was established by the minimum-constraint adjustment of the Canadian-Mexican-United States leveling observations. A vertical datum is a surface of zero elevation to which heights of various points are referenced. NAVD 88 consists of a leveling network on the North American Continent, ranging from Alaska, through Canada, across the United States, affixed to a single origin point on the continent (NOAA 2018a, 2018b).

similar plant palette and density as described above for the proposed sand dune; however, the dune profile and hummocks (i.e., mounds) would be contoured to match the existing dunes in this area.

Optional Restroom Relocation

An optional component of the Pilot Project includes relocating the existing restroom facility farther inland to reduce vulnerability and continued exposure to coastal flooding and sea-level rise. The existing restroom south of the parking lot could be relocated to a more central location within the grass landscaped areas next to the parking lot (refer to Figure 3-4). The restroom will be assessed to determine if relocation is possible or if reconstruction would be necessary. The new or relocated restroom would be at least 1,800 square feet. The new location of the restroom would be more accessible to users of the parking lot and would significantly increase the resilience of this facility due to the proposed location landside of the proposed sand dune.

Optional Express Shuttle Stop

Another optional component of the Pilot Project would be to provide an express shuttle that runs from an appropriate transportation center (e.g., Old Town Transit Center) to the Ocean Beach – Dog Beach project site. To support this transit service, a shuttle stop would be provided in the parking lot on the Ocean Beach – Dog Beach project site or along an adjacent street (refer to Figure 3-3). This express shuttle could improve access to the beach and associated recreational facilities and could reduce parking lot congestion and vehicle trips to the project site.

Construction Methods and Equipment

The Pilot Project is expected to be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and during the dry season. Imported material (via dump truck) would be minimal and limited to decomposed granite, aggregate base, and concrete for the proposed multi-use path. Sand for the proposed sand dune would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone or the San Diego River flood shoal.

3.4.4 Site Solutions

As previously described, the CRMP Phase 1 analyzes six priority sites (the Pilot Project and five other project sites) for suitability of nature-based solutions. Up to three nature-based solution concepts were considered for each of the six priority sites in the CRMP. The design concepts determined to be the most feasible and successful for each of the five other project sites are discussed below.

3.4.4.1 La Jolla Shores

Site Conditions and Constraints

La Jolla Shores is a popular recreational beach in La Jolla south of the Ellen Browning Scripps Memorial Pier. The often narrow sandy beach is entirely backed by a seawall (approximately 12.5 feet NAVD 88 in elevation) that protects the La Vereda pedestrian path (at an elevation of approximately 11 feet NAVD 88), the parking lot, and two grassy park areas (La Jolla Shores Park to the north and Kellogg Park to the south) on either side of the parking lot. The La Jolla Shores Lifeguard Station, a permanent lifeguard facility, is in the southwestern corner of the parking lot. Additionally, the two parks provide recreational amenities, such as concrete picnic tables, fire pits, restrooms and showers, and a playground (refer to Figure 2-5). The La Jolla Shores project site is along a northwest-facing shoreline and is exposed to the effects of coastal flooding with overtopping of the seawall occurring during extreme tide and wave events. Refer to Section 2.3.2, La Jolla Shores, for a complete description of the existing setting on this project site.

Project Description

There are two different design options that are considered in the CRMP Phase 1 for the La Jolla Shores project site – the Amphitheater Design Option and the Reconfigured Park Design Option, both described further below.

Amphitheater Design Option

The Amphitheater Design Option of the La Jolla Shores project would construct two different flood protection strategies across the site. Along the seaward (western) borders of La Jolla Shores Park and Kellogg Park, an elevated linear earthen dike would be constructed between the grassy area and the La Vereda pedestrian path. The earthen dike could be contoured and planted with native plants to integrate more natural elements and provide ecological benefits. Along the seaward border of the parking lot (between the parking lot and the La Vereda pedestrian path), a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection benefit (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). These project features are described below.

Earthen Dikes

Two earthen dikes would be constructed under this design option, including one along the western edge of La Jolla Shores Park on the northern side of the project site and one along the western edge of Kellogg Park on the southern side of the project site (refer to Figure 3-5). The northern dike would be approximately 15 to 20 feet wide and 500 feet long, occupying a 10,000-square-foot (0.23-acre) footprint. The southern dike would be approximately 15 to 20 feet wide and 600 feet long, occupying a 12,000-square-foot (0.28-acre) footprint. The combined footprint of the two dikes would be approximately 22,000 square feet (0.5 acre). The crest level of the dike would be
designed to provide additional coastal resilience behind the existing seawall, at a height between 2 to 5 feet above the existing elevation of the La Vereda pedestrian path. The final crest height of the earthen dikes would be established following additional technical analysis of projected sea-level rise and coastal flooding at the site. Ground cover on the earthen dikes could be grass (similar to the existing recreational areas), drought-tolerant and native species, or a combination of vegetation types. Additionally, the seaward side of the earthen dikes could be terraced in an amphitheater style to offer enhanced viewing and passive recreational opportunities. The southern earthen dike would follow the edge of the grassy landscaped area of Kellogg Park; therefore, it would be situated on the landward side of the existing playground, bathrooms, and educational infrastructure in the southwestern corner of the park.

Terraced Seatwall

The proposed terraced seatwall would extend along the entire seaward edge of the existing parking lot with the exception of the area around the La Jolla Shores Lifeguard Station (refer to Figure 3-5). The terraced seatwall would be approximately 20 feet wide and 550 feet long, occupying an 11,000-square-foot (0.25-acre) footprint. The crest level of the terraced seatwall would be at a height between 2 to 5 feet above the existing elevation of the La Vereda pedestrian path. The final crest height of the terraced seatwall would be established following additional technical analysis of projected sea-level rise and coastal flooding on the site. The seatwall design would generally have an amphitheater-style shape and function with seating and picnic opportunities terraced on the ocean-facing side. The terraces of the seatwall could be designed to incorporate pavers, minor vegetation and planter boxes to soften the feature, as well as appropriate safety features (e.g., handrails and railings). Accessways through the terraced seatwall would be integrated at key points with both staired terraces and access ramps compliant with the Americans with Disabilities Act (ADA). A small concrete floodwall (roughly 100 feet long) at the same height of the seatwall would be constructed between the lifeguard station and the parking lot to provide a continuous layer of flood protection.

Reconfigured Park Design Option

The Reconfigured Park Design Option of the La Jolla Shores project would reconfigure the parking lot and grassy recreational areas to orient the recreational areas more seaward (west) and align the parking lot more inland and linearly along Camino del Oro. A grassy recreational area would be created along the entire western side of the existing parking lot, creating a long linear and continuous grassy park north-south across the La Jolla Shores project site (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). The purpose of this design option would be to align the recreational space seaward of the parking lot to absorb the impact from coastal flooding, improve water quality, and avoid or minimize flooding of the parking lot.

Although the existing recreational areas and parking lot would be reconfigured, the total footprint of the proposed parking lot would remain the same as the existing parking lot within the La Jolla Shores project site. The same would be true for the combined footprint of the grassy recreational areas. Currently, the parking lot is approximately 128,500 sf (2.95 acres). La Jolla Shores Park is approximately 70,200 sf (1.61 acres) and Kellogg Park is approximately 111,700 sf (2.56 acres), with a combined footprint of approximately 181,900 sf (4.18 acres).

Realigned Recreational Area

Under this design option, the two existing parks would be reconfigured into one continuous waterfront park on the seaward side of the realigned parking lot (refer to Figure 3-6). The footprint of the proposed recreational area would remain the same as the combined footprint of the existing recreational areas (approximately 181,900 sf). Therefore, there would be no net loss of recreational space under this design option. This would require converting approximately 84,000 sf (1.93 acres) of the existing parking lot into recreational area.

One linear earthen dike could be constructed along the seaward edge of the reconfigured recreational area, adjacent to the La Vereda pedestrian path. If an earthen dike was chosen for this design option, it would be approximately 15 to 20 feet wide and 1,800 feet long, occupying approximately 36,000 sf (0.83 acre). The dike would be designed similarly to those described for the Amphitheater Design Option. Alternatively, the Reconfigured Park Design Option could realign the recreational area without the installation of an earthen dike.

Realigned Parking Lot

Under this design option, the existing parking lot would be reconfigured into a more linear feature along Camino del Oro (refer to Figure 3-6). Approximately 84,000 sf (1.93 acres) of the existing grassy recreational areas at La Jolla Shores and Kellogg Parks would be converted to parking lot and approximately 44,500 sf (1.02 acres) of the existing parking lot would remain. The total footprint of the reconfigured parking lot would be approximately 128,500 sf (2.95 acres), consistent with the footprint of the existing parking lot. Therefore, there would be no net loss in the number of parking stalls provided under this design option. New driveways, parking stall layout, and crosswalks would be incorporated into the reconfigured parking lot design to gain efficiency in vehicle flow throughout the parking lot and maximize the number of parking stalls. Dedicated accessways would be incorporated for lifeguards, maintenance, and emergency service vehicles. No alterations are proposed for any of the existing lifeguard facilities.

Construction Methods and Equipment

The La Jolla Shores project is expected to be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators). Imported material would be necessary to construct the proposed earthen dikes, if chosen. Additionally, pavers and decorative stone could be used within the design of the proposed seatwall and/or earthen dikes for the Amphitheater Design Option.

3.4.4.2 Pacific Beach – Tourmaline Surf Park

Site Conditions and Constraints

The Pacific Beach – Tourmaline Surf Park project site is along a west-facing shoreline and is characterized by a narrow sandy beach backed by coastal bluffs. Offshore reefs dissipate wave energy on this site and also make this a very popular location for surfers. A narrow valley cuts east–west through the bluff on the project site and provides coastal access via a roadway (Tourmaline Street) down to the parking lot and beach. Between the parking lot and beach sits a restroom with showers and a paved access ramp, which provides access to the beach for pedestrians and vehicles. The access ramp is an important City resource for public safety (i.e., lifeguard access) and maintenance vehicles. Therefore, the access ramp is buffered with a shoreline protection feature consisting of large boulders (riprap) and cobble to preserve the pedestrian and vehicle access along the ramp and prevent undermining of the parking lot. A vegetated median between the restroom and the access ramp provides additional protection to the restroom from coastal flooding (refer to Figure 2-7, Pacific Beach – Tourmaline Surf Park Project Site). The majority of this approximately 1,500-square-foot area is currently vegetated with invasive iceplant. Refer to Section 2.3.3, Pacific Beach – Tourmaline Surf Park, for a complete description of the existing setting on this project site.

While formal coastal access is directed along the ramp toward the southern end of the riprap, it is common for surfers and beachgoers to descend the northern end of the riprap near the outfall of a drainage culvert that borders the northern edge of the project site. This culvert is 25 feet wide and 325 feet long and extends from La Jolla Boulevard to the beach. Between the drainage culvert and Tournaline Street, two underutilized picnic areas are east of the parking lot.

Cobble is native to this beach and is typically exposed with a narrower beach during the winter and a wider and sandier beach in the summer. The City implements the winter berm program adjacent to the south of the Pacific Beach – Tourmaline Surf Park project site. This winter berm is approximately 6 to 8 feet high, up to 20 feet wide, and approximately 400 feet long. The winter berm is constructed in the fall to reduce impacts of flooding to beach amenities and to preserve the pedestrian and vehicle access along the ramp. Approximately 50 truckloads are used to transport material to the shores along Pacific Beach, including the berm south of the Pacific Beach – Tourmaline Surf Park project site. Refer to Section 3.4.3.1, Site Conditions and Constraints, for a complete discussion of the City's winter berm program.

Project Description

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature into a hybrid nature-based solution. The existing riprap would be buried to provide a core layer and topped with a mix of cobble and sand. The proposed sand and cobble dune (with a rock core) would be vegetated with native plants, which would provide ecological benefits through introduction of rare plant species and habitat for various bird species. In addition, the existing vegetated median between the restroom and the access ramp would be restored with native vegetation (refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings). The proposed sand dune would provide protection for the existing access ramp, restroom, and parking lot from existing and projected flooding impacts associated with sea-level rise and provide a reservoir of sand and cobble to the beach that can be used during erosive conditions. Overall, this proposed vegetated sand dune would allow for continued shoreline protection and use of the access ramp while improving the resilience of the feature, enhancing habitat opportunities, increasing the aesthetics of the site, maintaining existing parking on site, and preserving coastal access.

In addition to the proposed sand dune, the Pacific Beach – Tourmaline Surf Park project would include restoration of the existing vegetated median between the restrooms and the access ramp and an optional pedestrian access component. The proposed elevated sand dune, restoration area, and optional pedestrian access are described below.

Elevated Sand Dune

The Pacific Beach – Tourmaline Surf Park project would construct an approximately 50-foot-wide and 175-foot-long sand dune along the existing shoreline protection feature (refer to Figure 3-7). The dune would occupy approximately 8,750 square feet (0.2 acre), an increase of approximately 1,750 square feet (0.04 acre) compared to the footprint of the existing shoreline protection feature. The existing riprap would be buried within the dune where it is currently located. The crest level of the dune would be designed to mimic the elevation of the existing riprap and access ramp, which descends from approximately 20 feet NAVD 88 on the northern end near the top of the ramp to roughly 12 feet NAVD 88 at the southern end of the ramp. Thus, the dune would follow this alignment and taper in size from north to south. The dune would require approximately 2,500 cubic yards of sand and cobble to be constructed, which is anticipated to be sourced from littoral sources in the CRMP Phase 1 area (e.g., intertidal zone or material excavated by burying riprap). However, given the substantial amount of material already existing in the shoreline protective feature, a smaller volume may be required.

The dune would be planted or seeded with a native mix of vegetation appropriate for coastal dunes in the area. Vegetation may include pink sand verbena, red sand verbena, beach evening primrose, and saltgrass. Planting density is anticipated to be roughly one plant per 10 square feet, which translates to approximately 7,000 plants for the dune. Dune vegetation would be established via hand watering techniques; no fixed irrigation is proposed. A 10-foot-wide section along the crest of the dune would remain unvegetated to allow for sitting and viewing space, similar to the existing sandy area west of the access ramp. Formalized pedestrian access would be integrated into the northern end of the dune (refer to Figure 3-7). This could come in the form of a traditional staircase or an integrated approach (e.g., a "lily pad" feature composed of a series of specifically placed rocks) on the northern end of the dune that would allow for pedestrian access in case of erosion of the dune.

Restored Dune Area

The invasive iceplant would be removed from the existing vegetated median and replaced with appropriate native vegetation (refer to Figure 3-7). Vehicle and pedestrian access is currently prevented across this median due to the railing adjacent to the restrooms, and this area could serve as a restoration area where trampling impacts would be very limited. Additionally, water runoff from the shower currently flows down the access ramp. The restoration of the vegetated median could be designed to integrate drainage from the shower area, which would help irrigate the dune plants while reducing slip hazards along the walkway and access ramp.

Optional Pedestrian Access and Stormwater Improvements

An optional component of this project would include covering or undergrounding the existing drainage culvert along the northern edge of the Pacific Beach – Tourmaline Surf Park project site (refer to Figure 3-7). While this infrastructure is important to convey stormwater, especially during rain events, it currently occupies approximately 8,125 square feet of space along the parking lot that could be optimized for public recreation. There is no continuous sidewalk or walkway along the parking lot, causing all pedestrians to traverse through the parking lot to reach the beach. By covering or undergrounding the culvert, a pedestrian pathway and/or park space could be placed over the feature to provide increased pedestrian access across the parking lot and improved pedestrian safety. Additionally, this dedicated pedestrian accessway along the parking lot would provide a better connection between the beach and the two underutilized picnic areas, which are currently separated from other gathering areas. With this option, the pedestrian accessway improvements on the northern end of the dune could be integrated with the undergrounded culvert. Additional optional stormwater improvements for this site include the addition of an underground vault under the existing parking lot area for water quality treatment. Both the undergrounding or covering of the existing drainage culvert and an underground vault are optional additional stormwater infrastructure improvements for the Pacific Beach – Tourmaline Surf Park project site. These optional improvements would require additional environmental analysis, maintenance and conditions assessment, and updated modeling to assess climate change driven impacts, such as those from sea level rise and peak precipitation events.

Construction Methods and Equipment

The Pacific Beach – Tourmaline Surf Park project is expected to be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and during the dry season. It is assumed that no imported material would be necessary. Sand and cobble for the proposed sand dune would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone. No rock is anticipated to be imported. Existing riprap would be reused on site.

3.4.4.3 Mission Beach

Site Conditions and Constraints

Mission Beach is a popular recreational beach in front of a large commercial and recreational area. It is primarily characterized by a wide sandy beach backed by a seawall and boardwalk (Ocean Front Walk). The existing seawall reaches to 15 feet NAVD 88 and protects the boardwalk and Belmont Park, the Mission Beach Lifeguard Station, two parking lots, restrooms and showers, picnic areas, restaurants, and other vendors. On the Mission Beach project site, seven gaps exist in the seawall, which provide access between the beach and Ocean Front Walk. These seawall breaks are protected by staggered seawalls to reduce flood vulnerabilities. However, the Mission Beach project site and inland areas are already exposed to the effects of coastal flooding and overtopping events that move sediment over the seawall such that it covers Ocean Front Walk (refer to Figure 2-9, Mission Beach Project Site). Refer to Section 2.3.4, Mission Beach, for a complete description of the existing setting on this project site.

The winter berm is constructed in the fall to reduce impacts of flooding to Ocean Front Walk and the commercial and recreational uses to the east. Between 25 to 40 truckloads of material are used to construct the winter berm along Mission Beach. Refer to Section 3.4.3.1 for a complete discussion of the City's winter berm program.

Proposed Project

There are two different design options that are considered in the CRMP Phase 1 for the Mission Beach project site – the Dune Design Option and the Perched Beach Design Option, both described further below.

Dune Design Option

The Dune Design Option of the Mission Beach project would construct an elevated sand dune seaward (west) of the seawall and Ocean Front Walk (refer to Figure 3-8, Mission Beach Project Dune Design Option). The proposed sand dunes would be vegetated with native plants, which would provide ecological benefits. The sand dunes, which are inspired by the City's existing winter berm program, would provide flood protection to the community of Mission Beach by adding elevation to

the back of the beach and by providing a reservoir of sand to the beach that can be used during erosive conditions. The proposed sand dunes would make this annual feature a permanent fixture on the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. The proposed elevated sand dune is described below.

Elevated Sand Dune

The Dune Design Option would construct an approximately 49,500-square-foot (1.1-acre) sand dune seaward of the existing seawall that is approximately 20 to 30 feet wide and 1,650 feet long (refer to Figure 3-8). The crest level of the sand dune would be designed to mimic the elevation of the existing winter berm that is built along the beach annually at a height of approximately 5 feet above existing grades or 2 feet above the seawall (17 feet NAVD 88). The dune would require approximately 6,000 cubic yards of sand to be constructed, which is anticipated to be sourced from littoral sources near the CRMP Phase 1 area (e.g., adjacent intertidal zone, U.S. Army Corps of Engineers Mission Bay Entrance Channel Dredging). Appropriate openings and passageways would be designed into the dune structure to ensure public access to the beach, limit flood pathways, and integrate with the existing structural protection of the seawall breaks.

The dune would be planted or seeded with a native mix of vegetation appropriate for coastal dunes in the area. Planting density is anticipated to be roughly one plant per 10 square feet; this translates to approximately 6,000 plants for the dune under this design option. Refer to Section 3.4.3.2, Pilot Project Description, for a complete description of the methods used to vegetate the proposed sand dune, including the proposed vegetation mix and planting and irrigation methods.

Perched Beach Design Option

The Perched Beach Design Option of the Mission Beach project would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). The elevated perched beach would provide more beach space that is usable during higher tides and coastal flooding and also offers a reservoir of sand for the adjacent beach area during erosive events. This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. The realignment, perched beach, and elevated sand dunes are described further below.

Realigned Seawall and Ocean Front Walk

The Perched Beach Design Option would remove and realign an approximately 350-foot section of the existing seawall and Ocean Front Walk to a more inland alignment along the southern parking lot adjacent to Mission Beach Park (refer to Figure 3-9). This alignment would allow for the creation of a perched beach area while still preserving the connectivity of the seawall and Ocean Front Walk.

Perched Beach

The perched beach would consist of an approximately 350-foot-long and 90-foot-wide section, for a total footprint of approximately 31,500 square feet (0.72 acre). This design option would convert existing grassy recreational area as part of Mission Beach Park into usable sandy beach area (refer to Figure 3-9). The beach elevation would gradually increase in slope as it moves inland to provide an elevated or perched profile to the beach, which would allow it to be useable even during higher tides. The perched beach is anticipated to require approximately 2,500 cubic yards of sand to construct which is anticipated to be sourced from littoral sources in the CRMP Phase 1 area (e.g. adjacent intertidal zone, U.S. Army Corps of Engineers Mission Bay Entrance Channel Dredging).

Elevated Sand Dune

Similar to the Dune Design Option, the Perched Beach Design Option proposes to construct a roughly 20- to 30-foot-wide and 1,300-foot-long elevated sand dune seaward of the existing seawall to the north and south of the perched beach (refer to Figure 3-9). No dune would be constructed in front of the perched beach. The dune is anticipated to occupy an approximately 39,000-square-foot (0.89-acre) footprint. As described for the Dune Design Option, the crest level of the sand dune would be designed to mimic the elevation of the existing winter berm that is built along the beach annually at a height of 5 feet above existing grades or 2 feet above the seawall (17 feet NAVD 88). The dune would require approximately 5,000 cubic yards of sand to construct, which is anticipated to be sourced from littoral sources in the CRMP Phase 1 area (e.g. adjacent intertidal zone, U.S. Army Corps of Engineers Mission Bay Entrance Channel Dredging). Appropriate openings and passageways would be designed into the dune structure to ensure public access to the beach, limit flood pathways, and integrate with the existing structural protection of the seawall breaks.

The dune would be planted or seeded with a native mix of vegetation appropriate for coastal dunes in the area. Similar to the proposed sand dune at the Ocean Beach – Dog Beach project site, planting density is anticipated to be roughly one plant per 10 square feet; however, given the smaller footprint of the proposed sand dune on the Mission Beach project site, this translates to approximately 5,000 plants for the dune under this design option. Refer to Section 3.4.3.2, Pilot Project Description, for a complete description of the methods used to vegetate the proposed sand dune, including the proposed vegetation mix and planting and irrigation methods.

Construction Methods and Equipment

The Mission Beach project is expected to be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and during the dry season. It is assumed that no imported material would be necessary. Sand for the proposed sand dune would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone.

3.4.4.4 Ocean Beach – Pier

Site Conditions and Constraints

As described for the Ocean Beach – Dog Beach project site, the Ocean Beach – Pier project site is well used by beachgoers, dog owners, volleyball players, and surfers. The project site stretches from a short groin (referred to locally as the Avalanche Groin) at the northern end of the Ocean Beach – Pier project site (connecting to the southern border of the Ocean Beach – Dog Beach project site) to the Ocean Beach Pier at the southern end of the Ocean Beach – Pier project site encompasses two heavily used waterfront park areas, two parking lots, and the Ocean Beach Lifeguard Station. A paved path extends from the Ocean Beach Pier to the Ocean Beach Lifeguard Station, which is protected by an existing low-lying seawall that transitions into scattered riprap at its northern end (refer to Figure 2-11, Ocean Beach – Pier Project Site, and Section 2.3.5, Ocean Beach – Pier, for a complete description of the existing setting on this project site).

Due to the orientation of and wave exposure at Ocean Beach – Pier, the site experiences an overall northward sediment transport. Due to this and the existing infrastructure, the shoreline is narrow at the southern end of the project site and broadens to the north. The Avalanche Groin contributes to beach stability at the northern end of the site. Currently, the sandy beach area and backshore infrastructure on this project site are already exposed to the effects of coastal flooding during storm events, although some of the developed features on site (e.g., paved path) are higher in elevation and are less vulnerable.

The City currently implements a winter berm program on the project site, with a sand berm that is approximately 6 to 8 feet high and 30 feet wide. The sand berm is constructed in the fall to reduce impacts of coastal flooding to the beach amenities and Ocean Beach community during heavy winter storms. The winter berm is built along the back (landward side) of the beach from the Avalanche Groin to the Ocean Beach Pier. Generally, this berm is smaller and narrower at the southern end closer to the pier. The winter berm is flattened during the spring once the storm season ends to provide additional sediment that reduces the effects of coastal erosion. Approximately 75 truckloads of material are used to construct the winter berm along Ocean Beach (including the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites). Refer to Section 3.4.3.1 for a complete discussion of the City's winter berm program.

Proposed Project

The proposed Ocean Beach – Pier project would construct a multi-use path for cyclists and pedestrians fronted by an elevated vegetated sand dune (refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings), as described for the Pilot Project at the Ocean Beach – Dog Beach project site. The dunes and path would be along the landward edge of the beach, and would connect to the proposed improvements at the Ocean Beach – Dog Beach project site. As such, the multi-use path for both the Pilot Project and the Ocean Beach – Pier project would connect the existing western terminus of the San Diego River Bikeway to the Ocean Beach Pier.

The sand dunes, which are inspired by the City's existing winter berm program, would provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and by providing a reservoir of sand to the beach that can be used during erosive conditions. The proposed sand dunes would make this annual feature a permanent fixture on the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. Appropriate openings and pathways would be designed into the multi-use path and dune structure to ensure emergency vehicles are not hindered and appropriate public access to the beach is provided. The project would maintain existing parking on site.

Multi-Use Path

The Ocean Beach – Pier project would install a roughly 1,200-foot multi-use path (refer to Figure 3-10), similar to the multi-use path described for the Pilot Project at the Ocean Beach – Dog Beach project site. The multi-use path would be 14 feet wide at the northern end of the project site where it would connect to the Ocean Beach – Dog Beach project site and would slowly transition to 10 feet wide where it would connect with the existing paved pedestrian path adjacent to Ocean Beach Veterans Plaza. The total length of the multi-use path on both the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites would be approximately 2,400 feet.

Refer to Section 3.4.3.2 for a complete description of the proposed multi-use path, including the associated concrete header curb and low concrete seatwall header, that would span both the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites.

Elevated Sand Dune

Along the seaward edge of the proposed multi-use path, the Ocean Beach – Pier project would construct an approximately 20- to 40-foot-wide and approximately 1,200-foot-long sand dune along the back (landward side) of the beach (refer to Figure 3-10). On the Ocean Beach – Pier project site, the proposed sand dune would occupy approximately 48,000 square feet (1.1 acre). The crest level of the sand dune would be designed to mimic the elevation of the existing winter berm that is built along the beach annually at a height of approximately 5 feet above existing grades (17 feet NAVD 88). However, the dune would be lower and narrower toward the southern extent of the project site. The dune structure would also include open passageways to ensure emergency vehicles are not hindered and appropriate public access to the beach is provided.

The proposed sand dune would require approximately 5,000 cubic yards of sand to be constructed, which is anticipated to be sourced from littoral sources in the CRMP Phase 1 area (e.g., intertidal zone or San Diego River flood shoal). The existing riprap north of the seawall would be buried within the dune near where it is currently located. This material would act as a core layer in the dune for added stabilization and shoreline protection. This would also eliminate any costs of exporting the existing material.

Similar to the proposed sand dune at the Ocean Beach – Dog Beach project site, planting density is anticipated to be roughly one plant per 10 square feet; however, given the smaller footprint of the proposed sand dune on the Ocean Beach – Pier project site, this translates to approximately 4,800 plants for the dune within the Ocean Beach – Pier project site. Refer to Section 3.4.3.2 for a complete description of the methods used to vegetate the proposed sand dune, including the proposed vegetation mix and planting and irrigation methods.

Construction Methods and Equipment

The Ocean Beach – Pier project is expected to be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and constructed during the dry season. Imported material (via dump truck) would be minimal and limited to decomposed granite, aggregate base, and concrete for the proposed multi-use path. Sand for the proposed sand dune would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone or the San Diego River flood shoal. No rock is anticipated to be imported. Existing riprap would be reused on site.

3.4.4.5 Sunset Cliffs

Site Conditions and Constraints

The Sunset Cliffs project site is within the Sunset Cliffs Natural Park – Linear Park, an approximately 1.17-mile-long trail adjacent to Sunset Cliffs Boulevard to the east and along a cliff to the west. This entire stretch of Sunset Cliffs Boulevard, from Adair Street to Ladera Boulevard is a two-way road (one vehicle lane in each direction) bordered on the seaward edge by a guardrail. Along this stretch of road, widths vary widely (less than 5 feet to more than 300 feet) between Sunset Cliffs Boulevard and the cliff edge, resulting in varying amounts of space for trails, paths, and gathering spaces for recreational uses, which mostly consist of walking, jogging, ocean viewing, biking, and surfing. There are no formal bike lanes on the Sunset Cliffs project site, only sharrow (i.e., shared vehicle and bicycle route) designations for the roadway. Due to the generally narrow space between the guardrail and cliff edge, pedestrians typically walk along or even in the road for certain segments of the Sunset Cliffs trail (refer to Figure 2-13, Sunset Cliffs Project Site, and Section 2.3.6, Sunset Cliffs, for a complete description of the existing setting on this project site).

On the landward (eastern) side of the roadway, there is parallel parking, a sidewalk, and residential housing along Sunset Cliffs Boulevard. There is only one formal access point down to the shoreline on the Sunset Cliffs project site: a stairway at the intersection of Sunset Cliffs Boulevard and Ladera Street. South of Ladera Street is Sunset Cliffs Natural Park – Hillside Park, which includes a range of trails, coastal access points, and natural amenities. Sunset Cliffs Natural Park – Hillside Park is also within the City's MHPA (refer to Figure 2-13).

Several projects have been implemented over the years to stabilize the cliff and reduce erosion impacts. However, cliff erosion is a major vulnerability for Sunset Cliffs that would be exacerbated with projected sea-level rise, coastal wave runup, and precipitation events.

Proposed Project

The Sunset Cliffs project would implement a road reconfiguration on Sunset Cliffs Boulevard, which would convert the roadway into a one-lane, one-way, southbound vehicular travel lane with a separated multi-use path for pedestrians and bicyclists (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). Before implementation of the road reconfiguration, a pilot of the road reconfiguration would be tested to better understand potential impacts, traffic flow, confirm street segment for the road reconfiguration, and evaluate overall effectiveness of the proposed design. The road reconfiguration is anticipated to be piloted between Guizot Street and Ladera Street, with one-way traffic flow along Ladera Street from its intersection with Sunset Cliffs Boulevard to its intersection with Cordova Street. The project would first be implemented through temporary pilot (trial) phases to monitor the project and incorporate lessons learned back into the project design. As such, the road reconfiguration and separated multi-use path would be initially simulated through cones, signage, and other temporary traffic-calming devices (e.g., water-filled Jersey barriers) that are easily moved and modified. The road reconfiguration could be piloted on a single- or multipleweekday or weekend basis and coupled with substantial public outreach and engagement to better inform the design of a more permanent solution. One or more traffic studies would also be completed to better inform the roadway design and identify potential impacts and mitigation strategies. Following completion of the pilot and additional studies and outreach, an optimized design approach would be established identifying the portion of the roadway that would be permanently reconfigured to realign vehicle, bicyclist, and pedestrian travel away from the cliff edge.

The project would include habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail, which is adjacent to the City's MHPA south of the project site. Additional project elements for this project site would include trail realignment and realignment of parking lots. Trail enhancement, interpretative signage, and drainage improvements would also be implemented along the Sunset Cliffs project site where feasible and appropriate. The Sunset Cliffs project includes optional project components that would focus on an approximately 2,200-foot section of Sunset Cliffs Boulevard and Sunset Cliffs Natural Park – Linear Park between Adair and Froude Streets. These optional components would include realigning parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures that would generally follow recommendations identified for this area in the 2005 Sunset Cliffs Master Plan (refer to Figure 3-11).

These project elements could be implemented in parallel to the road reconfiguration or separate from the road reconfiguration. Given the narrow cliff edges and limited amount of recreational space

consisting of informal trails, the major focus for the Sunset Cliffs project is to enhance the existing resources without compromising the structural integrity of the cliff or current infrastructure.

Road Reconfiguration

The proposed road reconfiguration would convert a portion of Sunset Cliffs Boulevard into a onelane, southbound vehicular travel. This temporary road reconfiguration program could initially be trialed from the intersection of Sunset Cliffs Boulevard, Guizot Street, and Cordona Street in the north to the intersection of Sunset Cliffs Boulevard and Ladera Street in the south (refer to Figure 3-11). The one-way traffic flow would continue west along Ladera Street from its intersection with Sunset Cliffs Boulevard to its intersection with Cordova Street. At this time, southbound is the proposed direction of travel along Sunset Cliffs Boulevard based on initial discussion with emergency response personnel; however, the pilot implementation could also trial one-way northbound travel to better understand the tradeoffs and traffic flow.

The narrowest section of Sunset Cliffs Boulevard has an approximate width of 35.5 feet from the inland sidewalk to the guardrail on the cliff edge, which includes parallel parking, two vehicle lanes, and a small buffer. A potential reconfiguration of this narrowest section could include parallel parking (8 feet), one vehicle travel lane (12 feet), a small curb separator (1.5 feet), a multi-use path (10 feet), and buffer to the cliff edge (4 feet) with a pedestrian fence. While this option represents one potential reconfiguration of travel along Sunset Cliffs Boulevard, there are several options to achieve the goal of realigning vehicular, bicyclist, and pedestrian travel away from the cliff edge through a road reconfiguration and enhancing the safety and experience of recreational users along the Sunset Cliffs Natural Park – Linear Park. The Sunset Cliffs project would assess multiple configurations to maximize recreational benefits and safety while not impacting overall parking availability or emergency vehicle access and response time compared to current conditions. Additionally, traffic studies would be conducted to better inform the roadway design and identify potential impacts and mitigation strategies.

Optional Parking Lot Reconfiguration

The optional parking lot reconfiguration would convert and reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard (refer to Figure 3-11). Specific parking layout opportunities such as head in, reverse angle, and other layout options would be evaluated to consider the space available, optimize the space gained and flow of traffic, and reduce conflicts with bicyclists. The goal of this optional component would be to maintain and/or increase the existing number of parking spaces provided in these four parking lots. This reconfiguration would have multiple benefits, including aligning the parking lot areas further inland and away from coastal erosion hazards, serving as a traffic calming measure, providing more space for recreational opportunities along Sunset Cliffs Natural Park – Linear Park, improving drainage and erosion control, and providing more space for habitat improvements. The existing pavement of the

lots would be removed and converted to more natural material (e.g., decomposed granite, bare earth) and could be graded to ensure that drainage moves towards Sunset Cliffs Boulevard, which would prevent stormwater runoff on the bluff to minimize erosion. Additional stormwater infrastructure and drainage improvements could be implemented as the new parking configurations are designed and implemented.

Optional Trail Enhancement

The additional space gained by converting and reconfiguring the parking lots could enhance mobility along the recreational corridor (i.e., Sunset Cliffs Natural Park – Linear Park). Trail improvements in this space could be implemented along this northern portion of the Sunset Cliffs project site along with removing invasive species and installing native plants (refer to Figure 3-11). Safety and accessible improvements along the network of trails could also be implemented with the additional space gained.

Construction Methods and Equipment

The Sunset Cliffs project is expected to be constructed with conventional earthwork and roadway construction equipment (e.g., loaders, dozers, tracked excavators).

3.5 Scope of the Project

For the purposes of this PEIR, the CRMP Phase 1 includes programmatic improvements identified for six priority project sites described above. The other five coastal locations evaluated for naturebased solutions in the CRMP Phase 1 were not prioritized for CRMP Phase 1 based on feasibility, risk, and benefits. Therefore, these locations are not brought forward under the CRMP Phase 1 and are not analyzed in this PEIR.

Additionally, each of the six project sites would be designed with nature-based solutions that may also be supported with gray infrastructure project components. One site (i.e., Ocean Beach – Dog Beach) would be designed to the 15 percent design level and analyzed with project-level detail. Site solutions proposed for the other five project sites would be analyzed with program-level detail. Additional analysis under the California Environmental Quality Act (CEQA) would be required for each of the future project sites evaluated in this PEIR. Any proposed future development must comply with all governing laws.

3.6 Future Actions Associated with the Coastal Resilience Master Plan

The analysis included in this PEIR anticipates that future nature-based improvements would occur in the CRMP Phase 1 project sites and would be subject to applicable development regulations and requirements of the CRMP Phase 1 area, the proposed project, and this PEIR. Future nature-based improvements in the CRMP Phase 1 area would involve subsequent approval of project proposals through both ministerial and discretionary reviews in accordance with zoning and development regulations and the respective Community Plan policies. These subsequent activities are referred to as "future projects" in the PEIR. A non-inclusive list of subsequent permits that would likely be required for future projects under CRMP Phase 1 is listed in Table 3-3, Subsequent Permits Potentially Required for Future Projects.

Discretionary Action	Agency
Conditional Letter of Map Revision	Federal Emergency Management Agency
Section 408 Permission Inquiry	U.S. Army Corps of Engineers
CWA Section 404 Permit	U.S. Army Corps of Engineers
CWA Section 401 Permit	San Diego RWQCB
Section 1602 – Lake and Streambed Alteration Agreement	CDFW
Coastal Development Permit	California Coastal Commission
Site Development Permit for Infrastructure (water, sewer, and storm drain infrastructure, road improvements)	City of San Diego
Grading Permit	City of San Diego
Right-of-Way Permit	City of San Diego
Traffic Control Permit	City of San Diego
Sign Permit	City of San Diego
Discretionary Permit	City of San Diego

 Table 3-3. Subsequent Permits Potentially Required for Future Projects

Notes: CDFW = California Department of Fish and Wildlife; CWA = Clean Water Act; RWQCB = Regional Water Quality Control Board

NATURE-BASED SOLUTIONS

The term "nature-based solutions" encompasses **natural infrastructure**, which includes existing or restored natural landscapes, such as wetlands, forests or open space and **green infrastructure**, which includes a wide range of built or engineered solutions modeled after nature to support purposes such as stormwater management, flooding, urban heat island and climate adaptation.

Gray infrastructure, on the other hand, refers to hard, man-made structures that are engineered for a specific level of service given certain conditions. The following graphic compares several types of nature-based solutions and gray infrastructure that can help address flooding.



Wetlands and floodplains help to mitigate flooding impacts, can improve water quality and provides critical habitat for plants and animals. Coastal wetlands can also help to absorb wave energy and minimize coastal erosion.

Living shorelines stabilize and protect the shoreline using a combination of plants, sand, rock and other natural materials. They can help reduce wave energy, slow erosion and minimize flooding.

Stormwater parks are open space parks or recreational spaces that are designed to flood during extreme precipitation events, which minimizes flooding elsewhere.

Bioswales are vegetated or mulched channels or depressions in the ground that treat and absorb stormwater during a rain event. Bioswales help reduce runoff and minimize peak flows, which can help protect water quality.

Green streets have a range of vegetated or permeable features to integrate stormwater management into the streetscape. They can include features such as rain gardens, vegetated curbs, sidewalk trees or permeable pavements.

Green roofs are partially or completely covered in vegetation and provide a multitude of benefits, from rainwater absorption to reduction of increased heat in highly developed areas, habitat provisioning and air quality improvements.

Underground storage tanks can store water and may also have some capacity to filter water or allow for water infiltration.

Sea walls are hard structures, typically made of concrete, that protect the land behind it from waves up to a certain height, but can result in beach erosion.

Source: City of San Diego 2024.

Figure 3-1
Nature-Based and Gray Infrastructure Solutions

Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots











La Jolla Shores Project Reconfigured Park Design Option Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots



Pacific Beach – Tourmaline Surf Park Project Concept Renderings Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots

N

Feet







Ocean Beach – Pier Project Concept Renderings Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots


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Chapter 4.0 Regulatory Framework

This chapter includes the regulatory framework applicable to each subject area included in this Programmatic Environmental Impact Report (PEIR).

4.1 Aesthetics

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to aesthetics and neighborhood character for the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1).

4.1.1 Federal Regulations

No federal regulations are applicable to visual effects and neighborhood character.

4.1.2 State Regulations

No state regulations are applicable to visual effects and neighborhood character.

4.1.2.1 California Scenic Highway Program

Recognizing the value of scenic areas and views from roads in such scenic areas, the California Legislature established the California Scenic Highway Program in 1963. This legislation (Senate Bill [SB] 1467 [Farr]) sees scenic highways as "a vital part of the all-encompassing effort . . . to protect and enhance California's beauty, amenity and quality of life." Under this program, a number of state highways have been designated as eligible for inclusion as scenic routes. There are no officially designated state scenic highways or eligible state scenic highways in the CRMP Phase 1 area, and none of the project locations are visible from the nearest eligible state scenic highway, Interstate 5.

4.1.3 Local Regulations

4.1.3.1 City of San Diego General Plan

The City's General Plan includes a Citywide urban design strategy, goals, and policies regarding the physical features that define the character of a neighborhood or community. These goals complement the goals for pedestrian-oriented and walkable villages articulated in the City of Villages strategy. See Section 4.8.3, Local Regulations, for a complete discussion of the City's General Plan.

The General Plan Urban Design Element establishes a set of design principles on which its policies are based and on which future public and private development physical design decisions can be based. The General Plan Urban Design Element states, "San Diego's distinctive character results from its unparalleled natural setting, including beaches, bays, hills, canyons and mesas that allow the evolution of geographically distinct neighborhoods" (City of San Diego 2024i).

The General Plan Urban Design Element policies relevant to the CRMP Phase 1 involve respecting the natural environment and preserving open space systems. Policies call for respecting the City's natural topography and distinctive neighborhoods, providing public art, and encouraging the development of walkable, transit-oriented communities. The General Plan Urban Design Element also provides policies that help reduce the potential for impacts to public views and addresses the natural environment, preserving open space systems, and targeting new growth into compact villages through urban form and design policies. The element contains policies that address development adjacent to natural features and visual impacts to scenic areas or viewsheds. For example, one measure under Policy UD-A.3 is to "Provide public pedestrian, bicycle, and equestrian access paths to scenic view points, parklands, and where consistent with resource protection, in natural resource open space areas."

4.1.3.2 La Jolla Community Plan and Local Coastal Program Land Use Plan

The La Jolla Community Plan and Local Coastal Program Land Use Plan calls out La Jolla's natural resources and open space system for their natural beauty and visual interest. The plan claims the main attractions of La Jolla are its scenic shoreline parks and recreational areas, its coastal bluffs and beaches, steep slopes and hillsides, and native plant and animal life. The goals of the Natural Resources and Open Space System Element include the following:

- Preserve the natural amenities of La Jolla such as its open space, hillsides, canyons, bluffs, parks, beaches, tidepools and coastal waters.
- Maintain the identified public views to and from these amenities in order to achieve a beneficial relationship between the natural or unimproved and developed areas of the community.
- Enhance existing public access to La Jolla's beaches and coastline areas (for example La Jolla Shores Beach and Children's Pool areas) in order to facilitate greater public use and enjoyment of these and other coastal resources.
- Preserve all designated open space and habitat linkages within La Jolla such as the slopes of Mount Soledad and the sensitive ravines of Pottery Canyon.
- Protect the environmentally sensitive resources of La Jolla's open areas including its coastal bluffs, sensitive steep hillside slopes, canyons, native plant life and wildlife habitat linkages.
- Conserve the City of San Diego's Multi-Habitat Planning Area.

See Section 4.8.3, Local Regulations, for a complete discussion of the La Jolla Community Plan and Local Coastal Program Land Use Plan.

4.1.3.3 Pacific Beach Community Plan and Local Coastal Program Land Use Plan

The Parks and Open Space Element notes that the majority of the parks and recreational facilities in Pacific Beach are oriented to the shoreline, including the sand beaches of Mission Bay and the

Pacific Ocean, Tourmaline Park, Palisades Park (north and south), Pacific Beach (Ocean Boulevard) Park, Fanuel Street Park, and Crown Point Shores. The goals of the Parks and Open Space Element include the following:

- Provide sufficient community park and recreational facilities to meet the needs of the existing and future resident population.
- Promote the development, maintenance and safety of beach, park and bay recreational facilities within community and in those areas adjacent to Pacific Beach (such as the Mission Bay Golf Course or the Tourmaline Surfing Park) to serve both residents and visitors, while ensuring that such facilities will not adversely affect the community in terms of increased traffic or parking overflow.
- Conserve and enhance the natural amenities of the community such as its open space, topography, beach and plant life and achieve a desirable relationship between the natural and developed areas of the community, as is exemplified by Kate Sessions Park.
- Preserve significant environmental resource areas, such as the City-owned Kate Sessions Park, Rose Creek, Coastal Bluffs, and the Northern Wildlife Preserve (owned in part by the City and in part by the University of California), in their natural state.
- Improve access to beach, bay, and park areas along the shoreline to benefit residents and visitors.
- Maintain and enhance public views to the Pacific Ocean, Mission Bay, the Northern Wildlife Preserve and Kate Sessions Park.

Specific policies related to the CRMP Phase 1 include ensuring "that public views as identified in this plan of the Beach, Bay and Kate Sessions Park are retained" (Policy 8) and maintaining and improving "facilities at existing parks, beaches, and bay areas" (Policy 9). See Section 4.8.3, Local Regulations, for a complete discussion of the Pacific Beach Community Plan and Coastal Program Land Use Plan.

4.1.3.4 Mission Bay Park Master Plan

The Mission Bay Design Guidelines recommends the preservation of significant views into the Park from surrounding hillside development and roadways, such as Interstate 5, and from the main entrance roads such as Pacific Coast Highway and Tecolote Road. In addition, the Guidelines call for specific landscape and architectural standards to ensure the compatible integration of any new development, private or public, with the Bay environment.

The Aesthetics and Design Guidelines states that Mission Bay Park represents the adaptation of an aquatic environment for recreational purposes. The goals of the Guidelines state that, as a unique and limited coastal resource, Mission Bay Park should be:

- A park whose image, as defined by its landscape architecture, and public works manifests and magnifies its unique and distinctive aquatic nature.
- A park comprising an interconnected system of diverse recreational environments, or "parks within a park."
- A park that extends beyond its boundaries by offering "image bytes" or encapsulated views of its open waters and landscape to surrounding roadways, neighboring streets and distant viewing points.

See Section 4.8.3, Local Regulations, for a complete discussion of the Mission Bay Park Master Plan.

4.1.3.5 Ocean Beach Community Plan and Local Coastal Program

The Ocean Beach Community Plan and Local Coastal Program identifies Ocean Beach as a smallscale coastal village. Critical to the Ocean Beach community's vision is the preservation of open space, sensitive habitat, public park lands, and other recreational uses. The Ocean Beach Community Plan and Local Coastal Program is intended to support General Plan policies in Ocean Beach through implementation the City of Villages strategy, which encourages the development or enhancement of mixed-use activity centers, of different scales, that serve as vibrant cores of communities and are linked to the regional transit system. The Urban Design Element goals of the of the Ocean Beach Community Plan and Local Coastal Program are:

- A coastal community that values the coastline and topography as an amenity and provides an attractive built environment.
- New development with a high degree of design excellence.
- Distinctive residential neighborhoods.
- Vibrant mixed-use village commercial districts.
- Public art to augment the pedestrian experience.
- New development that is environmentally friendly and attains Leadership in Energy and Environmental Design (LEED) and/or California Green Building Standards (Cal Green) standards or equivalent.
- Connectivity of neighborhoods and commercial districts to activity centers and adjacent communities.
- Coastal views protected and enhanced.
- Pedestrian-friendly walkable neighborhoods.

See Section 4.8.3, Local Regulations, for a complete discussion of the Ocean Beach Community Plan and Local Coastal Program.

4.1.3.6 Peninsula Community Plan and Local Coastal Program Land Use Plan

The Peninsula Community Plan and Local Coastal Program Land Use Plan describes a future community composed of residential, community commercial, commercial recreation, naval-related,

and park uses. The Peninsula Community Plan's overall community goals include conserving existing open space, including canyons, hillsides, wetlands, and shorelines; enhancing and protecting physical and visual access to the bay and ocean shoreline; maintaining and complementing the existing scale, architectural features, and vegetation in the Peninsula area; and providing additional park and recreation facilities (City of San Diego 2011).

The Peninsula community is a highly urbanized residential area surrounded by water and recreational resources. The Peninsula community is unique due to a number of physical factors, including:

- A coastline consisting of bluffs, rocky and sandy beaches, and the bay.
- Numerous hillsides and canyons which act as natural boundaries forming distinctive neighborhoods.
- Extensive areas of large trees and natural vegetation.
- Well-defined neighborhoods with a variety of well-preserved architectural styles and housing types.
- A number of historically significant buildings and resources.

See Section 4.8.3, Local Regulations, for a complete discussion of the Peninsula Community Plan and Local Coastal Program Land Use Plan.

4.1.3.7 San Diego River Park Master Plan

The San Diego River Park Master Plan, adopted in 2013, provides vision and guidance to reverse the increased development pressure along the San Diego River since the 1950s and to restore a symbiotic relationship between the river and surrounding communities by creating a river-long park, stretching from the San Diego River headwaters near Julian to the Pacific Ocean at Ocean Beach. The San Diego River Park Master Plan is closely aligned with the City's General Plan goals for land use, mobility, urban design, economic prosperity, public facilities, recreation, conservation, and historic preservation. The San Diego River Park vision, principles, recommendations, and implementation strategy included in this Master Plan provide the City with a strong policy document for the future development along the river. The San Diego River Park Master Plan includes design guidelines to support the plan's vision, principles, and recommendations; the goals of the Community Plans for Mission Valley, Navajo, Tierrasanta and East Elliott; and the development regulations of the City's Land Development Code and community-specific regulations. The design guidelines only apply to the River Corridor Area (i.e., the 100-year Floodway, as mapped by the Federal Emergency Management Agency [FEMA], plus 35 feet on both sides of the floodway to accommodate a pathway corridor) and the River Influence Area (i.e., 200 feet beyond the River Corridor Area on both sides of the river). The design guidelines for the River Corridor Area focus on the site planning of the floodway and the 35-foot-wide pathway corridor, the design and materials for trails and the San Diego River Pathway, recreational amenities within the pathway corridor, and appropriate plant materials. Within this section of the guidelines is a discussion on how the River Corridor Area interfaces with the City's Multi-Habitat Planning Area (MHPA), the Wetland Buffer overlay, and what takes precedence. For the River Influence Area, the guidelines provide information on building requirements, such as building setbacks, building orientation, and type of access to the river park from adjacent development; building transparency and reflectivity; location for off-street parking; equipment and storage areas; and appropriate plant materials (City of San Diego 2013a).

4.2 Air Quality

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to air quality and odor for the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1 or project). The section describes applicable plans, policies, and regulations of federal, state, or regional agencies with jurisdiction over the City.

4.2.1 Federal Regulations

4.2.1.1 Federal Clean Air Act/National Ambient Air Quality Standards

The federal Clean Air Act (CAA), passed in 1970 and last amended in 1990, was enacted for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity, forming the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (USEPA) is responsible for implementing most aspects of the federal CAA, including the setting of National Ambient Air Quality Standards (NAAQS) for major air pollutants, hazardous air pollutant standards, approval of state attainment plans, motor vehicle emission standards, stationary source emission standards and permits, acid rain control measures, stratospheric ozone (O_3) protection, and enforcement provisions.

NAAQS are established by the USEPA for "criteria air pollutants" under the CAA, which are ozone (O_3) , carbon monoxide (CO), nitrogen dioxide (NO_2) , sulfur dioxide (SO_2) , coarse and fine particulate matter (PM₁₀ and PM_{2.5}), and lead. The NAAQS are presented in Table 4-1, National Ambient Air Quality Standards.

		National Standards ^a	
Pollutant	Averaging Time	Primary ^{b,c}	Secondary ^{b,d}
O ₃	1 Hour	_	Same as Primary Standarde
	8 Hours	0.070 ppm (137 μg/m³)e	
CO	1 Hour	35 ppm (40 mg/m ³)	None
	8 Hours	9 ppm (10 mg/m ³)	
NO ₂ ^f	1 Hour	0.100 ppm (188 µg/m³)	Same as Primary Standard
	Annual Arithmetic Mean	0.053 ppm (100 μg/m³)	

Table 4-1. National Ambient Air Quality Standards

		National Standards ^a	
Pollutant	Averaging Time	Primary ^{b,c}	Secondary ^{b,d}
SO ₂ g	1 Hour	0.075 ррт (196 µg/m³)	_
	3 Hours	_	0.5 ppm (1,300 µg/m³)
	24 Hours	0.14 ppm (for certain areas) ^g	_
	Annual	0.030 ppm (for certain areas) ^g	_
PM10	24 Hours	150 µg/m³	Same as Primary Standard
	Annual Arithmetic Mean	_	
PM _{2.5} ^h	24 Hours	35 μg/m³	Same as Primary Standard
	Annual Arithmetic Mean	12.0 µg/m³	15.0 µg/m³
Lead ⁱ	30-Day Average	_	_
	Calendar Quarter	1.5 μg/m³ (for certain areas) ^k	Same as Primary Standard
	Rolling 3-Month Average	0.15 µg/m³	

Table 4-1. National Ambie	ent Air Quality Standards
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Source: USEPA 2022.

Notes: μ g/m³ = microgram per cubic meter; CO = carbon monoxide; mg/m³ = milligram per cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; PM_{2.5} = fine particulate matter; PM₁₀ = coarse particulate matter; ppb = part per billion; ppm = part per million by volume; SO₂ = sulfur dioxide

- ^a National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ 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 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- ^b Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25° Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^c National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- ^d National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- ^e On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- ^f To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ⁹ On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour 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 non-attainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- ^h On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 μg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- ⁱ 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 non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The federal CAA requires the USEPA to reassess the NAAQS at least every 5 years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a State Implementation Plan (SIP) that demonstrates how those areas will attain the standards within mandated time frames.

4.2.1.2 National Emission Standards for Hazardous Air Pollutants

The 1977 federal CAA Amendments required the USEPA to identify National Emission Standards for Hazardous Air Pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic compounds (VOCs), pesticides, herbicides, and radionuclides that present a tangible hazard based on scientific studies of exposure to humans and other mammals. Under the 1990 federal CAA Amendments, which expanded the control program for hazardous air pollutants, 187 substances and chemical families were identified as hazardous air pollutants.

4.2.2 State Regulations

4.2.2.1 California Clean Air Act/California Ambient Air Quality Standards

The California CAA was adopted in 1988 and establishes the state's air quality goals, planning mechanisms, regulatory strategies, and standards of progress. Under the California CAA, the task of air quality management and regulation has been legislatively granted to California Air Resources Board (CARB), with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB is responsible for ensuring the implementation of the California CAA, responding to the federal CAA, and regulating emissions from motor vehicles and consumer products. Pursuant to the authority granted to CARB, it has established California Ambient Air Quality Standards, which are generally more restrictive than the NAAQS. In addition to the federal criteria for pollutants, the California Ambient Air Quality Standards also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride (see Table 4-2, California Ambient Air Quality Standards).

		California Standards ^a
Pollutant	Averaging Time	Concentration ^b
O ₃	1 hour	0.09 ppm (180 μg/m³)
	8 hours	0.070 ppm (137 µg/m³)
NO ₂ c	1 hour	0.18 ppm (339 µg/m³)
	Annual Arithmetic Mean	0.030 ppm (57 µmg/m ³)
CO	1 hour	20 ppm (23 mg/m ³)
	8 hours	9.0 ppm (10 mg/m ³)
SO ₂ d	1 hour	0.25 ppm (655 μg/m³)

 Table 4-2. California Ambient Air Quality Standards

		California Standards ^a
Pollutant	Averaging Time	Concentration ^b
	3 hours	—
	24 hours	0.04 ppm (105 μg/m ³)
	Annual	—
PM ₁₀ ^e	24 hours	50 µg/m³
	Annual Arithmetic Mean	20 µg/m³
PM _{2.5} e	24 hours	_
	Annual Arithmetic Mean	12 µg/m³
Lead ^{f,g}	30-day Average	1.5 μg/m³
	Calendar Quarter	_
	Rolling 3-Month Average	_
Hydrogen Sulfide	1 hour	0.03 ppm (42 µg/m³)
Vinyl Chloride ^f	24 hours	0.01 ppm (26 µg/m³)
Sulfates	24 hours	25 µg/m³
Visibility-Reducing Particles	8 hour (10:00 a.m. to 6:00 p.m. PT)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%

Table 4-2. California Ambient Air Quality Standards

Source: CARB 2016.

Notes: °C = degree Celsius; μg/m³ = microgram per cubic meter; CARB = California Air Resources Board; CO = carbon monoxide; mg/m³ = milligram per cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; PM_{2.5} = fine particulate matter; PM₁₀ = coarse particulate matter; ppb = part per billion; ppm = part per million by volume; SO₂ = sulfur dioxide; TAC = toxic air contaminant

- ^a California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended 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 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- ^c To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- ^d 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 national 1-hour 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 non-attainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- ^e On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μg/m³ to 12.0 mg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 μg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- ^f CARB has identified lead and vinyl chloride as TACs 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.
- ^g 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 non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

4.2.2.2 Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California.

California regulates TACs primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB can designate a substance as a TAC. Once a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If there is no safe threshold, the measure must incorporate the best available control technology for toxics to minimize emissions. None of the TACs identified by CARB have a safe threshold.

Of particular concern statewide are diesel particulate matter emissions. Diesel particulate matter was established as a TAC in 1998 and is estimated to represent the majority of the cancer risk from TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of the health effects of diesel exhaust a complex scientific issue. The overall strategy for achieving these reductions is found in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). A stated goal of the plan is to reduce the statewide cancer risk arising from exposure to diesel particulate matter by 85 percent by 2020.

4.2.2.3 State Implementation Plan

The SIP is a collection of documents that set forth a state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as monitoring, modeling, and permitting), district rules, state regulations, and federal controls. CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. All of the items included in the SIP are listed in Code of Federal Regulations (CFR), Title 40, Chapter I, Part 52, Subpart F, Section 52.220.

The San Diego County Air Pollution Control District (SDAPCD) is responsible for preparing and implementing the portion of the SIP applicable to the San Diego Air Basin (SDAB). The 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County (SDAPCD 2020) is described below. The SDAPCD adopts rules, regulations, and programs to attain state and federal air quality standards and appropriates money (including permit fees) to achieve these objectives. CARB adopted the 2020 SIP Update on November 19, 2020.

4.2.3 Local Regulations

4.2.3.1 San Diego County Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the state, local air quality management districts and air pollution control districts are responsible for enforcing standards and regulating stationary sources.

In San Diego County (County), O₃ and particulate matter are the pollutants of main concern since exceedances of California Ambient Air Quality Standards for those pollutants are experienced here in most years. For this reason, the SDAB has been designated as a non-attainment area for the state PM₁₀, PM_{2.5}, and O₃ standards. The SDAB is also a federal O₃ non-attainment area for the 8-hour O₃ standard.

Regional Air Quality Strategy

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The County Regional Air Quality Strategy (RAQS) was initially adopted on June 30, 1992, and is updated on a triennial basis, most recently in 2016 (SDAPCD 2016). A 2022 RAQS Revision is currently underway. The RAQS outlines the SDAPCD's plans and control measures designed to attain the state air quality standards for O₃. The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, and information regarding projected growth in the cities and the County, to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SANDAG growth projections are based on population, vehicle trends, and land use plans developed by the cities and the County as part of the development of their General Plans.

In December 2016, the SDAPCD revised the RAQS for the County. Since 2007, the San Diego region reduced daily VOC emissions and NOx emissions by 3.9 percent and 7 percent, respectively; the SDAPCD expects to continue reductions through 2035. These reductions were achieved through implementation of six VOC control measures and three NOx control measures adopted in the SDAPCD's 2009 RAQS. In addition, the SDAPCD is considering additional measures, including three VOC measures and four control measures to reduce 0.3 daily ton of VOC and 1.2 daily tons of NOx, provided they are found to be feasible regionwide. Further, the SDAPCD has implemented nine incentive-based programs, worked with SANDAG to implement regional transportation control measures, and reaffirmed the state emission offset repeal.

Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County

The SDAPCD's attainment plan for San Diego County (Ozone Plan; SDAPCD 2020) demonstrates how the region will comply with the federal O₃ standard. As documented in the 2020 Ozone Plan, the County has a likely chance of obtaining attainment due to the transition to low-emissions cars and stricter new source review rules and continuing the requirement of general conformity for military growth and San Diego International Airport. The County will also continue emission control measures: ongoing implementation of existing regulations in O₃ precursor reduction to stationary and area-wide sources, subsequent inspections of facilities and sources, and the adoption of laws requiring best available retrofit control technology for control of emissions.

General Rules and Regulations

As stated earlier, the SDAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SDAB. The following rules and regulations apply to all sources in the jurisdiction of the SDAPCD (SDAPCD 2023):

- **SDAPCD Regulation IV: Prohibitions; Rule 51: Nuisance.** Prohibits the discharge, from any source, of such quantities of air contaminants or other materials that cause or have a tendency to cause injury, detriment, nuisance, annoyance to people and/or the public, or that endangers the comfort, repose, health or safety of any such persons of the public or that cause or have a natural tendency to cause injury or damage to any business or property.
- **SDAPCD Regulation IV: Prohibitions; Rule 55: Fugitive Dust.** Regulates fugitive dust emissions from any commercial construction or demolition activity capable of generating fugitive dust emissions, including active operations, earthmoving activities, erosion, open storage piles, and inactive disturbed areas, as well as track-out/carry-out onto paved roads.
- **SDAPCD Regulation IV: Prohibitions; Rule 67.0.1: 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.
- SDAPCD Regulation XII: Toxic Air Contaminants; Rule 1200: Toxic Air Contaminants New Source Review. Requires sources of TAC emissions subject to SDAPCD permit to limit emissions of TACs and meet specific control strategies.

4.2.3.2 City of San Diego Municipal Code

The City's Municipal Code addresses air quality and odor impacts in Chapter 14, Article 2, Division 7, Section 142.0710, Air Contaminant Regulations, which states that "air contaminants including smoke, charred paper, dust, soot, grime, carbon, noxious acids, toxic fumes, gases, odors, and particulate matter, or any emissions that endanger human health, cause damage to vegetation

or property, or cause soiling shall not be permitted to emanate beyond the boundaries of the *premises* upon which the use emitting the contaminants is located" (City of San Diego 2022a).

4.3 Biological Resources

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to biological resources for the CRMP Phase 1. See Section 4.7, Hydrology and Water Quality, for a discussion of additional regulations related to protection of wetlands and water resources.

4.3.1 Federal Regulations

4.3.1.1 Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 USC 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration, and National Marine Fisheries Service. This legislation is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend and provide programs for the conservation of those species, thus preventing extinction of plants and wildlife. Under provisions of Section 9(a)(1)(B) of FESA, it is unlawful to "take" any listed species within the United States or the territorial sea of the United States. "Take" is defined in Section 3(19) of FESA as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Additionally, Section 7(a)(2) of FESA directs federal agencies to consult with the USFWS for any actions that may "jeopardize the continued existence" of any listed species. Take incidental to otherwise lawful activities can be authorized by the USFWS through a permit under Sections 4(d), 7, or 10(a).

FESA provides for designation of "critical habitat," defined in Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features "essential to the conservation of the species, at the time it is listed in accordance with the provisions of section 4" are found and "which may require special management considerations or protection." Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless "essential for the conservation of the species."

4.3.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act prohibits the take of any migratory bird or any part, nest, or eggs of any such bird. Under the Migratory Bird Treaty Act, "take" is defined as pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities (16 USC 703 et seq.). The number of bird species covered by the Migratory Bird Treaty Act is extensive; the species are listed in CFR Title 50, Part 10.13. The regulatory definition of "migratory bird" is broad and includes any mutation or hybrid of a listed species and also includes any part, egg, or nest of such birds (50 CFR 10.12). The Migratory Bird Treaty Act, which is enforced by the

USFWS, makes it unlawful "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird or attempt such actions, except as permitted by regulation. The applicable regulations prohibit the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations (50 CFR 21.10).

Additionally, Executive Order (EO) 13186, Responsibilities of Federal Agencies to Protect Migratory Birds, requires that any project with federal involvement address impacts of federal actions on migratory birds with the purpose of promoting conservation of migratory bird populations (66 FR 3853–3856). The EO requires federal agencies to work with the USFWS to develop a memorandum of understanding. The USFWS reviews actions that might affect these species.

4.3.1.3 Clean Water Act, Section 404

Pursuant to Section 404 of the Clean Water Act (CWA), the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and/or fill material into "waters of the United States." The term "wetlands" (a subset of waters) is defined in CFR, Title 33, Part 328.3(c)(1), as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." In the absence of wetlands, the limits of USACE jurisdiction in non-tidal waters, such as intermittent streams, extend to the "ordinary high water mark," which is defined in CFR, Title 33, Part 328.3(c)(4).

4.3.1.4 Rivers and Harbors Appropriation Act, Sections 9 and 10

Section 9 of the Rivers and Harbors Appropriation Act prohibits the construction of any bridge, dam, dike, or causeway over or in navigable waterways of the U.S. without congressional approval. Administration of Section 9 has been delegated to the U.S. Coast Guard. Consultation with the U.S. Coast Guard may be necessary to determine if a Section 9 Permit would be required under the Rivers and Harbors Appropriation Act.

Section 10 of the Rivers and Harbors Appropriation Act requires that permits be obtained from the USACE in navigable waters of the United States for all structures, such as riprap, and activities, such as dredging. Navigable waters are defined as those subject to the ebb and flow of the tide and susceptible to use in their natural condition or by reasonable improvements as means of interstate transport or foreign commerce. USACE grants or denies Section 10 Permits based on the effects on navigation. Most projects covered under this act are also covered under CWA Section 404.

4.3.1.5 Rivers and Harbors Act Appropriation, Section 408

Section 408 of the Rivers and Harbors Appropriation Act allows another party, such as a local government, company, or individual, to alter a USACE Civil Works project. The Section 408 program verifies that changes to authorized USACE Civil Works projects will not be injurious to the public interest and will not impair the usefulness of the CRMP Phase 1.

4.3.1.6 Marine Mammal Protection Act

All marine mammals are afforded protection under the Marine Mammal Protection Act (16 USC 1361 et seq.). With limited exception, the Marine Mammal Protection Act makes it illegal to "take" a marine mammal without authorization granted by the National Marine Fisheries Service. "Take" is defined as harassing, hunting, capturing, or killing, or attempting to harass, hunt, capture, or kill any marine mammal. "Harassment" is defined as pursuit, torment, or annoyance, which has the potential to injure a marine mammal in the wild or has the potential to disturb a marine mammal in the wild by causing disruption of behavioral patterns, including but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering. Take authorization must be granted by the National Marine Fisheries Service.

4.3.1.7 Coastal Zone Management Act

The Coastal Zone Management Act of 1972 (16 USC 1451–1464, Chapter 33) is administered by the National Oceanic and Atmospheric Administration's Office of Ocean and Resource Management and was established as a national policy to preserve, protect, develop, and where possible, enhance or restore the Coastal Zone in the United States. The federal consistency provision, Section 307 of the Coastal Zone Management Act, encourages states to join the Coastal Zone Management by balancing the competing and/or conflicting demands of coastal resource use, economic development, and conservation and allows states to issue the applicable permits. California has a federally approved Coastal Zone Management Program, and the Coastal Zone Management Act is administered by the California Coastal Commission (CCC). Therefore, the Coastal Zone Management Program and permit requirements are discussed further under California Coastal Act (CCA) in Section 4.3.2, State Regulations.

4.3.1.8 Magnuson–Stevens Fishery Conservation and Management Act of 1976

The Magnuson–Stevens Fishery Conservation and Management Act is the primary law that governs marine fisheries management in U.S. federal waters. First passed in 1976, the act fosters the long-term biological and economic sustainability of marine fisheries.

4.3.2 State Regulations

4.3.2.1 California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a project's potentially significant impacts on biological resources and feasible mitigation measures and alternatives that could avoid or reduce significant impacts (14 CCR 15000 et seq.). CEQA Guidelines, Section 15380(b)(1), defines "endangered" animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors." A "rare" animal or plant is defined in CEQA Guidelines, Section 15380(b)(2), as a species that, although not presently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or ... the species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act." Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing, as defined further in CEQA Guidelines, Section 15380(c). CEQA also requires identification of a project's potentially significant impacts on riparian habitats (such as wetlands, bays, estuaries, and marshes) and other sensitive natural communities, including habitats occupied by endangered, rare, and threatened species.

4.3.2.2 California Coastal Act and California Coastal Commission Wetlands Regulation

The CCC was established by voter initiative in 1972 and was made permanent by the California Legislature through the adoption of the CCA of 1976 (PRC Section 30000 et seq.). The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the Coastal Zone. Under the CCA, cities and counties are responsible for preparing LCPs in order to obtain authority to issue Coastal Development Permits for projects within their jurisdiction. LCPs consist of land use plans, zoning ordinances, zoning maps, and other implementing actions that conform to the policies of the CCA. Until an agency has a fully certified LCP, the CCC is responsible for issuing Coastal Development Permits.

Under CCA PRC Section 30107.5, environmentally sensitive habitat areas are areas within the Coastal Zone that are designated based on the presence of rare habitats or areas that support populations of rare, sensitive, or especially valuable species or habitats. In addition, the CCC regulates impacts to coastal wetlands defined in Section 30121 of the CCA as "lands within the Coastal Zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." The CCA requires that most development avoid and buffer coastal wetland resources in accordance with Sections 30231 and 30233, including limiting the filling of wetlands to certain allowable uses.

The survey area, as defined in Section 5.2.1, Existing Conditions, is entirely in the Coastal Zone and, therefore, subject to the CCA.

4.3.2.3 California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA) (California Fish and Game Code, Section 2050 et seq.), which prohibits the "take" of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in the State of California. Under California Fish and Game Code Section 86, take is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy."

CESA Sections 2080–2085 address the taking of threatened, endangered, or candidate species by stating that "no person or public agency shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided in this chapter, the Native Plant Protection Act (Fish and Game Code, Sections 1900–1913), or the California Desert Native Plants Act (Food and Agricultural Code, Section 80001)."

4.3.2.4 California Fish and Game Code

The CDFW exercises jurisdiction over waters of the state under Sections 1600–1616 of the California Fish and Game Code based on the definition of regulated activity provided in Section 1602 of the California Fish and Game Code and the definition of a stream provided in Title 14, Section 1.72, of the California Code of Regulations.

Section 1600 of the California Fish and Game Code is discussed in Section 4.7.2, State Regulations.

Section 1602 of the California Fish and Game Code states that "an entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake" without notifying the CDFW. Title 14, Section 1.72, of the California Code of Regulations defines a stream as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation." This definition includes a broad range of vegetation communities, including some that do not contain wetland

species but are in a riparian landscape position. CDFW jurisdiction typically extends to the outer limit of riparian vegetation or to the top of bank of an unvegetated stream channel.

Under Section 1603 of the California Fish and Game Code, upon notification, the CDFW "shall determine whether the activity may substantially adversely affect an existing fish and wildlife resource." If such a determination is made, the CDFW reaches an agreement with the notifying entity (a Streambed Alteration Agreement) that includes measures to protect the resources that the CDFW has determined the activity may substantially adversely affect.

Sections 2800–2835 of the California Fish and Game Code (Natural Community Conservation Planning Act) are intended to conserve natural communities at the ecosystem level while accommodating compatible land use. The program seeks to anticipate and prevent the controversies and gridlock caused by species' listing by focusing on the long-term suitability of wildlife and plant communities and including key interests in the process.

According to Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code, which regulate birds, mammals, amphibians, and fish, respectively, a "fully protected" species may not be taken or possessed without a permit from the California Fish and Game Commission, and "incidental takes" of these species are not authorized.

Section 3503 of the California Fish and Game Code prohibits the take, possession, or needless destruction of the nests or eggs of any birds, except as otherwise provided by the code or any regulation made pursuant thereto. Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

For the purposes of these state regulations, the CDFW currently defines an active nest as one that is under construction or in use and includes existing nests that are being modified. For example, if a hawk is adding to or maintaining an existing stick nest in a transmission tower, then it would be considered to be active and covered under these California Fish and Game Code sections.

4.3.2.5 California Native Plant Protection Act

The Native Plant Protection Act of 1977 (California Fish and Game Code, Section 1900 et seq.) gives the CDFW authority to designate state endangered, threatened, and rare plants and provides specific protection measures for identified populations.

4.3.2.6 California Natural Communities Conservation Planning Act of 1991

The CDFW's Natural Community Conservation Planning (NCCP) program takes a broad-based ecosystem approach to planning for the protection and perpetuation of biological diversity. The NCCP program began in 1991 as a cooperative effort to protect habitats and species. It is broader in

its orientation and objectives than the California and federal Endangered Species Acts, as these laws are designed to identify and protect individual species that have already declined in numbers significantly. An NCCP program identifies and provides for the regional protection of plants, animals, and their habitats while allowing compatible and appropriate economic activity. Working with landowners, environmental organizations, and other interested parties, a local agency oversees the numerous activities that compose the development of an NCCP program. The CDFW and the USFWS provide the necessary support, direction, and guidance to NCCP program participants.

4.3.2.7 State Water Resources Control Board

The State Water Resources Control Board (SWRCB) was created in 1967 and given the broad authority and responsibility to protect water quality, and balance competing demands on our water resources and attempt to resolve decades-long water disputes. The SWRCB merged the functions of two previous Boards: the State Water Quality Control Board and the State Water Rights Board. The former had its roots in the late 1940s, when legislators created a streamlined regulatory agency to address rising water quality problems with the state's explosive industrial and population growth. A water rights commission, which preceded the State Water Rights Board, was created in the early 1900s to arbitrate and resolve the state's water battles, which began during the 1849 Gold Rush (SWRCB 2023). Today the five-member SWRCB allocates water rights, adjudicates water right disputes, develops statewide water protection plans, establishes water quality standards, and guides the nine Regional Water Quality Control Boards (RWQCBs) located in the major watersheds of the state (see Section 4.3.3, Local Regulations).

4.3.2.8 Areas of Special Biological Significance

In an effort to help protect our oceans and maintain natural water quality within some of the most pristine and biologically unique sections of California's coast, the SWRCB created Areas of Special Biological Significance (ASBS) in the 1970s. Following establishment of these areas, in 1983, the SWRCB's Ocean Plan officially prohibited all polluted runoff and discharges into ASBS. Today, there are 34 ASBS in California, sometimes referred to as State Water Quality Protection Areas. ASBS are areas of the ocean that support a unique variety of aquatic life and often host unique individual species and have thus been designated as areas to be protected from pollution and degraded water quality (San Diego Coastkeeper 2024). The SWRCB describes ASBS as "basic building blocks for a sustainable, resilient coastal environment and economy."

There are two ASBS in the City of San Diego. The La Jolla ASBS covers 453 acres and includes La Jolla Cove with its biologically-rich kelp forests and rocky reef. The San Diego-Scripps ASBS is a 31-acre area just north of Scripps Pier. Together, these areas protect water quality in critical habitats for unique and fragile species (San Diego Coastkeeper 2024).

4.3.3 Local Regulations

4.3.3.1 San Diego Regional Water Quality Control Board

The RWQCBs, each comprised of seven members, serve as the frontline for state and federal water pollution control efforts. The San Diego RWQCB regulates impacts to water quality under Section 401 of the CWA in the San Diego region (Region 9). A project must comply with Section 401 of the CWA before the USACE can issue a Section 404 Permit. The RWQCB will issue a Section 401 Water Quality Certification or Waiver of Certification, depending on the extent of impacts to waters of the United States. The RWQCB also regulates impacts to waters of the state (usually limited to "isolated" waters or swales that may not fall under USACE jurisdiction) under the Porter-Cologne Water Quality Control Act (see Section 4.7.2. State Regulations).

4.3.3.2 San Diego County Multiple Species Conservation Program

The City is a participant in the regional County of San Diego Multiple Species Conservation Program (MSCP), a cooperative federal, state, and local environmental conservation program aimed at preserving San Diego's unique native plants and animals (covered species). The MSCP's boundaries extend over multiple jurisdictions and environments, including regional watersheds and migratory wildlife corridors. The MSCP protects the region's diverse native plant and animal species, including those that are threatened and endangered. The MSCP also provides provisions and regulations that accommodate future growth and streamline building regulations while protecting natural resources in the region.

Multiple Species Conservation Program Subarea Plan

The City's Subarea Plan was adopted in 1997 and encompasses 206,124 acres within the regional MSCP Study Area (City of San Diego 1997). The Subarea Plan provides an MHPA, where preserve planning is focused and permanent conservation of habitat lands will be accomplished and includes a process for the issuance of permits under the California Natural Communities Conservation Planning Act of 1991 and the federal and California Endangered Species Act (as discussed in Section 4.3.2, State Regulations). The City's Subarea Plan is characterized by predominantly urban land uses, including associated parks and open space. The City's Subarea Plan separates the City into several geographic subunits. The CRMP Phase 1 is located within the Urban Area, which encompasses the central coastal and central eastern portions of San Diego, including Point Loma and other Urban Habitat Areas. More specifically, the Urban Habitat Areas include existing designated open space such as Mission Bay; Tecolote Canyon; Marian Bear Memorial Park; Rose Canyon; the San Diego River; southern slopes along Mission Valley, Carroll, and Rattlesnake Canyons; Florida Canyon; Chollas Creek; and a variety of smaller canyon systems. The majority of these lands consist of canyons with native habitats in relative proximity to other MHPA areas providing habitat. These areas contribute in some form to the MHPA, either

by providing habitat for native species to continue to reproduce and find new territories or by providing necessary shelter and forage for migrating species (mostly birds).

The CRMP Phase 1 project is required to comply with the General Management Directives outlined in Section 1.5.2 of the MSCP Subarea Plan. The Biological Resources Technical Report (Appendix C), Table 5, discusses the CRMP Phase 1's compliance with the MSCP Subarea Plan General Management Directives and area-specific management directives.

Multi-Habitat Planning Area

The City's MHPA identifies a "hard line" boundary developed by the City in cooperation with the wildlife agencies, property owners, developers, and environmental groups. Sections of this project would be within and adjacent to MHPA boundaries (Figure 2-2, Project Sites – Index). The MHPA identifies biological core resource areas and corridors targeted for conservation, in which only limited development may occur. The MHPA is considered an urban preserve that is constrained by existing or approved development and is composed of habitat linkages connecting several large core areas of habitat. The criteria used to define core and linkage areas involve maintaining ecosystem function and processes, including large animal movement. Each core area is connected to other core areas or to habitat areas outside the MSCP either through common boundaries or through linkages. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained. Critical habitat linkages between core areas are conserved in a functional manner with a minimum of 75 percent of the habitat within identified linkages conserved (City of San Diego 1997).

Portions of the Ocean Beach – Dog Beach project site and the survey buffer of the Sunset Cliffs project site occur within the MHPA (Figure 2-2). Therefore, the CRMP Phase 1 would be required to document compliance with the General Planning Policies and Design Guidelines in Section 1.4.2 of the MSCP Subarea Plan, as applicable. The Biological Resources Technical Report (Appendix C), Table 6, discusses the CRMP Phase 1's compliance with the MSCP Subarea Plan General Planning Policies and Design Guidelines.

Multi-Habitat Planning Area Land Use Adjacency Guidelines

Land uses adjacent to or within the MHPA would be managed to ensure minimal impacts to the MHPA. Consideration would be given to good planning principles in relation to adjacent land uses. The MHPA Land Use Adjacency Guidelines will be incorporated into applicable permits during the development review phase of a project. These guidelines address the issues of drainage, toxics, lighting, noise, barriers, invasive species, brush management, and grading/development.

Portions of the Ocean Beach – Dog Beach project site and the survey buffer of the Sunset Cliffs project site occur within the MHPA (Figure 2-2). Therefore, the CRMP Phase 1 would be required to document compliance with the MHPA Land Use Adjacency Guidelines, as applicable. The

Biological Resources Technical Report (Appendix C), Table 7, discusses the CRMP Phase 1's compliance with the MHPA Land Use Adjacency Guidelines.

4.3.3.3 City of San Diego General Plan

Refer to Section 4.8.3, Local Regulations, for a discussion of the City's General Plan. The City's General Plan elements applicable to biological resources in the survey area include the Conservation and Recreation Elements. The Biological Resources Technical Report (Appendix C), Table 8, documents the CRMP Phase 1's consistency with the applicable City goals and policies.

4.3.3.4 City of San Diego Environmentally Sensitive Lands Regulations

Refer to Section 4.8.3, Local Regulations, for a discussion of the Environmentally Sensitive Lands regulations.

4.3.3.5 City of San Diego Biology Guidelines

The City's Development Services Department developed the Biology Guidelines presented in the Land Development Manual "to aid in the implementation and interpretation of the Environmentally Sensitive Lands regulations, San Diego Land Development Code (LDC), Chapter 14, Article 3, Division 1, Section 143.0101 et seq., and the Open Space Residential (OR-1-2) Zone, Chapter 13, Article 1, Division 2, Section 131.0201 et seq." (City of San Diego 2018a). The guidelines also provide standards for the determination of impact and mitigation under CEQA and the CCA. Biological technical report supplemental guidelines were provided in the 2018 update of the 2012 San Diego Biology Guidelines. Sensitive biological resources, as defined by the Environmentally Sensitive Lands regulations, include lands within the MHPA, as discussed in the Multi-Habitat Planning Area discussion above, as well as other lands outside the MHPA that contain wetlands; vegetation communities classifiable as Tier I, II, IIIA, or IIIB; habitat for rare, endangered, or threatened species; or narrow endemic species.

The City's definition of wetlands is broader than the definition applied by the USACE. The City uses the criteria listed in Section 320.4(b)(2) of the USACE General Regulatory Policies (33 CFR 320–330) to apply an appropriate buffer around wetlands that serves to protect the functions and values of the wetland. Guidelines that supplement the development regulation requirements described in this section are provided in the Biology Guidelines (City of San Diego 2018a).

The CRMP Phase 1 area includes a 50-foot buffer from the proposed impact area, and resources in the San Diego River floodplain are within this buffer that would be considered wetlands within the Coastal Overlay Zone and, therefore, would require adherence to the Coastal Overlay Zone wetland buffer regulations (City of San Diego 2018a). According to the Biology Guidelines, a wetland buffer is an area surrounding a wetland that helps protect the function and value of the adjacent wetland by reducing physical disturbance, provides a transition zone where one habitat phases into another, and

acts to slow flood waters for flood and erosion control, sediment filtration, water purification, and groundwater recharge (City of San Diego 2018a). Within the Coastal Overlay Zone, wetland buffers should be a minimum of 100 feet wide (as determined on a case-by-case basis in consultation with CDFW, USFWS, and the USACE) adjacent to a wetland. The width of the buffer is determined by factors such as type and size of development, sensitivity of the wetland resource to edge effects, topography, and the need for upland transition (City of San Diego 2018a). The City's Municipal Code also ranks upland habitat values by rarity and sensitivity. The most sensitive habitats are Tier I and the least sensitive are Tier IV. The varying mitigation ratios and requirements that mitigation be either in-tier or in-kind are based on the sensitivity of the habitat being affected. Mitigation ratios for impacts to sensitive habitats are also determined based on the relationship between impacts and mitigation relative to their location inside or outside the MHPA boundary.

4.4 Cultural Resources

4.4.1 Federal Regulations

4.4.1.1 National Historic Preservation Act and National Register of Historic Places

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of historic places that have been nominated by state offices for their historical significance. Listing in the NRHP provides recognition that a property is significant to the nation, the state, or the local community and assumes that federal agencies consider historic values in the planning for federal and federally assisted projects. Properties listed in the NRHP, or "determined eligible" for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Structures and features must be at least 50 years old to be considered for listing in the NRHP, barring exceptional circumstances. Criteria for listing in the NRHP, which are set forth in CFR Title 36, Part 63, are: significance in American history, architecture, archaeology, engineering, and/or culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that are:

- A. Associated with events that have made a significant contribution to the broad patterns of our history;
- B. 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; and/or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

Eligible properties must meet at least one of the criteria and exhibit integrity, measured by the degree to which the resource retains its historic properties and conveys its historic character, the degree to which the original fabric has been retained, and the reversibility of changes to the property. The fourth criterion is typically reserved for archaeological resources. These criteria have largely been incorporated into the CEQA Guidelines.

4.4.1.2 Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony, to lineal descendants and culturally affiliated Native American Tribes.

4.4.2 State Regulations

4.4.2.1 California Environmental Quality Act and California Register of Historical Resources

CEQA requires that all private and public activities not specifically exempted be evaluated against the potential for environmental damage, including effects on historical resources. Historical resources are recognized as part of the environment under CEQA. The act defines historical resources as "any object, building, structure, site, area, place, record, or manuscript which a lead agency determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (PRC Division 5, Section 5020.1[j]).

Lead agencies have a responsibility to evaluate historical resources against the California Register of Historical Resources (CRHR) criteria prior to making a finding as to a project's impacts to historical resources. Mitigation of adverse impacts is required if the CRMP Phase 1 will cause substantial adverse change. Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired. While demolition and destruction are fairly obvious significant impacts, it is more difficult to assess when change, alteration, or relocation crosses the threshold of substantial adverse change. The CEQA Guidelines provide that a project that demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance (i.e., its characterdefining features) is considered to materially impair the resource's significance. The CRHR is used in the consideration of historical resources relative to significance for purposes of CEQA.

Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC Section 5024.1; 14 CCR 4852), which consist of the following:

- **Criteria 1:** It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.
- **Criteria 2:** It is associated with the lives of persons important to local, California, or national history.
- **Criteria 3:** It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values.
- **Criteria 4**: It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

It should be noted that while the CRHR criteria considers historical resources of national importance, the CEQA Guidelines refer solely to locally and State designated historical resources.

4.4.2.2 Native American Burials (California Public Resources Code, Section 5097 et seq.)

California law protects Native American burials, skeletal remains, and associated grave goods, regardless of their antiquity, and provides for the sensitive treatment and disposition of those remains. California Health and Safety Code, Section 7050.5 et seq., requires that if human remains are discovered in any place other than a dedicated cemetery, no further disturbance or excavation of the site or nearby area reasonably suspected to contain human remains shall occur until the County Coroner has examined the remains (Section 7050.5[b]). California Public Resources Code, Section 5097.98, also outlines the process to be followed in the event that remains are discovered. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the coroner shall contact the California Native American Heritage Commission (NAHC) by telephone within 24 hours (Section 7050.5[c]). The NAHC shall immediately notify those persons it believes to be most likely descendant from the deceased Native American. The descendants may, with the permission of the landowner, or his or her authorized representative inspect the site of discovery of the Native American human remains and may recommend to the owner or the person responsive for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The descendants shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site (Section 5097.98[a]).

4.4.2.3 California Native American Graves Protection and Repatriation Act

The California Native American Graves Protection and Repatriation Act, enacted in 2001, required all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items, as defined, to complete an inventory and summary of these remains and items on or before January 1, 2003, with certain exceptions. The act also provides a process for the identification and repatriation of these items to the appropriate Tribes.

4.4.2.4 California Health and Safety Code, Section 7050.5

California Health and Safety Code, Section 7050.5, states that in the event of the discovery of human remains outside a dedicated cemetery, all ground disturbance must cease, and the County Coroner must be notified. If the remains are found to be Native American, then the County Coroner must contact the NAHC within 24 hours.

4.4.3 Local Regulations

4.4.3.1 City of San Diego Historical Resources Regulations

In January 2000, the City's Historical Resources regulations, part of the City's Municipal Code (Chapter 14, Article 3, Division 2, Purpose of Historical Resources Regulations, or Sections 143.0201–143.0280), were adopted, providing a balance between sound historic preservation principles and the rights of private property owners. The regulations have been developed to implement applicable local, state, and federal policies and mandates. Included in these regulations are the City's General Plan, CEQA, and Section 106 of the National Historic Preservation Act. Historical resources, in the context of the City's regulations, include site improvements, buildings, structures, historic districts, signs, features (including significant trees or other landscaping), places, place names, interior elements and fixtures designated in conjunction with a property, or other objects of historical, archaeological, scientific, educational, cultural, architectural, aesthetic, or traditional significance to the citizens of the City. These include structures, buildings, archaeological sites, objects, districts, or landscapes having physical evidence of human activities. These resources are usually over 45 years old and may have been altered or still be in use. Historical Resources Guidelines are incorporated in the San Diego LDC Land Development Manual by reference. These guidelines set up a development review process to review projects in the City. This process is composed of two aspects: the implementation of the regulations and the determination of impacts and mitigation under CEQA.

Compliance with the regulations begins with the determination of need for a site-specific survey for a project. Section 143.0212(b) of the regulations requires that the Historical Resource Sensitivity Maps be used to identify properties in the City that have a probability of containing historic or prehistoric archaeological sites. These maps are based on records of the California Historical Resources Information System maintained by the South Coastal Information Center at San Diego State University and the Museum of Us (formerly Museum of Man), as well as sitespecific information in the City's files. If records show an archaeological site exists on or immediately adjacent to a subject property, the City shall require a survey. In general, archaeological surveys are required when the proposed development is on a previously undeveloped parcel, if a known resource is recorded on the parcel or within a 1-mile radius, or if a qualified consultant or knowledgeable City staff member recommends it. A historic property (built environment) survey may be required if the property is over 45 years old and appears to have integrity of setting, design, materials, workmanship, feeling, and association. Section 143.0212(d) of the regulations states that, if a property-specific survey is required, it shall be conducted according to the guidelines criteria. Using the survey results and other available applicable information, the City shall determine whether a historical resource exists, whether it is eligible for designation as a designated historical resource, and where it is located.

4.4.3.2 City of San Diego Historical Resources Inventory Database

Compared to CEQA, the City provides a broader set of criteria for eligibility for the City's Historical Resources Register. As stated in the City's Historical Resources Guidelines, any improvement, building, structure, sign, interior element and fixture, feature, site, place, district, area, or object may be designated as historic by the City of San Diego Historical Resources Board if it meets any of the following criteria (City of San Diego 2022b):

- a. Exemplifies or reflects special elements of the City's, a community's, or a neighborhood's historical, archaeological, cultural, social, economic, political, aesthetic, engineering, landscaping, or architectural development;
- b. Is identified with persons or events significant in local, State, or national history;
- c. Embodies distinctive characteristics of a style, type, period, or method of construction or is a valuable example of the use of indigenous materials or craftsmanship;
- d. Is representative of the notable work of a master builder, designer, architect, engineer, landscape architect, interior designer, artist, or craftsman;
- e. Is listed or has been determined eligible by the National Park Service for listing in the National Register of Historic Places or is listed or has been determined eligible by the State Historic Preservation Office for listing in the State Register of Historical Resources; or
- f. Is a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest, or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City.

4.4.3.3 City of San Diego Comprehensive Historic Preservation Plan

The City's Comprehensive Historic Preservation Plan was prepared by the Historical Resources Board and the City's City Planning Department in order to direct and focus the City's efforts to deal with increasingly complex historic preservation issues. There are four elements to this plan— Inventory Element, Incentives Element, Education Element, and Draft Historic Resource Board Ordinance. The first three elements were adopted by the San Diego City Council in February 1992; the final element was incorporated into Chapter 14, Article 3, Division 2, of the LDC.

Section 143.0212, Need for Site-Specific Survey and Determination of Location of Historical Resources, directs City staff to determine whether a potentially significant historical resource

exists on site before the issuance of a construction permit or development permit for development proposed for any parcel in the City that contains a structure 45 years old or older. Interior development and any modifications or repairs that are limited in scope to an electrical or plumbing/mechanical permit shall be exempt where the development would include no change to the exterior of an existing structure.

4.4.3.4 City of San Diego Historical Resources Board

The Historical Resources Board was established by the San Diego City Council as an advisory board to identify, designate, and preserve the historical resources of the City; to review and make a recommendation to the appropriate decision-making authority on applications for permits and other matters relating to the demolition, destruction, substantial alteration, removal, or relocation of designated historical resources; to establish criteria and provide for a Historical Resources Inventory of properties within the boundaries of the City; and to recommend to the San Diego City Council and Planning Commission procedures to facilitate the use of the Historical Resources Inventory results in the City's planning process in accordance with Section 111.0206 of the LDC.

4.4.3.5 City of San Diego General Plan

The Historic Preservation Element offers a general guide for preserving, protecting, restoring, and rehabilitating historical and cultural resources within the City in order to maintain and encourage appreciation of its history and culture, improve the quality of the City's built environment, maintain the character and identity of its communities, and enhance the local economy through historic preservation. The primary goals of the Historic Preservation Element (City of San Diego 2024c) are outlined below:

- A. Identification and Preservation of Historical Resources
 - Identification of the historical resources of the City.
 - Preservation of the City's important historical resources.
 - Integration of historic preservation planning in the larger planning process.
- B. Historic Preservation, Education, Benefits, and Incentives
 - Public education about the importance of historical resources.
 - Provision of incentives supporting historic preservation.
 - Cultural heritage tourism promoted to the tourist industry.

The detailed policies associated with items A and B above can be found in the Historic Preservation Element (updated 2024) available on the City's website (https://www.sandiego.gov/sites/default/files/2024-07/general-plan_10_historic-preservation_july-2024.pdf).

4.5 Geology and Soils

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to geologic conditions for the CRMP Phase 1.

4.5.1 Federal Regulations

No federal regulations are applicable to geologic conditions.

4.5.2 State Regulations

4.5.2.1 Earthquake Fault Zoning Act (Alquist-Priolo Act)

The State of California Alquist-Priolo Earthquake Fault Zoning Act (1972) was established to mitigate the hazard of surface faulting to structures for human occupancy. Pursuant to the act, the State Geologist has established regulatory zones (known as Earthquake Fault Zones) around surface traces of active faults. These have been mapped for affected cities, including San Diego. Application for a development permit for any project within a delineated earthquake fault zone shall be accompanied by a geologic report, prepared by a geologist registered in the State of California, that is directed to the problem of potential surface fault displacement through a project site.

4.5.3 Local Regulations

4.5.3.1 City of San Diego Seismic Safety Study

The San Diego Seismic Safety Study includes geologic hazards and fault maps of the City. Areas of the City are identified by geologic hazard category, which reflects the geologic hazard type and related risks. These are generalized maps, and site-specific geologic/geotechnical investigations may be necessary for proposed development or construction. LDC Section 145.1803 and Information Bulletin 141 describes when a geotechnical investigation is required, and City of San Diego Development Services Department's Information Bulletin 515 describes the minimum submittal requirements for geotechnical and geological reports that may be required for development permits, subdivision approvals, or grading permits.

4.5.3.2 City of San Diego General Plan Policies

The City's General Plan presents goals and policies for geologic and soil safety in the Public Facilities, Services, and Safety Element (City of San Diego 2024g). Relevant excerpts from this element are included below.

Policy PF-Q.1. Protect public health and safety through the application of effective seismic, geologic and structural considerations.

a. Ensure that current and future community planning and other specific land use planning studies continue to include consideration of seismic and other geologic hazards. This

information should be disclosed, when applicable, in the California Environmental Quality Act (CEQA) document accompanying a discretionary action.

- b. Maintain updated Citywide maps showing faults, geologic hazards, and land use capabilities, and related studies used to determine suitable land uses.
- c. Require the submission of geologic and seismic reports, as well as soils engineering reports, in relation to applications for land development permits whenever seismic or geologic problems are suspected.
- d. Utilize the findings of a beach and bluff erosion survey to determine the appropriate rate and amount of coastline modification permissible in the City.
- e. Coordinate with other jurisdictions to establish and maintain a geologic "data bank" for the San Diego area.
- f. Regularly review local lifeline utility systems to ascertain their vulnerability to disruption caused by seismic or geologic hazards and implement measures to reduce any vulnerability.
- g. Adhere to state laws pertaining to seismic and geologic hazards.

Policy PF-Q.2. Maintain or improve integrity of structures to protect residents and preserve communities.

- a. Abate structures that present seismic or structural hazards with consideration of the desirability of preserving historical and unique structures and their architectural appendages, special geologic and soils hazards, and the socio- economic consequences of the attendant relocation and housing programs.
- b. Continue to consult with qualified geologists and seismologists to review geologic and seismic studies submitted to the City as project requirements.
- c. Support legislation that would empower local governing bodies to require structural inspections for all existing pre-Riley Act (1933) buildings, and any necessary remedial work to be completed within a reasonable time.

4.6 Greenhouse Gas Emissions

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to greenhouse gas (GHG) emissions for the CRMP Phase 1. The section describes applicable plans, policies, and regulations of federal, state, or regional agencies with jurisdiction over the City.

4.6.1 Federal Regulations

4.6.1.1 Federal Clean Air Act

Refer to Section 4.2.1, Federal Regulations, for discussion of the federal CAA.

Massachusetts vs. U.S. Environmental Protection Agency

On April 2, 2007, in Massachusetts v. USEPA, the U.S. Supreme Court directed the USEPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the USEPA administrator is required to follow the language of Section 202(a) of the CAA. On December 7, 2009, the administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the CAA:

- The administrator found that elevated concentrations of GHGs—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF₆)—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and hydrofluorocarbons—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

4.6.1.2 Federal Vehicle Standards

In response to the U.S. Supreme Court ruling discussed above, the Bush Administration issued EO 13432 in 2007 directing the USEPA, the U.S. Department of Transportation, and the U.S. Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. The standards have continued to be updated to include additional standards for future vehicle model years regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. Most recently, in December 2021, the USEPA finalized revised national GHG emissions standards for passenger cars and light trucks for model years 2023–2026.

4.6.1.3 Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the USEPA published the Final Mandatory Greenhouse Gas Reporting Rule (Reporting Rule) in the Federal Register (74 FR 56260–56373). The Reporting Rule requires reporting of GHG data and other relevant information from fossil fuel and industrial GHG suppliers, vehicle and engine manufacturers, and all facilities that would emit 25,000 metric tons of carbon dioxide equivalent (MT CO₂e) or more per year. Facility owners are required to submit an annual report with detailed calculations of facility GHG emissions on March 31 for emissions from the previous calendar year.

The Reporting Rule also mandates recordkeeping and administrative requirements to enable the USEPA to verify the annual GHG emissions reports.

4.6.2 State Regulations

4.6.2.1 Executive Order S-3-05 (Statewide GHG Emission Targets)

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and assigned responsibilities among the state agencies for implementing the EO and reporting on progress toward the targets. EO S-3-05 established the following targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The emissions targets established in EO-S-3-05 have been codified and updated as described below.

4.6.2.2 Assembly Bill 32 (California Global Warming Solutions Act)

In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32 (Núñez and Pavley), the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020, representing a reduction of approximately 15 percent below emissions expected under a "business-as-usual" scenario.

CARB has been assigned responsibility for carrying out and developing the programs and requirements necessary to achieve the goals of AB 32. Under AB 32, CARB must adopt regulations requiring the reporting and verification of statewide GHG emissions. This program will be used to monitor and enforce compliance with the established standards. CARB is also required to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 also authorized CARB to adopt market-based compliance mechanisms to meet the specified requirements. Finally, CARB is ultimately responsible for monitoring compliance and enforcing any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism adopted.

In 2007, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline (427 million metric tons [MMT] CO₂e). CARB's adoption of this limit is in accordance with the California Health and Safety Code, Section 38550. In addition to the 1990 emissions inventory, CARB also adopted regulations requiring mandatory reporting of GHGs for the large facilities that account for 94 percent of GHG emissions from industrial and commercial stationary sources in California.

4.6.2.3 Climate Change Scoping Plan

As directed by AB 32, CARB adopted the Scoping Plan in December 2008, in accordance with California Health and Safety Code, Section 38561, and included measures to address GHG emissions reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures (CARB 2008). The 2017 Scoping Plan was adopted in November 2017. The 2017 Scoping Plan Update incorporates the 2030 target set by EO B-30-15 and was codified by Senate Bill (SB) 32. It identifies how the state can reach the 2030 climate target and substantially advance toward our 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels (CARB 2017). Most recently, the 2022 Scoping Plan was adopted in December 2022. The 2022 Scoping Plan Update assesses progress toward the statutory 2030 target and identifies a path to achieving carbon neutrality by 2045 (CARB 2022).

4.6.2.4 Senate Bill 32 and Assembly Bill 197

SB 32 and AB 197 (enacted in 2016) are companion bills that set a new statewide GHG reduction target, make changes to CARB's membership, increase legislative oversight of CARB's climate change-based activities, and expand dissemination of GHG and other air quality-related emissions data to enhance transparency and accountability. SB 32 codified the 2030 emissions reduction goal by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the legislature to CARB as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

4.6.2.5 Assembly Bill 1279

AB 1279, the California Climate Crisis Act, enacted in September 2022, updates the goals of AB 32. The bill established a statewide goal to achieve net-zero GHG emissions by 2045 and achieve and maintain net-negative GHG emissions thereafter. Additionally, the bill established a specific target for statewide anthropogenic GHG emissions to be reduced to at least 85 percent below the 1990 levels by 2045. The bill requires CARB to work with relevant state agencies to ensure that updates to the Scoping Plan identify and recommend measures to achieve these policy goals and to identify and implement a variety of policies and strategies that enable CO_2 removal solutions and carbon capture, utilization, and storage technologies in California, as specified. The bill also requires CARB to submit an annual progress report.

4.6.2.6 California Energy Code

Title 24 of the California Code of Regulations was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically establishes Building Energy Efficiency Standards that are designed to ensure that new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. The California Energy Code is required by law to adopt standards every 3 years that are cost effective for homeowners over the 30-year lifespan of a building. These standards are updated to consider and incorporate new energy efficient technologies and construction methods. As a result, these standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The latest update to the Title 24 standards occurred in 2019 and went into effect on January 1, 2020. The 2019 update to the Building Energy Efficiency Standards focused on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The most significant efficiency improvements to the residential standards include the introduction of photovoltaic into the prescriptive package and improvements for attics, walls, water heating, and lighting. The most significant efficiency improvements to the non-residential standards include alignment with the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1 2017 National Standards. The 2019 standards also include changes made throughout its sections to improve the clarity, consistency, and readability of the regulatory language. In December 2021, the 2022 standards were approved for inclusion into the California Building Standards Code. The 2022 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. They went into effect on January 1, 2023.

4.6.2.7 California Green Building Standards

California Code of Regulations, Title 24, Part 11 (California Green Building Standard Code [CALGreen]), was adopted in 2010 and went into effect on January 1, 2011. Further updates to CALGreen went into effect on January 1, 2017, and January 1, 2020. The 2022 standards went into effect January 1, 2023. CALGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CALGreen reduce the use of VOC emitting materials, strengthen water conservation, and require construction waste recycling.

4.6.2.8 Senate Bill 1078 (Renewable Portfolio Standard) and Senate Bill 350

SB 1078 (Sher; September 2002) established the Renewable Portfolio Standard (RPS) program, which requires an annual increase in renewable generation by the utilities equivalent to at least 1 percent of retail sales, with an aggregate goal of 20 percent by 2017. Several bills have accelerated
and expanded the RPS. Most recently, SB 350 (October 2015) expands the RPS by establishing a goal of 50 percent of the total electricity sold to retail customers in California per year by December 31, 2030, and interim goals of 40 percent by 2024 and 45 percent by 2027. In addition, SB 350 includes the goal to double the energy efficiency savings in electricity and natural gas final end uses (such as heating, cooling, lighting, or class of energy uses on which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the California Public Utilities Commission, in consultation with the California Energy Commission, to establish efficiency targets for electrical and gas corporations consistent with this goal.

Consequently, utility energy generation from non-renewable resources is expected to be reduced based on implementation of the 60 percent RPS in 2030. Therefore, any project's reliance on non-renewable energy sources would also be reduced.

4.6.2.9 Assembly Bill 1493 and Executive Order S-1-07

In a response to the transportation sector accounting for more than half of California's CO₂ emissions, CARB has adopted several emissions standards to reduce vehicle GHG emissions. AB 1493 (Pavley) was enacted in July 2002. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by CARB to be vehicles that are primarily used for noncommercial personal transportation in the state. The 2009–2012 standards resulted in a reduction in approximately 22 percent of GHG emissions compared to emissions from the 2002 fleet, and the 2013–2016 standards resulted in a reduction of approximately 30 percent. Standards that regulate vehicles of model years 2009–2016 are termed "Pavley I." CARB adopted a second phase of the Pavley regulations, termed "Pavley II," which are now called the Low Emission Vehicle III (LEV III) Standards. LEV III covers model years 2017–2025.

Issued on January 18, 2007, EO S-1-07 set a declining Low Carbon Fuel Standard (LCFS) for GHG emissions measured in CO₂e grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020. The carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered. A 10 percent reduction in the intensity of transportation fuels is expected to equate to a reduction of 16.5 MMT CO₂e in 2020. However, to account for possible overlap of benefits between LCFS and the Pavley GHG standards, CARB has discounted the contribution of LCFS to 15 MMT CO₂e.

In January 2012, CARB approved the Advanced Clean Cars program, a new emissions-control program for model years 2015–2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package (CARB 2011). To improve air quality, CARB has implemented new emission standards to reduce smog-forming

emissions beginning with 2015 model year vehicles. It is estimated that in 2025, cars will emit 75 percent less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the USEPA and the National Highway Traffic Safety Administration, adopted new GHG standards for model year 2017–2025 vehicles; the new standards are estimated to reduce GHG emissions by 34 percent in 2025.

4.6.2.10 Executive Order N-79-20

Governor Newsom signed EO N-79-20 in September 2020 to end sales of internal combustion passenger vehicles by 2035, which establishes a target for the transportation sector that helps put the state on a path to carbon neutrality by 2045.

4.6.2.11 Senate Bill 375 (Sustainable Communities Strategy)

SB 375 (Steinberg; September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans and was enacted into law in September 2008. SB 375 required CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035. Regional Metropolitan Planning Organizations (MPOs) are then responsible for preparing a Sustainable Communities Strategy (SCS) within their Regional Transportation Plan. The goal of the SCS is to establish a forecasted development pattern for the region that, after considering transportation measures and policies, will achieve, if feasible, the GHG reduction targets. If an SCS is unable to achieve the GHG reduction target, an MPO must prepare an Alternative Planning Strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

In 2010, CARB adopted the SB 375 targets for the regional MPOs. The targets for SANDAG are a 15 percent reduction in emissions per capita by 2020 and a 19 percent reduction by 2035. SANDAG completed and adopted its most recent Regional Plan, the 2021 Regional Plan, in December 2021. The 2021 Regional Plan includes the region's SCS in accordance with SB 375 and continues to emphasize alternative transportation infrastructure and infill development.

4.6.2.12 Executive Order S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. It directs state agencies to take specified actions to assess and plan for such impacts. In 2021, the California Natural Resources Agency released an updated Climate Change Adaptation Strategy. The update provides recommendations and a framework for policy initiatives in response to the impacts of climate change, with additional considerations for fully integrating equity into California's climate resilience programs (CNRA 2021).

4.6.3 Local Regulations

4.6.3.1 City of San Diego General Plan

The City's General Plan Conservation Element contains policies to guide the conservation of resources that are fundamental components of San Diego's environment, help define the City's identity, and are relied upon for continued economic prosperity. The purpose of this element is to help the City become an international model of sustainable development and conservation and to provide for the long-term conservation and sustainable management of the rich natural resources that help define the City's identity, contribute to its economy, and improve its quality of life. For example, Conservation Element Policy CE-A.2 aims to "reduce the City's carbon footprint" and to "develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth" related to climate change (City of San Diego 2024a).

The Land Use and Community Planning Element; the Mobility Element; the Urban Design Element; and the Public Facilities, Services, and Safety Element also identify GHG reduction and climate change adaptation goals. These elements contain policy language related to sustainable land use patterns, alternative modes of transportation, energy efficiency, water conservation, waste reduction, and greater landfill efficiency. The overall intent of these policies is to support climate protection actions while retaining flexibility in the design of implementation measures, which could be influenced by new scientific research, technological advances, environmental conditions, or state and federal legislation.

One specific concept introduced in the City's General Plan is the City of Villages strategy, which proposes growth to be directed into pedestrian-friendly, mixed-use activity centers linked to an improved regional transit system. The City of Villages strategy shifts the focus of land use policies to encourage infill development and reinvest in existing communities. Locating different land use types near one another can decrease mobile emissions. Thus, the development of dense urban "villages" would generate fewer GHG emissions. The City of Villages strategy can be seen as an effort to avoid what is commonly referred to as "urban sprawl."

4.6.3.2 City of San Diego Climate Action Plan

An updated qualified Climate Action Plan (CAP) was adopted in August 2022 that builds upon the 2015 CAP and establishes a community-wide goal of net zero by 2035. The overall strategies to achieve the CAP target include decarbonization of the built environment, access to clean and renewable energy, reduction of vehicle miles traveled (VMT) through land use and transportation options, CH₄ capture and waste diversion, resilient infrastructure, habitat restoration, and pursuit of emerging climate actions. The CAP Consistency Checklist, adopted in 2016, has codified as an amendment to the LDC, Chapter 14, Article 3, Division 14, as the CAP Consistency Regulations to ensure that all new development is consistent with the updated CAP. The CAP Consistency Regulations apply to specified ministerial and discretionary projects to ensure that the projects comply with the goals and objectives of the updated CAP and contain measures that are required to be implemented on a project-by-project basis to ensure the specified emissions targets identified in this CAP are achieved. Implementation of these measures would ensure that new development is consistent with the CAP's assumptions for relevant CAP strategies toward achieving the identified GHG reduction targets. Projects that are consistent with the CAP, as determined through the CAP Consistency Regulations, may rely on the CAP for the CEQA cumulative impacts analysis of GHG emissions. Projects that are not consistent with the CAP must prepare a comprehensive project-specific analysis of GHG emissions, including quantification of existing and projected GHG emissions and incorporation of the measures in the CAP Consistency Regulations to the extent feasible.

4.6.3.3 City of San Diego Climate Resilient SD Plan

On December 14, 2021, the San Diego City Council adopted the City's first-ever climate adaptation and resiliency plan. The Climate Resilient SD Plan provides strategies to prepare, respond, and recover from potential climate change hazards, like extreme heat, wildfires, sea-level rise, and flooding and drought, as well as how the proposed investments can improve local communities. It will increase the City's ability to adapt, recover, and thrive in a changing climate.

4.7 Hydrology and Water Quality

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to hydrology and water quality for the CRMP Phase 1.

4.7.1 Federal Regulations

4.7.1.1 Federal Clean Water Act

The CWA is the principal law governing pollution control and water quality of the nation's waterways, including lakes, rivers, aquifers, and coastal areas. The objective of the CWA is to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 USC 1251). CWA Section 401 requires that any applicant for a federal permit to conduct any activity, including the construction or operation of a facility that may result in the discharge of any pollutant, must obtain certification from the state. Section 402 of the CWA controls water pollution through the National Pollutant Discharge Elimination System by regulating point sources that discharge pollutants into waters of the United States. Implementation of the CWA is the responsibility of the USEPA, which has delegated much of that authority to state and regional agencies.

Under CWA Sections 303(d) and 518(e), states, territories, and authorized Tribes are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized Tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop Total Maximum

Daily Loads for these waters. A Total Maximum Daily Load is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards.

4.7.1.2 Executive Order 11988 – Floodplain Management

The major requirements of EO 11988 are to avoid support of floodplain development; prevent uneconomic, hazardous, or incompatible use of floodplains; protect and preserve the natural and beneficial floodplain values; and be consistent with the standards and criteria of the National Flood Insurance Program. The basic tools for regulating construction in potentially hazardous floodplain areas are local zoning techniques and guidelines. Proper floodplain zoning can be beneficial in the preservation of open space, retention of floodplains as groundwater recharge areas, and directing of development to less flood-prone areas.

4.7.2 State Regulations

4.7.2.1 State Water Resources Control Board Construction General Permit

Construction activities that disturb more than 1 acre of land must comply with the Construction General Permit. To be in compliance, the applicant for a construction permit must file a complete and accurate Notice of Intent with the SWRCB. Compliance requires conformance with all applicable best management practices (BMPs) and development and implementation of a Stormwater Pollution Prevention Plan. A Stormwater Pollution Prevention Plan's purpose is to develop a strategy for construction projects to comply with stormwater regulations in order to minimize sedimentation, erosion, and point source and non-point source pollutants entering waterways. BMPs are designed to aid and guide on-site personnel to secure a site's stormwater discharges during rain events through prevention, action, and restabilization methods and techniques.

4.7.2.2 Porter-Cologne Water Quality Control Act

The Porter-Cologne Act established the principal California legal and regulatory framework for water quality control. The Porter-Cologne Act is embodied in the California Water Code, which authorizes the SWRCB to implement the provisions of the federal CWA. The Porter-Cologne Act is regulated by the RWQCB for impacts to waters of the state. Although water quality issues related to impacts to waterways are normally addressed during Section 401 Water Quality Certification, should a water of the State of California be determined by the USACE not to have CWA jurisdiction, Porter-Cologne would be addressed under a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending on the level of impact and the properties of the waterway.

The state is divided into nine regions governed by the RWQCBs. The RWQCBs implement and enforce provisions of the California Water Code and the CWA under the oversight of the SWRCB. The City is located within the purview of the San Diego RWQCB (Region 9). The Porter-Cologne Act also provides for the development and periodic review of basin-specific Water Quality Control Plans (Basin Plans) that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives for those waters.

4.7.2.3 Municipal Separate Storm Sewer System Permit

The most current Municipal Separate Storm Sewer System (MS4) Permit for Region 9, Order No. R9-2013-0001, was adopted on May 8, 2013, by the San Diego RWQCB and became effective on June 27, 2013. This order was amended by adoption of Order No. R9-2015-0001 on February 11, 2015, and adoption of Order No. R9 2015-0100 on November 18, 2015. This is an update to the 2007 MS4 Permit, Order No. R9-2007-0001. Updated City of San Diego Stormwater Standards (based on the Co-Permittees' Model BMP Design Manual) were adopted on February 16, 2016. The CRMP Phase 1 would be subject to the most current MS4 Permit requirements.

The MS4 Permit implements a regional strategy for water quality and related concerns and mandates a watershed-based approach that often encompasses multiple jurisdictions. The overall permit goals include (1) providing a consistent set of requirements for all co-permittees and (2) allowing the co-permittees to focus their efforts and resources on achieving identified goals and improving water quality, rather than just completing individual actions (which may not adequately reflect identified goals). Under this approach, the co-permittees are tasked with prioritizing their individual water quality concerns, as well as providing implementation strategies and schedules to address those priorities. MS4 Permit conformance entails considerations such as receiving water limitations, waste load allocations, and numeric water quality based effluent limitations. Specific efforts to provide permit conformance and reduce runoff and pollutant discharges to the maximum extent practicable involve methods such as (1) using jurisdictional planning efforts to provide water quality protection; (2) requiring coordination between individual jurisdictions to provide watershed-based water quality protection; (3) implementing appropriate BMPs, including Low Impact Development (LID) measures, to avoid, minimize, and/or mitigate effects such as increased erosion and off-site sediment transport (sedimentation), hydromodification, and the discharge of pollutants in urban runoff; and (4) using appropriate monitoring/assessment, reporting, and enforcement efforts to ensure proper implementation, documentation, and (as appropriate) modification of permit requirements. The City has implemented a number of regulations to ensure conformance with these requirements, as outlined below under local standards.

4.7.2.4 California Coastal Act

Pursuant to CCA Sections 30231 and 30233, the CCC requires that most development avoid and buffer wetland resources. Policies require the maintenance and restoration of the biological productivity and quality of wetlands and limiting the filling of wetlands. The filling of wetlands is generally limited to high-priority uses and must be avoided unless there "is no feasible less environmentally damaging alternative, and authorized fill must be fully mitigated."

CCA Section 30121 defines the term "wetland" as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens." Further, the CCC's Wetlands Briefing Background Information Handout 3 regulations (14 CCR 13577) establish a "one-parameter definition" that only requires evidence of a single parameter to establish wetland conditions:

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

The CCC's one-parameter definition states that wetlands must have one or more of the following three attributes: "(1) at least periodically the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year."

The CCC provides further guidance on analyzing wetlands and wetland impacts in the Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone (CCC 1994).

4.7.2.5 California Department of Fish and Game Code, Section 1600 – Streambed Alteration Program

The CDFW regulates activities that would divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. CDFW has jurisdiction over riparian habitats (e.g., southern willow scrub) associated with watercourses. CDFW jurisdictional resources are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. A Lake and Streambed Alteration Agreement is required for a project that would impact CDFW jurisdictional resources. The Lake and Streambed Alteration Agreement with the CDFW typically requires mitigation in the form of onsite, off-site, or in-lieu fee mitigation, or a combination of all three forms.

4.7.3 Local Regulations

4.7.3.1 Regional Water Quality Control Board Water Quality Control Plan for the San Diego Basin

The San Diego Basin encompasses approximately 3,900 square miles, including most of San Diego County and portions of southwestern Riverside and Orange Counties. The basin is composed of 11 major Hydrologic Units, 54 Hydrologic Areas, and 147 Hydrologic Subareas, extending from Laguna

Beach southerly to the U.S.–Mexico border. Drainage from higher elevations in the east flows to the west and ultimately into the Pacific Ocean. The RWQCB prepared the Basin Plan, which defines existing and potential beneficial uses and water quality objectives for coastal waters, groundwater, surface waters, imported surface waters, and reclaimed waters in the basin. Water quality objectives seek to protect the most sensitive of the beneficial uses designated for a specific water body.

4.7.3.2 City of San Diego Jurisdictional Urban Runoff Management Program

This document is a total account of how the City plans to protect and improve the water quality of rivers, bays, and the Pacific Ocean within the region in compliance with the water board permit referenced above. The document describes how the City incorporates stormwater BMPs into land use planning, development review and permitting, City Capital Improvement Program project planning and design, and execution of construction contracts.

4.7.3.3 Water Quality Improvement Plans

The MS4 Permit also requires development of Water Quality Improvement Plans that guide the co-permittees' jurisdictional runoff management programs toward achieving improved water quality in MS4 discharges and receiving waters. The Water Quality Improvement Plans further the CWA's objectives to protect, preserve, enhance, and restore the water quality and designated beneficial uses of waters of the state. The requirement sets forth a collaborative and adaptive planning and management process that identifies the highest-priority water quality conditions within a watershed management area and implements strategies through the jurisdictional runoff management programs of the respective jurisdictions.

4.7.3.4 City of San Diego Drainage Design Manual

Pursuant to City's Municipal Code, Chapter 14, Article 2, Division 2, Storm Water Runoff and Drainage Regulations, drainage regulations apply to all development in the City whether or not a permit or other approval is required.

Drainage design policies and procedures for the City are given in the City's Drainage Design Manual, updated in January 2017. The Drainage Design Manual provides a guide for designing drainage and drainage-related facilities for developments within the City. Chapter 1 of the Drainage Design Manual outlines basic policies and objectives. Subsequent chapters provide design criteria. The CRMP Phase 1 would be required to adhere to these existing criteria.

The City would be responsible for reviewing hydrologic and hydraulic studies and design features for conformance to criteria given in the Drainage Design Manual for every map or permit for which development approval is sought from the City.

4.7.3.5 City of San Diego Stormwater Standards Manual

The City updated its Stormwater Standards in May 2021 to comply with the 2013 MS4 Permit and its 2015 amendments (City of San Diego 2018b). The Stormwater Standards provide direction for associated regulatory compliance, including identification of construction and postconstruction stormwater requirements for Standard Projects and Priority Development Projects. Specifically, the standards identify regulatory requirements and provide detailed performance standards and monitoring/maintenance efforts for (1) construction BMPs, (2) overall stormwater management design, (3) site design low impact development (LID) and source control BMPs applicable to all projects, (4) pollutant (or treatment) control and hydromodification management BMPs applicable to Priority Development Projects, (5) operation and maintenance requirements for applicable BMPs, and (6) specific direction and guidance to provide conformance with City and related National Pollutant Discharge Elimination System stormwater standards.

The updated Stormwater Standards Manual Pollutant Control BMPs require Priority Development Projects to implement LID BMPs that are designed to retain (i.e., intercept, store, infiltrate, evaporate, evapotranspire and filtrate) stormwater. If retention BMPs are determined infeasible, then biofiltration BMPs may be allowed. Furthermore, if biofiltration BMPs are determined infeasible, then the Priority Development Projects may be allowed to use flow-through treatment control BMPs, provided that an off-site alternative compliance project is available.

LID BMPs will be important for site planning because these features require on-site areas to retain stormwater for infiltration, reuse, or evaporation. Although the footprint of the LID BMPs can often be fit into planned landscaping features, this requires early planning to ensure that the features are located in places where they can intercept the drainage and safely store the water without adverse effects to adjacent slopes, structures, roadways, or other features.

4.7.3.6 City of San Diego General Plan

The City's General Plan provides a number of goals and policies related to hydrology and water quality concerns in the Public Facilities, Services, and Safety Element, and in the Conservation Element, as summarized below:

- **Public Facilities, Services, and Safety Element.** This element includes a number of goals and policies related to the provision of adequate public facilities and services for existing and proposed development (City of San Diego 2024g). For stormwater, these involve efforts to provide appropriately designed and sized infrastructure and ensure adequate conveyance capacity, protect water quality, and provide conformance with applicable regulatory standards (such as the National Pollutant Discharge Elimination System).
- **Conservation Element.** This element provides a number of goals and policies related to preserving and protecting watersheds and natural drainage features, minimizing runoff

and related pollutant generation during and after construction activities, and protecting drinking water resources (City of San Diego 2024a).

4.7.3.7 City of San Diego Grading Ordinance

The City's Grading Regulations Ordinance (City's Municipal Code, Section 142.0101 et seq.) incorporates a number of requirements related to hydrology and water quality, including BMPs necessary to control stormwater pollution from sources such as erosion/sedimentation and construction materials during project construction and operation. Specifically, these requirements include elements related to slope design, erosion/sediment control, revegetation requirements, and material handling/control.

4.8 Land Use and Planning

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to land use for the CRMP Phase 1. Project consistency with applicable goals and policies of the plans described below is presented in Appendix E, Land Use Consistency Tables.

4.8.1 Federal Regulations

4.8.1.1 Federal Aviation Regulations

The Federal Aviation Regulations are rules prescribed by the Federal Aviation Administration governing all aviation activities in the United States. The Federal Aviation Regulations comprise Title 14 of the CFR. A variety of activities are regulated, such as aircraft design and maintenance, typical airline flights, pilot training activities, hot-air ballooning, lighter-than-air aircraft, human-made structure heights, obstruction lighting and marking, model rocket launches, commercial space operations, model aircraft operations, Unmanned Aircraft Systems, and kite-flying. The rules are designed to promote safe aviation, protecting pilots, flight attendants, passengers, and the general public from unnecessary risk.

4.8.2 State Regulations

4.8.2.1 Landscaping and Lighting Act

The Landscaping and Lighting Act of 1972 enables counties, cities, and special districts to acquire land for parks, recreation, and open space. A local government also may use assessments to pay for improvements and maintenance of these areas. In addition to local government agencies (i.e., counties and cities), park and recreation facilities may be provided by other public agencies, such as community service districts, park and recreation districts, and water districts. If so empowered, such an agency may acquire, develop, and operate recreation facilities for the general public.

4.8.2.2 California Coastal Act

Under the CCA, cities and counties are responsible for preparing Local Coastal Programs (LCPs) to obtain authority to issue Coastal Development Permits for projects within their jurisdiction. LCPs consist of land use plans, zoning ordinances, zoning maps, and other implementing actions that conform to the policies of the CCA. Until an agency has a fully certified LCP, the CCC is responsible for issuing Coastal Development Permits. The CCC was established by voter initiative in 1972 and was made permanent by the California Legislature through the adoption of the CCA (PRC Section 30000 et seq.). The CCC, in partnership with coastal cities and counties, plans and regulates the use of land and water in the Coastal Zone.

4.8.3 Local Regulations

4.8.3.1 City of San Diego General Plan

The City's General Plan was unanimously adopted by the San Diego City Council on March 10, 2008, with additional amendments approved in December 2010, January 2012, August 2021, and July 2024. The City's General Plan provides policy guidance to balance the needs of a growing city while enhancing the quality of life for current and future San Diegans. It includes the City of Villages strategy, which outlines how the City can enhance its many communities and neighborhoods as growth occurs over time. The City's General Plan contains 10 elements that provide a comprehensive "blueprint" for the City's growth over the next 20 plus years.

As shown on the City's General Plan Land Use Map (Figure LU-2; City of San Diego 2024d), the majority of this project's survey area is designated as Park, Open Space, and Recreation, with the eastern edges designated as Residential. Most of the environmental goals relevant to the CRMP Phase 1 are in the City's General Plan Land Use and Community Planning, Urban Design, Conservation, Recreation, and Noise Elements, as described in the following sections.

Land Use and Community Planning Element

The purpose of this element is to guide future growth and development into a sustainable Citywide development pattern while maintaining or enhancing quality of life in the City's communities (City of San Diego 2024d). The Land Use and Community Planning Element addresses land use issues that apply to the City as a whole. The community planning program is the mechanism to refine Citywide policies, designate land uses, and make additional site-specific recommendations as needed. The element establishes the structure to respect the diversity of each community and includes policy direction to govern the preparation of community plans. It also provides policy direction in areas including zoning and policy consistency, the plan amendment process, coastal planning, airport land use compatibility planning, annexation policies, balanced communities, equitable development, and environmental justice.

Urban Design Element

"Urban design" describes the physical features that define the character or image of a street, neighborhood, community, or the City as a whole. Urban design provides the visual and sensory relationship between people and the built and natural environments. The built environment includes buildings and streets, and the natural environment includes features such as shorelines, canyons, mesas, and parks as they shape and are incorporated into the urban framework. Citywide urban design recommendations are provided in this element to ensure that the built environment continues to contribute to the qualities that distinguish the City as a unique living environment (City of San Diego 2024i).

Conservation Element

The purpose of the Conservation Element is to provide for the long-term conservation and sustainable management of the rich natural resources that help define the City's identity, contribute to the economy, and improve its quality of life (City of San Diego 2024a). The Conservation Element contains policies to guide the conservation of the resources that are fundamental components of the City's environment, help define the City's identity, and are relied upon for continued economic prosperity.

Recreation Element

The City has over 42,000 acres of park and open space lands that offer a diverse range of recreational opportunities. The Recreation Element contains goals and policies to address the challenges the City faces to preserve, protect, develop, operate, maintain, and enhance public recreation opportunities and facilities throughout the City (City of San Diego 2024h). The purpose of the element is to help manage the increasing demand on existing/remaining usable park and recreation resources/facilities, develop open space lands and resource-based parks for population-based recreational purposes, ensure the distribution and access to parks is achieved equally Citywide recognizing the unique differences among communities, and achieve livable neighborhoods and communities.

Noise Element

The purpose of the Noise Element is to protect people living and working in the City from excessive noise. The Noise Element provides goals and policies to guide compatible land uses and incorporates noise attenuation measures for new uses to protect people living and working in the City from an excessive noise environment (City of San Diego 2024f). It also establishes noise land use compatibility guidelines, as discussed in Section 5.9, Noise.

Environmental Justice Element

The purpose of the Environmental Justice Element is to identify and reduce unique and compounded health risks, increase community assets, and improve overall health (City of San Diego 2024b). The Environmental Justice Element provides goals and policies focused on reducing pollution exposure, improving air quality, and promoting public facilities, food access, safe and healthy homes, and physical activity. To better address community needs, this element also encourages and supports inclusive public engagement in City decisions.

4.8.3.2 La Jolla Community Plan and Local Coastal Program Land Use Plan

The La Jolla Shores project site is within the La Jolla Community Planning Area. The La Jolla Community Plan and Local Coastal Program (LCP) Land Use Plan (La Jolla Community Plan) was approved by the Planning Commission on December 6, 2001, and adopted by City Council on November 4, 2003. The La Jolla Community Plan prioritizes pedestrian-oriented amenities and protection of natural resources, such as natural and shoreline parks, sensitive coastline bluffs, nature trails, and bikeways and promenades along the public beaches. The general community goals of the La Jolla Community Plan applicable to the CRMP Phase 1 include the following:

- Maintain La Jolla as a primarily residential and recreational oriented community by protecting its residential areas and historic resources, maintaining its public recreational areas, and enhancing its commercial districts.
- Conserve and enhance the natural amenities of the community such as its views from identified public vantage points, open space, hillsides, canyons, ocean, beaches, water quality, bluffs, wildlife and natural vegetation, and achieve a desirable relationship between the natural and developed components of the community.
- Enhance existing public access to the ocean, beach, and park areas such as Ellen Browning Scripps Park and Kellogg Park along the shoreline in order to be of greatest benefit to neighborhood residents and visitors to the community.

4.8.3.3 Pacific Beach Community Plan and Local Coastal Program Land Use Plan

The Pacific Beach – Tourmaline Surf Park project site is within the Pacific Beach Community Planning Area. The Pacific Beach Community Plan and LCP Land Use Plan (Pacific Beach Community Plan) was approved by the Planning Commission on December 2, 1993, and adopted by City Council on February 28, 1995. The vision of the Pacific Beach Community Plan is to reconcile the community as a visitor destination and residential community, and the Pacific Beach Community Plan includes goals, policies, and recommended actions to support this vision. The Pacific Beach Community Plan aims to minimize traffic through the increased provision of convenient and affordable public transit and concentrate new development along and around Garnet Avenue and Mission Boulevard, the community's primary commercial areas and transit corridors.

4.8.3.4 Mission Beach Precise Plan and Local Coastal Program Addendum

The Mission Beach project site is within the Mission Beach Community Planning Area. The Mission Beach Precise Plan and LCP was approved by the Planning Commission on May 15 and adopted by the City Council on July 11 in 1974. The plan was more recently amended on June 26, 2017. The vision of the Mission Beach Precise Plan and LCP Addendum is to reconcile its roles as both a visitor destination and a residential community by enhancing aspects of the community which draw both visitors and residents (e.g., the beach, the bay, Kate Sessions Park, and scenic vistas) through improved identification and access and minimizing the negative impacts of increased traffic through the increased provision of convenient and affordable public transit.

4.8.3.5 Mission Bay Park Master Plan

The Ocean Beach – Dog Beach project site is partially within the Mission Bay Park Community Planning Area. The Mission Bay Park Master Plan (MBPMP), which was adopted by the City of San Diego City Council in August 1994 and most recently amended in May 2024 with the De Anza Cove Amendment, serves as the guiding planning policy document for Mission Bay Park. The MBPMP was developed to manage the degraded water quality of the bay, plan for the new recreational demands of the future, and preserve and restore the environmental resources of the park, which had previously been exploited through historical development. The MBPMP outlines goals and objectives to support the sound management of the park's land and water resources while also balancing public recreation and the operation of economically successful commercial leisure enterprises. Goals and objectives of the MBPMP cover land use, water use, circulation and access, economics, environment, and aesthetics and design (City of San Diego 2021b).

Further, the MBPMP serves as the LCP for this area of the City. The MBPMP has incorporated the coastal issues that have been identified by and for the community and has developed policies and recommendations in various elements of the plan (City of San Diego 2021b).

4.8.3.6 Ocean Beach Community Plan and Local Coastal Program

The Ocean Beach – Dog Beach project site is partially within and the Ocean Beach – Pier project site is within the Ocean Beach Community Planning Area. The Ocean Beach Community Plan and LCP (Ocean Beach Community Plan) is the City's policy document guiding growth and infill development within Ocean Beach. The plan designates areas for residential, commercial, and public uses, as well as areas that are to remain undeveloped open space. The Ocean Beach Community Plan is a revision of the Ocean Beach Precise Plan and LCP Addendum adopted by the City Council in July 1975 and certified by the CCC in May 1980. The Ocean Beach Community Plan focuses on the environment of Ocean Beach, emphasizing development complementary to the existing small-scale character of the community. Maintaining and enhancing the existing development pattern is the primary objective of the Ocean Beach

Community Plan. Critical to the Ocean Beach community's vision is the preservation of open space, sensitive habitat, public park lands, and other recreational uses (City of San Diego 2015).

4.8.3.7 Peninsula Community Plan and Local Coastal Program Land Use Plan

The Sunset Cliffs project site is within the Peninsula Community Planning Area. The Peninsula Community Plan and LCP Land Use Plan (Peninsula Community Plan) was adopted on July 14, 1987 by the San Diego City Council and has undergone several updates since, the most recent of which occurred on May 31, 2011. The plan describes a future community composed of residential, community commercial, commercial recreation, naval-related, and park uses. The Peninsula Community Plan's overall community goals include redeveloping the former Naval Training Center with a mix of uses that complement the Peninsula community, conserving the character of existing single-family neighborhoods, and promoting multi-family infill in areas proximate to transit lines to reduce traffic congestion and airport noise pollution. These goals also include providing housing opportunities for residents of all levels and age groups and promoting the continued development and sensitive redevelopment of a mix of community, visitor, and marinerelated commercial land uses in the Roseville commercial district and neighborhood commercial uses in the Voltaire commercial district. In addition, the Peninsula Community Plan's overall community goals include increasing coordination between federal, state, and local government; conserving existing open space, including canyons, hillsides, wetlands, and shorelines; enhancing and protecting physical and visual access to the bay and ocean shoreline; developing a balanced transportation system, including alternatives to the automobile; maintaining and complementing the existing scale, architectural features, and vegetation in the Peninsula area; and providing additional park and recreation facilities (City of San Diego 2011).

4.8.3.8 Sunset Cliffs Natural Park Master Plan

The Sunset Cliffs Natural Park Master Plan, adopted in July 2005, is intended to "Create a Park where people can enjoy San Diego's natural coastal environment as it once was, free from the effects of man and intended to inspire the user to reflect on the grandeur of the sea, and the beauty of the cliffs that are Point Loma." The Sunset Cliffs Natural Park Master Plan primary objectives established to achieve this goal are to protect, conserve, and enhance; maintain focus on the unique coastal resources; allow public access with minimal environmental impacts; maintain planning integrity/strategy for resource preservation; and restore areas of neglect and damage to their previous condition and visual quality. This Master Plan has incorporated the recommendations identified in the Peninsula Community Plan that are applicable to Sunset Cliffs, including recommendations related to public access, recreation and visitor serving facilities, beach and bluff preservation, preservation of water, biological, and ecological resources, and visual resources.

4.8.3.9 City of San Diego Land Development Code Regulations

The City's LDC consists of Chapters 11, 12, 13, 14, and a portion of Chapter 15, of the City's Municipal Code. The LDC contains the City's planning, zoning, subdivision, and building regulations that regulate how land is to be developed within the City. The LDC sets forth the procedures used in the application of land use regulations, the types of review of development, and the regulations that apply to the use and development of land in the City. The intent of these procedures and regulations is to facilitate fair and effective decision-making and to encourage public participation.

General Development Regulations

The City established and adopted submittal requirements, review procedures, and standards and guidelines for development as manuals to supplement the LDC. These support documents are known collectively as the Land Development Manual. Chapter 14 of the LDC includes general development regulations, supplemental development regulations, building regulations, and electrical/plumbing/mechanical regulations that govern all aspects of project development. The grading, landscaping, parking, signage, fencing, and storage requirements are all in Chapter 14, General Regulations. Chapter 14 provides procedures to review land use plans, zoning actions, maps, and permit applications. Map and permit reviews are divided into two major categories: development review and construction review. A proposed map or permit may require either type or both types of review as specified. Development review is the review of conceptual or schematic plans. Development review is required when conditions must be applied to a map or permit or when adjustments or exceptions from regulations are proposed. Construction review is review of final or construction plans for compliance with regulations of the LDC.

Environmentally Sensitive Lands Regulations

The Environmentally Sensitive Lands regulations in Chapter 14, Article 3, Division 1 (Section 143.0101), of the City's LDC (City of San Diego 2022c) are intended to ensure that development, including but not limited to coastal development in the Coastal Overlay Zone, occurs in a manner that protects the overall quality of specific natural resources, as defined in the City's LDC, and is consistent with sound resource conservation principles and the rights of private property owners. These regulations and accompanying guidelines for biological resources, steep hillsides, Special Flood Hazard Areas, and coastal bluffs and beaches are intended to serve as standards for the determination of impacts and mitigation under the CEQA Statute and Guidelines and the CCA. Development on a site containing Environmentally Sensitive Lands requires a Site Development Permit in accordance with LDC Section 125.0502.

Historical Resources Regulations

Refer to Section 4.4.3, Local Regulations, for a discussion of the Historical Resources regulations.

4.8.3.10 San Diego County Regional Airport Authority Airport Land Use Compatibility Plan

The San Diego County Regional Airport Authority, which serves as the state-designated Airport Land Use Commission for the County, adopts Airport Land Use Compatibility Plans (ALUCPs) for all airports in the San Diego region. The ALUCPs serve as a tool for use by the Airport Land Use Commission in conducting reviews of proposed land use in the areas surrounding airports and assists the City, as an affected local land use jurisdiction, in the preparation or amendment of land use plans and ordinances, including the City's General Plan. Currently, four adopted ALUCPs—San Diego International Airport, Marine Corps Air Station Miramar, Brown Field Municipal Airport, and Montgomery Field Municipal Airport—are in place within the City's land use jurisdiction.

4.8.3.11 San Diego Association of Governments San Diego Forward: The Regional Plan

SANDAG is the federally designated MPO for the San Diego region. SANDAG serves as a forum for public decision-making on regional issues such as growth, transportation, and land use in the County and consists of representatives from each of the County's local jurisdictions. The San Diego Forward: The Regional Plan (2021 Regional Plan) was adopted by the SANDAG Board of Directors on December 10, 2021. The 2021 Regional Plan provides a long-term blueprint for the San Diego region that seeks to meet regulatory requirements, address traffic congestion, and create equal access to jobs, education, healthcare, and other community resources. The 2021 Regional Plan is the result of years of planning, data analysis, and community engagement to reimagine the San Diego region with a transformative transportation system, a sustainable pattern of growth and development, and innovative demand and management strategies (SANDAG 2021).

4.8.3.12 City of San Diego Climate Action Plan

Refer to Section 4.6.3, Local Regulations, for a discussion of the City's Climate Action Plan (CAP) and CAP Consistency Checklist.

4.8.3.13 City of San Diego Parks Master Plan

On August 3, 2021, the San Diego City Council approved the Citywide Parks Master Plan that replaced the City's 1956 planning document. The 2021 Parks Master Plan makes a firm commitment to equity by prioritizing funding for park-deficient and historically underserved communities, where park needs are greatest. The 2021 Parks Master Plan provides additional recreational opportunities for the public by delivering parks of all types, sizes, and features while emphasizing locations where park space is needed most and serves the greatest number of people. The plan also recognizes the importance of safe and enjoyable access by incorporating biking, walking, or rolling and transit options to easily visit local parks (City of San Diego 2021a).

4.8.3.14 San Diego County Multiple Species Conservation Program

Refer to Section 4.3.3, Local Regulations, for a discussion of the MSCP.

4.8.3.15 City of San Diego Biology Guidelines

Refer to Section 4.3.3, Local Regulations, for a discussion of the Biology Guidelines.

4.9 Noise

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to noise for the CRMP Phase 1.

4.9.1 Federal Regulations

The USEPA has indicated that residential noise exposure of 55 A-weighted decibels (dBA) to 65 dBA is acceptable when analyzing land use compatibility (USEPA 1981); however, these guidelines are not regulatory. With regard to noise exposure and workers, the federal Occupational Safety and Health Administration has established regulations to safeguard the hearing of workers exposed to occupational noise (29 CFR 1910.95). The Occupational Safety and Health Administration specifies that sustained noise over 85 dBA (8-hour time-weighted average) can be a threat to workers' hearing, and if worker exposure exceeds this amount, the employer shall develop and implement a monitoring plan (29 CFR 1910.95[d][1]).

4.9.2 State Regulations

4.9.2.1 California Code of Regulations

California Government Code, Section 65302(f)(1), requires the preparation of a General Plan Noise Element that shall identify and appraise the noise problems in the community. The Noise Element shall analyze and quantify, to the extent practicable, as determined by the legislative body, current and projected noise levels for the following sources:

- A. Highways and freeways
- B. Primary arterials and major local streets
- C. Passenger and freight on-line railroad operations and ground rapid transit systems
- D. Aviation and airport-related operations
- E. Local industrial plants
- F. Other ground stationary noise sources contributing to the community noise environment

4.9.2.2 California Noise Control Act

The California Noise Control Act of 1973 (California Health and Safety Code, Sections 46000–46080) finds that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic

damage. The act also finds that a continuous and increasing bombardment of noise occurs in urban, suburban, and rural areas. The act declares that the state has a responsibility to protect the health and welfare of its citizens through the control, prevention, and abatement of noise. It is the policy of the state to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

4.9.2.3 California Noise Insulation Standards (California Code of Regulations, Title 25)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (California Administrative Code, Title 25, Chapter 1, Subchapter 1). Title 24 requires that residential structures be designed to prevent the intrusion of exterior noise so that the interior noise, with windows closed, attributable to exterior sources shall not exceed 45 dBA community noise equivalent level (CNEL) in any habitable room. The regulations also specify that acoustical studies must be prepared whenever a multi-family residential building or structure may be exposed to exterior noise levels of 60 dBA CNEL or greater. Such acoustical analysis must demonstrate that the residences have been designed to limit intruding noise to a maximum interior noise level of 45 dBA CNEL.

4.9.3 Local Regulations

4.9.3.1 City of San Diego General Plan

The Noise Element of the City's General Plan includes the following policies intended to minimize noise through standards, site planning, and noise mitigation. The City's General Plan policies include the separation of excessive noise-generating uses from residential and other noise-sensitive land uses, the limitation of future residential and other noise-sensitive land uses in areas exposed to high levels of noise, and an acoustical study requirement.

In addition, the Noise Element includes the Land Use – Noise Compatibility Guidelines (City's General Plan Table NE-3), which identify the limits for acceptable noise levels for different land use categories, as illustrated in Table 4-3, City of San Diego Land Use – Noise Compatibility Guidelines (City of San Diego General Plan Table NE-3). The City conditionally allows multiple-unit and mixed-use residential uses exposed to exterior noise levels of up to the 70 dBA CNEL in areas affected primarily by motor vehicle noises with existing residential uses even though they are not generally considered compatible (City of San Diego 2024f).

	Exterior Noise Exposure (dBA CNEL)				
Land Use Category	<60	60–65	65–70	70–75	75+
Parks and	Recreationa				
Parks; Active and Passive Recreation					
Outdoor Spectator Sports; Golf Courses; Water Recreational Facilities; Indoor Recreation Facilities					
Agric	ultural				
Crop Raising and Farming; Community Gardens; Aquaculture; Dairies; Horticulture Nurseries and Greenhouses; Animal Raising; Maintenance and Keeping; Commercial Stables					
Resid	dential				
Single Dwelling Units; Mobile Homes		45			
Multiple Dwelling Units		45	45		
Instit	utional		_		
Hospitals; Nursing Facilities; Intermediate Care Facilities; K– 12 Educational Facilities; Libraries; Museums; Childcare Facilities		45			
Other Educational Facilities (including Vocational/Trade Schools and Colleges and Universities)		45	45		
Cemeteries					
Retail Sales					
Building Supplies/Equipment; Groceries; Pets and Pet Supplies; Sundries, Pharmaceutical, and Convenience Sales; Apparel and Accessories			50	50	
Commercial Services					
Building Services; Business Support; Eating and Drinking; Financial Institutions; Maintenance and Repair; Personal Services; Assembly and Entertainment (includes Public and Religious Assembly); Radio and Television Studios; Golf Course Support			50	50	
Visitor Accommodations		45	45	45	
Offices					
Business and Professional; Government; Medical, Dental, and Health Practitioner; Regional and Corporate Headquarters			50	50	
Vehicle and Vehicular Equip	ment Sales	and Service	s Use		
Vehicle Repair and Maintenance; Vehicle Sales and Rentals; Vehicle Equipment and Supplies Sales and Rentals; Vehicle Parking					50
Wholesale, Distribution, and Storage Use					
Equipment and Materials Storage Yards; Moving and Storage Facilities; Warehouse; Wholesale Distribution					50

Table 4-3. City of San Diego Land Use – Noise Compatibility Guidelines(City of San Diego General Plan Table NE-3)

				Exterior Noise Exposure				
			(dBA CNEL)					
Land Use Category			<60	60–65	65–70	70–75	75+	
			Indu	strial				
Heavy Manufacturing; Light Manufacturing; Marine Industry; Trucking and Transportation Terminals; Mining and Extractive Industries							50	
Research and Development						50		
Compatib	ility Key:							
	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.					
		Outdoor Uses	Activities associated with the land use may be carried out.					
45, 50	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number (45 or 50) for occupied areas.					
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable.					
	Incompatible	Indoor Uses	New construction should not be undertaken.					
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.					

Table 4-3. City of San Diego Land Use – Noise Compatibility Guidelines(City of San Diego General Plan Table NE-3)

Source: City of San Diego 2024f.

Notes: CNEL = community noise equivalent level; dBA = A-weighted decibel

Compatible noise levels and land use definitions reflect amendments to the City's General Plan Noise Element approved in 2015.

4.9.3.2 City of San Diego Municipal Code

Chapter 5, Article 9.5, Noise Abatement and Control, of the City's Municipal Code declares that the making, creation, or continuance of excessive noises is detrimental to the public health, comfort, convenience, safety, welfare, and prosperity of the City's residents. Section 59.5.0401 establishes sound level limits. The exterior noise limits for each land use classification are summarized in Table 4-4, City of San Diego Table of Applicable Noise Limits. One-hour average sound levels are not to exceed the applicable limit. The noise subject to these limits is defined as that part of the total noise at the specified location that is due solely to the action of said person.

Land Use	Time of Day	1-Hour Average Sound Level (dBA)
Single-Family Residential	7:00 a.m. to 7:00 p.m.	50
	7:00 p.m. to 10:00 p.m.	45
	10:00 p.m. to 7:00 a.m.	40
Multi-Family Residential (up to a	7:00 a.m. to 7:00 p.m.	55
Maximum Density of 1/2,000)	7:00 p.m. to 10:00 p.m.	50
	10:00 p.m. to 7:00 a.m.	45
All Other Residential	7:00 a.m. to 7:00 p.m.	60
	7:00 p.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	50

Table 4-4. City of San Diego Table of Applicable Noise Limits

Land Use	Time of Day	1-Hour Average Sound Level (dBA)
Commercial	7:00 a.m. to 7:00 p.m.	65
	7:00 p.m. to 10:00 p.m.	60
	10:00 p.m. to 7:00 a.m.	60
Industrial or Agricultural	Anytime	75

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Source: City of San Diego 2019.

Notes: dBA = A-weighted decibel

Additionally, Section 59.5.0404 of the City's Municipal Code sets forth limitations related to construction noise:

- a. It shall be unlawful for any person, between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise unless a permit has been applied for and granted beforehand by the Noise Abatement and Control Administrator. In granting such permit, the Administrator shall consider whether the construction noise in the vicinity of the proposed work site would be less objectionable at night than during the daytime because of different population densities or different neighboring activities; whether obstruction and interference with traffic particularly on streets of major importance would be less objectionable at night than during the daytime; whether the type of work to be performed emits noises at such a low level as to not cause significant disturbances in the vicinity of the work site; the character and nature of the neighborhood of the proposed work site; whether great economic hardship would occur if the work were spread over a longer time; whether proposed night work is in the general public interest; and he shall prescribe such conditions, working times, types of construction equipment to be used, and permissible noise levels as he deems to be required in the public interest.
- b. Except as provided in subsection C. hereof, it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 a.m. to 7:00 p.m.
- c. The provisions of subsection B. of this section shall not apply to construction equipment used in connection with emergency work, provided the Administrator is notified within 48 hours after commencement of work.

4.9.3.3 San Diego County Regional Airport Authority San Diego International Airport Land Use Compatibility Plan

Refer to Section 4.8.3, Local Regulations, for a discussion on the San Diego County Regional Airport Authority San Diego International Airport ALUCP.

4.10 Public Services and Recreation

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to public services and facilities for the CRMP Phase 1.

4.10.1 Federal Regulations

No federal regulations are applicable to public services and facilities.

4.10.2 State Regulations

No state regulations are applicable to public services and facilities.

4.10.3 Local Regulations

The City requires payment of Development Impact Fees (DIFs) to collect a proportional fair share cost of capital improvements needed to offset the impact of the development (City's Municipal Code, Section 142.0640). Development Impact Fees are based on community-specific financing plans completed when Community Plans are updated. Financing plans were formerly known as Public Facilities Financing Plans and are now referred to as Impact Fee Studies.

The City's General Plan Public Facilities, Services, and Safety Element includes a number of policies that address financing of public services and facilities and specifies that Impact Fee Studies should be completed concurrent with preparation of Community Plan updates, should set community-level priorities for facility financing, and ensure that new development pays its proportional fair share of public facilities costs through payment of Development Impact Fees. Facility types that are eligible for Development Impact Fee funding include transportation, storm drains, parks and recreation, fire rescue, police, and libraries.

4.10.3.1 Police

As specified in the City's General Plan Public Facilities, Services, and Safety Element Policy PF-E.2, the City goal is to maintain average response time goals as development and population growth occurs. Average response time guidelines are as follows:

- Priority E Calls (imminent threat to life) within 7 minutes
- Priority 1 Calls (serious crimes in progress) within 12 minutes
- Priority 2 Calls (less serious crimes with no threat to life) within 30 minutes
- Priority 3 Calls (minor crimes/requests that are not urgent) within 90 minutes
- Priority 4 Calls (minor requests for police service) within 90 minutes

4.10.3.2 Parks and Recreation

The City's General Plan provides standards for population-based parks and recreation facilities, which include recreation centers and aquatic complexes. The standard for population-based parks

is 2.8 usable acres per 1,000 residents, which can be achieved through a combination of neighborhood and community parks and park equivalencies. The standard for a recreation center is a minimum of 17,000 square feet per recreation center to serve a population of 25,000. The standard for an aquatic complex is one per 50,000 people or within approximately 6 miles.

4.10.3.3 Fire Rescue

The Fire-Rescue Department has an active program that promotes the clearing of canyon vegetation away from structures in accordance with the City's Municipal Code, Section 142.0412, and the San Diego Fire-Rescue Department's Canyon Fire Safety guidelines and policies related to brush management. The City thins brush on City property within 100 feet of a previously conforming structure unless a site-specific report, which indicates that a greater distance is necessary, is approved by the San Diego Fire Rescue Department (per City's Municipal Code, Section 142.0412(i)) or a previously recorded entitlement requires a width more or less than the standard 100 feet. Other fire prevention measures include adopting safety codes and an aggressive brush management program. Citywide fire service goals, policies, and standards are located in the Public Facilities, Services, and Safety Element of the City's General Plan and the Fire-Rescue Services Department's Fire Service Standards of Response Coverage Deployment Study.

Response time standards are provided in the City's General Plan Public Facilities, Services, and Safety Element and summarized below:

- a. To treat medical patients and control small fires, the first-due unit should arrive within 7.5 minutes, 90 percent of the time from the receipt of the 911 call in fire dispatch. This equates to 1- minute dispatch time, 1.5 minutes company turnout time, and 5-minute drive time in the most populated areas.
- b. To provide an effective response force for serious emergencies, a multiple-unit response of at least 17 personnel should arrive within 10.5 minutes from the time of 911-call receipt in fire dispatch, 90 percent of the time.
 - This response is designed to confine fires near the room of origin, to stop wildland fires to under 3 acres when noticed promptly, and to treat up to five medical patients at once.
 - This equates to 1-minute dispatch time, 1.5 minutes company turnout time, and 8-minute drive time spacing for multiple units in the most populated areas.

To direct fire station location timing and crew size planning as the community grows, fire unit deployment performance measures are established based on population density zones and are provided in Table 4-5, Response Times Established for Future Growth (in Minutes).

	Structure Fire Urban Area	Structure Fire Rural Area	Structure Fire Remote Area	Wildfires Populated Areas
	>1,000 people/ square mile	1,000 to 500 people/ square mile	500 to 50 people/ square mile	Permanent Open Space Areas
1st Due Travel Time	5	12	20	10
Total Reflex Time	7.5	14.5	22.5	12.5
1st Alarm Total Time	8	16	24	15
1st Alarm Total Reflex	10.5	18.5	26.5	17.5

Table 4-5. Response Times Established for Future Growth (in Minutes)
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Source: City of San Diego 2021b.

Notes: Reflect time is the total time from receipt of a 911 call to arrival of the required number of emergency units.

The following population-based performance measures are used to plan for needed facilities. Where more than 1 square mile is not populated at similar densities, and/or a contiguous area with different zoning types aggregates into a population "cluster," these measures guide the determination of response time measures (Table 4-6, Response Times Determined for Future Population Clusters) and the need for fire stations.

Area	Aggregate Population	1st Due Unit Travel Time Goal
Metropolitan	>200,000 people	4 minutes
Urban-Suburban	<200,000 people	5 minutes
Rural	500 to 1,000 people	12 minutes
Remote	<500 people	>15 minutes

 Table 4-6. Response Times Determined for Future Population Clusters

Source: City of San Diego 2021b.

4.11 Transportation

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to transportation and circulation for the CRMP Phase 1.

4.11.1 Federal Regulations

No federal regulations are applicable to transportation and circulation.

4.11.2 State Regulations

4.11.2.1 California Department of Transportation

As the owner and operator of the State Highway System, Caltrans implements established state planning priorities in all functional plans, programs, and activities. Caltrans has the responsibility to coordinate and consult with local jurisdictions when proposed local land use planning and development may impact state highway facilities. Pursuant to Section 21092.4 of the California Public Resources Code, for projects of statewide, regional, or area-wide significance, the lead

agency shall consult with transportation planning agencies and public agencies that have transportation facilities that could be affected by the CRMP Phase 1.

4.11.2.2 Senate Bill 375 (Sustainable Communities Strategy)

SB 375 provides a new planning process to coordinate land use planning and regional transportation plans and funding priorities in order to help California meet the GHG reduction goals established in AB 32. SB 375 requires that regional transportation plans developed by MPOs (e.g., SANDAG) incorporate an SCS in their regional transportation plans that will achieve regional GHG emissions reduction targets set by CARB. The development of the SCS requires scenario planning that considers a range of alternative land use patterns for the region and transportation investments that achieve the regional target reduction in GHGs. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented developments.

4.11.2.3 Senate Bill 743 (Transit-Oriented Development and Vehicle Miles Traveled)

In September 2013, Governor Brown signed SB 743, which made significant changes to how transportation impacts are assessed under CEQA. SB 743 directs the Governor's Office of Planning and Research to develop a new metric and approach that replaces level of service analysis and suggests VMT as a metric. SB 743 also creates a new exemption for certain projects that are consistent with the regional SCS and, in some circumstances, eliminates the need to evaluate aesthetic and parking impacts of a project.

The Governor's Office of Planning and Research included the proposed update to the analysis of transportation impacts pursuant to SB 743 in its proposed amendments to the CEQA Guidelines. The California Natural Resources Agency finalized the updates to the CEQA Guidelines in November 2018, and the changes were approved by the Office of Administrative Law and filed with the Secretary of State; these changes are now in effect. According to the California Natural Resources Agency's Final Statement of Reasons for Regulatory Action, the new rules for applying the VMT metric in transportation analyses became mandatory on July 1, 2020.

4.11.2.4 Assembly Bill 1358 (California Complete Streets Act)

AB 1358, the California Complete Streets Act (California Government Code, Sections 65040.2 and 65302), required General Plan Circulation Elements as of January 1, 2011, to accommodate the transportation system from a multimodal perspective, including public transit, walking, and biking.

4.11.3 Local Regulations

4.11.3.1 San Diego Association of Governments

SANDAG is the region's transportation and land use planning agency for the County's 19 local governments. SANDAG is governed by a Board of Directors composed of mayors,

councilmembers, and County supervisors from local governments, including the City. The City also participates in the development and adoption of SANDAG documents and programs through staff participation on advisory committees and direct citizen participation. Key regional planning efforts include the following plans and programs.

San Diego Forward: The Regional Plan

Refer to Section 4.8.3, Local Regulations, for a discussion of SANDAG's 2021 Regional Plan.

Regional Transportation Improvement Plan

SANDAG is the MPO and regional transportation planning agency for the San Diego region. State and federal law requires MPOs to develop and adopt a regional transportation improvement program. This program is effective for 5 fiscal years and encompasses major transportation projects throughout the San Diego region. The most recent version of the Regional Transportation Improvement Plan was adopted by the SANDAG Board of Directors on December 10, 2021.

Riding to 2050: San Diego Regional Bike Plan

The Riding to 2050: San Diego Regional Bike Plan (Regional Bike Plan) was adopted by SANDAG to provide a regional strategy to make riding a bike a useful form of transportation for everyday travel. The plan will help San Diego meet its goals to reduce GHG emissions and improve mobility. Goals of the Regional Bike Plan include increasing levels of bicycling, improving bicycling safety, encouraging complete streets, supporting reductions in emissions, and increasing community support. The Regional Bike Plan supports the implementation of the 2021 Regional Plan, which calls for more transportation choices and a balanced regional transportation system that supports smart growth and a more sustainable region. The Regional Bike Plan provides a critical component of that balanced system and the programs necessary to support it (SANDAG 2010).

4.11.3.2 City of San Diego General Plan

The City's General Plan Mobility Element provides policies to attain a balanced, multimodal transportation network where each mode, or type of transportation, is able to contribute to an efficient network of services meeting varied user needs. In addition to addressing walking, streets, and transit, the Mobility Element also includes policies related to regional collaboration, bicycling, parking, goods movement, transportation demand management, and other components of the transportation system. Taken together, these policies advance a strategy for congestion relief and increased transportation choices in a manner that strengthens the City of Villages strategy and helps achieve a clean and sustainable environment (City of San Diego 2024e).

4.11.3.3 City of San Diego Municipal Code

Chapter 8, Traffic and Vehicles, of the City's Municipal Code regulates traffic control devices and signs on public roads, parking restrictions, restrictions on use of public roadways, parking regulations for vehicles transporting hazardous materials, and temporary (construction) traffic controls and road closures.

4.11.3.4 City of San Diego Bicycle Master Plan

The 2013 update to the City's 2002 Bicycle Master Plan presents a renewed vision closely aligned with the City's General Plan and includes a bicycle network with related bicycle projects, policies, and programs. The proposed bikeway network was developed to complement and connect with the proposed network in the 2002 Bicycle Master Plan, the 2006 San Diego Downtown Community Plan, and the 2010 San Diego Regional Bicycle Plan. There are approximately 511 miles of existing bikeway facilities with the majority composed of Bike Lanes. The recommended bicycle network includes recommendations for an additional 595 miles of bicycle facilities for a future network totaling almost 1,090 miles (City of San Diego 2013b).

The types of projects recommended in the Bicycle Master Plan include bikeways (Class I – Bike Path, Class II – Bike Lane, Class III – Bike Route, Bicycle Boulevards, and Cycle Tracks); bike parking, such as bike racks and on-street bike corrals; end-of-trip facilities that may be identified as part of individual development projects; maintenance activities, such as road and sign repair; bicycle signal detection installation, signage, and striping for warnings and wayfinding; and multimodal connection improvements, such as providing secure bicycle parking at transit stops (City of San Diego 2013b).

Bicycle facilities in the CRMP Phase 1 vicinity that are proposed in the Bicycle Master Plan include a Class III bicycle facility along Camino Del Oro adjacent to the La Jolla Shores project site, a Class II bike lane along La Jolla Boulevard adjacent to the Pacific Beach – Tourmaline Surf Park project site, a bicycle boulevard along Mission Boulevard adjacent to the Mission Beach project site, Class III bike routes and bicycle boulevards around the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites, and Class II or III bicycle facilities along Sunset Cliffs Boulevard.

4.11.3.5 City of San Diego Transportation Study Manual

In December 2020, the City approved its Transportation Study Manual to implement the required shift from a level of service CEQA analysis to a VMT CEQA analysis as a result of SB 743 and to better address all transportation modes. The purpose of this Transportation Study Manual is to provide guidance on how to prepare transportation studies in the City and to ensure consistency among consultants, predictability in preparation, consistency among reviewers, and conformance with all applicable City and state regulations, including CEQA. This Transportation Study Manual provides guidance for the following (City of San Diego 2022d):

- The City's CEQA Significance Determination Thresholds, screening criteria, and methodology for conducting the transportation VMT analysis.
- Preparation of Local Mobility Analyses to identify any off-site infrastructure improvements in the CRMP Phase 1 vicinity that may be triggered with the development of the CRMP Phase 1, analyze site access and circulation, and evaluate the local multimodal network available to serve the CRMP Phase 1.

4.12 Tribal Cultural Resources

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to Tribal Cultural Resources for the CRMP Phase 1.

4.12.1 Federal Regulations

Refer to Section 4.4.1.2 for a discussion of the Native American Graves Protection and Repatriation Act.

4.12.2 State Regulations

Refer to Section 4.4.2.2 for a discussion of California Public Resources Code, Section 5097 et seq. and Section 4.4.2.3 for a discussion of the California Native American Graves Protection and Repatriation Act.

4.12.2.1 Senate Bill 18

Native American involvement in the planning and development review process is addressed by several state laws. One of the state laws is SB 18, which includes detailed requirements for local agencies to consult with identified California Native American Tribes early in the planning and/or development process for proposed adoption or amendment of any General Plan or Specific Plan, or designation of open space.

4.12.2.2 Assembly Bill 52 (California Public Resources Code, Section 21080.3.1)

On September 25, 2014, Governor Brown signed the Native American Historic Resource Protection Act (AB 52), which created the new category of "Tribal Cultural Resources" that must be considered under CEQA. AB 52 requires lead agencies to provide notice to Tribes that are traditionally and culturally affiliated with the geographic area of a project if they have requested notice of projects proposed within that area. This is relevant to projects requiring the release of a Notice of Preparation, Notice of Mitigated Negative Declaration, Notice of Negative Declaration or Environmental Impact Report. If a Tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the Tribe.

4.13 Utilities and Service Systems

Groundwater recharge using recycled water is governed primarily by state and local agencies. The primary agencies involved are the California Department of Public Health, the SWRCB, and the local RWQCB. The federal government does not have direct jurisdiction over groundwater. However, it should be noted that because surface water quality may affect groundwater, and because USEPA has a role in setting wastewater treatment requirements and standards for surface water discharges, some federal regulations may be applied indirectly to groundwater recharge projects.

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to public services utilities for the CRMP Phase 1.

4.13.1 Federal Regulations

No federal regulations are applicable to public services and facilities.

4.13.2 State Regulations

4.13.2.1 California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum extent feasible. Specifically, this Act requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from land disposal by the year 2000 through source reduction, recycling, and composting activities, and requires the participation of the residential, commercial, industrial, and public sectors.

4.13.3 Local Regulations

4.13.3.1 Water Supply

SB 610 requires water suppliers to prepare a Water Supply Assessment (WSA) report for inclusion by land use agencies during the CEQA process for new developments subject to SB 221. SB 221 requires water suppliers to prepare written verification that sufficient water supplies are planned to be available prior to approval of large-scale subdivision of land under the State Subdivision Map Act. Large-scale projects include residential development of more than 500 units, shopping centers or businesses employing more than 1,000 people, shopping centers or businesses having more than 500,000 square feet of floor space, commercial office buildings employing more than 1,000 people, and/or commercial buildings having more than 250,000 square feet of floor space or occupying more than 40 acres of land. SB 221 and SB 610 went into effect January 2002 with the intention of linking water supply availability to land use planning by cities and counties.

4.13.3.2 Wastewater

The City of San Diego's Council Policy 400-13 identifies the need to provide maintenance access to all sewers in order to reduce the potential for spills. The policy requires that environmental impacts from access paths in environmentally sensitive areas should be minimized to the maximum extent possible through the use of sensitive access path design, canyon-proficient maintenance vehicles, and preparation of plans that dictate routine maintenance and emergency access procedures. City Council Policy 400-14 outlines a program to evaluate the potential to redirect sewage flow out of canyons and environmentally sensitive areas to an existing or proposed sewer facility located in City streets or other accessible locations. The policy includes an evaluation procedure that requires both a physical evaluation and a cost–benefit analysis. Based on the analysis, if redirection of flow outside the canyon is found infeasible, a Long-Term Maintenance and Emergency Access Plan is required. The plan would be specific to the canyon evaluated and would prescribe long-term access locations for routine maintenance and emergency repairs along with standard operating procedures identifying cleaning methods and inspection frequency.

The City's Sewer Design Guide sets forth criteria to be used for the design of sewer systems, which may consist of pump stations, gravity sewers, force mains, and related appurtenances. It includes criteria for determining capacity and sizing of pump stations, gravity sewers and force mains, alignment of gravity sewers and force mains, estimating wastewater flow rates, design of bridge crossings, and corrosion control requirements.

4.13.3.3 Water Distribution

The City's Water Facility Design Guidelines identify general planning, predesign, and design details and approaches to be used for water infrastructure. The guidelines provide uniformity in key concepts, equipment types, and construction materials on facilities built under the Water CIP. These design guidelines assist in providing professionally sound, efficient, uniform, and workable facilities, whether pipelines, pressure control facilities, pumping stations, or storage facilities.

4.13.3.4 Communication Facilities

City Council Policy 600-43 established a set of comprehensive guidelines for the review and processing of applications for the placement and design of Wireless Communication Facilities in accordance with the City of San Diego land use regulations. These guidelines are intended to prescribe clear, reasonable, and predictable criteria to assess and process applications in a consistent and expeditious manner, while reducing visual and land use impacts associated with Wireless Communication Facilities. For applicants seeking placement of a Wireless Communication Facility on City-owned land, this policy should be used in conjunction with applicable Council policies and LDC Section 141.0420.

4.13.3.5 Solid Waste and Recycling

The California Legislature passed AB 939 to address landfill capacity and solid waste concerns in 1989. The Integrated Waste Management Act mandated that all cities reduce waste disposed in landfills from generators within their borders by 50 percent by the year 2000. The law also required local governments to prepare Source Reduction and Recycling Elements detailing how these reductions would be achieved. In 2011, the State enacted AB 341, which established a policy goal for California of 75 percent recycling, composting, or source reduction of solid waste by 2020. In July 2012, the City updated the Recycling Ordinance to lower the exemption threshold for required recycling, thereby requiring all privately serviced businesses, commercial/institutional facilities, apartments, and condominiums generating 4 or more cubic yards of trash per week to recycle. The City is currently at a 67 percent diversion rate (City of San Diego 2022c). Pursuant to the City's CEQA Significance Determination Thresholds, any land development project of more than 40,000 square feet that may generate approximately 60 tons of waste or more during construction and/or operation is required to prepare a project-specific Waste Management Plan (WMP) to address disposal of waste generated during short-term project construction and long-term post-construction operation (City of San Diego 2023). The WMP is required to identify how the CRMP Phase 1 would reduce waste and achieve target reduction goals.

4.14 Wildfire

The following describes the planning framework and additional regulatory documents, plans, and policies relevant to wildfire for the CRMP Phase 1.

4.14.1 Federal Regulations

No federal regulations are applicable to wildfire hazards or response.

4.14.2 State Regulations

4.14.2.1 California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) serves and safeguards the people and protects the property and resources of over 31 million acres of California's privately owned wildlands within the State Responsibility Area (SRA). CAL FIRE foresters and fire personnel work closely with other agencies to encourage and implement fuels management projects to reduce the threat of uncontrolled wildfires. CAL FIRE provides varied emergency services in 36 of the State's 58 counties via contracts with local governments. CAL FIRE's Fire Prevention Program consists of multiple activities including wildland pre-fire engineering, vegetation management, fire planning, education and law enforcement. Typical fire prevention projects include brush clearance, prescribed fire, defensible space inspections, emergency evacuation planning, fire prevention education, fire hazard severity mapping, and fire-related law enforcement activities. CAL FIRE's mission emphasizes the management and protection of

California's natural resources; a goal that is accomplished through ongoing assessment and study of the state's natural resources and an extensive CAL FIRE Resource Management Program (FRAP). FRAP publishes several maps to inform planning and emergency response programs at state and local levels, including statewide maps of:

- Fire Hazard Severity Zones (FHSZs) Indicates that the majority of the city lies within a Very High FHSZ in an LRA; however, all of the CRMP Phase 1 locations are along the coastline and outside of the Very High FHSZ. FHSZs are defined per Government Code, Sections 51175–51189.
- Fire Threat Identifies the portions of the CRMP Phase 1 area with moderate and high fire threat. Fire threat provides a measure of fuel conditions and fire potential in the ecosystem, representing the relative likelihood of "damaging" or difficult to control wildfire occurring for a given area.
- Wildland–Urban Interface (WUI) Identifies communities outside of the CRMP Phase 1 areas a WUI Influence Zone, where vegetation is susceptible to wildfire, and Interface Zone, where dense housing adjacent to vegetation can burn in a wildfire.
- **Communities at Risk from Wildfire –** Identifies communities outside of the CRMP Phase 1 area, such as Mission Bay and Coronado, as Communities at Risk from Wildfire. Communities at Risk are communities which are identified as having some lands at high risk of house/structure damage from wildfire. These high-risk communities are within the WUI, the area where homes are close enough to wildland vegetation to be within fire's reach, defined here as within 0.5 to 1.5 miles of areas of High or Very High wildfire threat.

4.14.2.2 California Fire Code

The California Fire Code is Part 9 of thirteen parts of the official building regulations to the California Code of Regulations. This code is also referred to as Title 24, or the California Building Standards Code. The Code establishes the minimum requirements consistent with nationally recognized good practices to safeguard public health, safety and general welfare from fire and other hazards in new and existing buildings, structures and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations. The California Fire Code applies to the construction – including presence of fire service features and fire apparatus access roads – alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, means of egress, evacuation plans, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout the state.

4.14.2.3 California Strategic Fire Plan

The California Strategic Fire Plan is a cooperative effort between the State Board of Forestry and Fire Protection and CAL FIRE. The plan serves as the state's road map for reducing the risk of wildfire by placing the emphasis on preventive action before a fire starts. The Fire Plan looks to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. Eight goals outlined by the fire plan include:

- 1. Identify and evaluate wildland fire hazards and facilitate the collaborative development and sharing of such analyses and data collection.
- 2. Promote and support local land use planning processes as they relate to protection from wildfire and land owner responsibility.
- 3. Support and participate in the collaborative development and implementation of local, county and regional plans that address fire protection and landowner objectives.
- 4. Increase fire prevention awareness, knowledge and actions implemented by individuals and communities to reduce human loss, property damage and impacts to natural resources from wildland fires.
- 5. Integrate fire and fuels management practices with landowner/land manager priorities across jurisdictions.
- 6. Determine the level of resources necessary to effectively identify, plan and implement fire prevention using adaptive management strategies.
- 7. Determine the level of fire suppression resources necessary to protect the values and assets at risk identified during planning processes.
- 8. Implement post-fire assessments and programs for the protection of life, property, and natural resource recovery.

4.14.2.4 Government Code, Sections 51175–51189

Government Code, Sections 51175–51189, designate responsibility to local agencies to identify areas in the state as Very High FHSZs falling under local protection with local responsibility areas. Classification of Very High FHSZ must be consistent with statewide criteria. Designation of Very High FHSZ is based on fuel loading, slope, fire weather, and other relevant factors, including winds identified as causing wildfire spread. Once identified, information on Very High FHSZ is mapped and made available to the public. The CAL FIRE director periodically reviews the local responsibility areas and, as necessary, makes recommendations relative to the designated of Very High FHSZ. Sections 51175–51189 also outline brush clearance and defensible space maintenance for buildings in the FHSZ as well as the necessary permit process for building construction and reconstruction. CAL FIRE provides guidance on fuels management and defensible space requirements.

4.14.2.5 Public Resources Code, Sections 4201–4204

Public Resources Code, Sections 4201–4204, direct CAL FIRE to map areas of significant fire hazards, known as fire hazard severity zones, within state responsibility areas. Classification is based on fuels, terrain, weather, and other relevant factors. The director of CAL FIRE shall designate, and review and revise, as necessary, fire hazard severity zones and assign to each zone a rating reflecting the degree of fire hazard severity expected to prevail in the zone.

4.14.2.6 Public Resources Code, Section 4290

Public Resources Code, Section 4290, requires adoption of minimum fire safety standards related to defensible space that are applicable to SRA lands under the authority of CAL FIRE, and to lands classified and designated as Very High FHSZ, as defined in subdivision (i) of Section 51177 of the Government Code. These regulations apply to the perimeters and access to all residential, commercial, and industrial building construction within SRAs approved after January 1, 1991, and within lands classified and designated as Very High FHSZ, as defined in subdivision (i) of Section 51177 of the Government Code after July 1, 2021. The regulations shall include all of the following:

- 1. Road standards for fire equipment access
- 2. Standards for signs identifying streets, roads, and buildings
- 3. Minimum private water supply reserves for emergency fire use
- 4. Fuel breaks and greenbelts

On and after July 1, 2021, regulations for fuel breaks and greenbelts near communities shall be updated to provide greater fire safety for the perimeters to all residential, commercial, and industrial building construction within SRA and lands classified and designated as Very High FHSZ, as defined in subdivision (i) of Section 51177 of the Government Code, after July 1, 2021. These regulations shall include measures to preserve undeveloped ridgelines to reduce fire risk and improve fire protection.

4.14.2.7 Public Resources Code, Section 4291

Public Resources Code, Section 4291, requires a person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material shall maintain defensible space of 100 feet from each side and from the front and rear of the structure. Fuels shall be maintained in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. The intensity of fuels management may vary within the 100-foot perimeter of the structure, the most intense being within the first 30 feet around the structure. A greater distance may be required by state law, local ordinance, rule, or regulation. Clearance beyond the property line may only be required if the state law, local ordinance, rule, or regulation includes findings that the clearing is necessary to significantly reduce the risk of

transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. Clearance on adjacent property shall only be conducted following written consent by the adjacent landowner. Here, "fuel" means any combustible material, including petroleum-based products and wildland fuels. This section does not apply to single specimens of trees or other vegetation that are wellpruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation.

4.14.2.8 Public Resources Code, Section 4119

Public Resources Code, Section 4119, authorizes the U.S. Forest Service, the U.S. Department of the Interior Bureau of Land Management, and CAL FIRE to inspect properties to determine whether they comply with state forest and fire laws, regulations, or use permits. The inspector should note all violations in writing and provide a reasonable time limit for compliance considerate of time estimates for work required.

4.14.2.9 Public Resources Code, Section 4427

Public Resources Code, Section 4427, limits the use of any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tar pots, or grinding devices from which a spark, fire, or flame may originate, when the equipment is located on or near land covered by forest, brush, or grass. Before such equipment may be used, all flammable material, including snags, must be cleared away from the area around such operation for a distance of 10 feet. A serviceable round point shovel with an overall length of not less than 46 inches and a backpack pump water-type fire extinguisher, fully equipped and ready for use, must be maintained in the immediate area during the operation.

4.14.2.10 Public Resources Code, Section 4428

Public Resources Code, Section 4428, limits industrial operations powered by an internal combustion engine operated on hydrocarbon fuels on or near any land covered by forest, brush, or grass between April 1 and December 1, or other times when ground litter and vegetation would sustain spread of fire. Such operations must provide and maintain, for firefighting purposes only, suitable and serviceable tools in the following amounts, manner, and locations:

- a. A sealed fire toolbox shall be located in the operating area, at a point accessible in the event of fire. The fire toolbox shall contain a backpack pump-type fire extinguisher filled with water, two axes, two McLeod fire tools, and enough shovels for each employee at the operation to be equipped to fight fire.
- b. One or more serviceable chainsaws shall be immediately available in the operating area, or in the alternative, a full set of timber-felling tools shall be located in the fire toolbox.
c. Each passenger vehicle used shall be equipped with a shovel and an ax, and any other vehicle used shall be equipped with a shovel. Each tractor used shall also be equipped with a shovel.

4.14.2.11 Public Resources Code, Section 4431

Public Resources Code, Section 4431, limits use of a 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. Such operations shall maintain a clearance zone of at least 25 feet from flammable material. A serviceable round point shovel or fire extinguisher shall be present within 25 feet of the tool in use.

4.14.2.12 Government Code, Section 66474.02

In 2012, Senate Bill 1241 added Section 66474.02 to Title 7 Division 2 of the Government Code, commonly known as the Subdivision Map Act. The statute prohibits subdivision of parcels designated within Very High FHSZ or that are in the SRA, unless certain findings are made prior to approval of the tentative map. The statute requires that a city or county planning commission make three new findings regarding fire hazard safety before approving a subdivision proposal. The three findings are, in brief: (1) the design and location of the subdivision and its lots are consistent with defensible space regulations found in the California Public Resources Code, Section 4290-91, (2) structural fire protection services will be available for the subdivision through a publicly funded entity, and (3) ingress and egress road standards for fire equipment are met per any applicable local ordinance and Public Resources Code, Section 4290.

4.14.3 Local Regulations

4.14.3.1 City of San Diego Fire Code

The San Diego Fire Code consists of the City's Municipal Code, Chapter 5, Article 5, Sections 55.0101 through 55.9401, which adopt the 2016 California Fire Code, with some modifications, and applicable sections of the California Code of Regulations. Provisions of the California Fire Code are described under Section 4.14.2, State Regulations.

4.14.3.2 City of San Diego Building Regulations

The City's Building Regulations (City's Municipal Code, Chapter 14, Article 5, Division 1) are intended to regulate the construction of applicable facilities and encompass (and formally adopt) associated elements of the California Building Standards Code. Specifically, this includes regulating the "construction, alteration, replacement, repair, maintenance, moving, removal, demolition, occupancy, and use of any privately owned building or structure or any appurtenances connected or attached to such buildings or structures within this jurisdiction, except work located primarily in a public way, public utility towers and poles, mechanical equipment not specifically

regulated in the Building Code, and hydraulic flood control structures." The City's Building Regulations also establish acceptable construction materials for development near open space to minimize fire risk through adoption of Chapter 7, Fire Resistance-Rated Construction, and Chapter 7A, Materials and Construction Methods for Exterior Wildlife Exposure, of the California Building Standards Code (City's Municipal Code, Chapter 14, Article 5, Division 7).

4.14.3.3 Brush Management Regulations

The City's Brush Management Regulations (City's Municipal Code, Section 142.0412) are intended to minimize wildland fire hazards through prevention activities and programs. These regulations require the provision of mandatory setbacks, irrigation systems, regulated planting areas, and plant maintenance in specific zones, and are implemented at the project level through the grading and building permit process.

Brush management is required in all base zones on publicly or privately owned premises that are within 100 feet of a structure and contain native or naturalized vegetation. The City requires Brush Management Plans for all new development, which are intended to reduce the risk of significant loss, injury, or death involving wildland fires. Unless otherwise approved by the City Fire Marshal, the brush management plans for all future development would consist of two separate and distinct zones as follows:

- 1. Zone One consists of the area adjacent to structures where flammable materials would be minimized through the use of pavement and/or permanently irrigated ornamental landscape plantings. This zone is not allowed on slopes with a gradient greater than 4:1.
- 2. Zone Two consists of the area between Zone One and any area of native or nonirrigated vegetation and consists of thinned native or naturalized vegetation.

Chapter 5.0 Environmental Analysis

The following sections of the Program Environmental Impact Report (PEIR) analyze the potential environmental impacts that may occur from implementation of the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1). The environmental issues addressed in this chapter include the following:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Greenhouse Gas Emissions
- Hydrology and Water Quality

- Land Use and Planning
- Noise
- Public Services and Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Each issue analysis section includes a description of existing setting, the significance determination thresholds, an evaluation of potential project impacts, the significance of impacts, mitigation measures (if applicable), and a conclusion of significance after mitigation for impacts identified as requiring mitigation (if applicable).

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5.1 Aesthetics

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing visual conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to scenic resources and neighborhood character that could result from implementation of the proposed CRMP Phase 1. This section also includes a description of the built and natural visual resources in the CRMP Phase 1 area.

The analysis in this section is based on a review of available plans and technical information, including the City of San Diego's (City's) General Plan PEIR (City of San Diego 2007) and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023).

5.1.1 Existing Conditions

5.1.1.1 Physical Setting

The City is in a region with unique and varied landscapes—the Pacific Ocean, bays, beaches, estuaries and river valleys, canyons and mesas, hills and mountains, and desert. Much of the City is situated in the coastal plain portion of southwestern San Diego County. This coastal plain slopes gently upwards to the eastern foothills and has been eroded into separate mesas. Numerous side canyons have incised the coastal plain and created major drainages that generally flow westward toward the coast. These major drainages are the San Dieguito River, Los Peñasquitos Canyon, Carroll Canyon, Rose Canyon, the San Diego River, Los Chollas Creek, the Sweetwater River, the Otay River, and the westernmost mouth of the Tijuana River (City of San Diego 2007).

San Diego's location bordering the Pacific Ocean also contributes to the natural setting of the area. Many of San Diego's most appreciated natural resources are located within the Coastal Zone. These include the City's beaches, bays, shoreline, coastal canyons, and the many rivers, streams, and other watercourses that drain inland areas, eventually reaching the coastal environment and waters. In the City of San Diego, the Coastal Zone established by the Coastal Commission encompasses approximately 40,000 acres of public and private land and waters (City of San Diego 2007). All project sites represent the visual character of coastal beach communities in San Diego. Descriptions of the visual setting on each project site are provided below.

Pilot Project: Ocean Beach – Dog Beach

Ocean Beach – Dog Beach is a curved sandy beach that faces north along the mouth of the San Diego River and west where it meets the Pacific Ocean. Immediately north of the San Diego River is the Quivira Jetty, an approximately 0.9-mile-long rock jetty that separates the mouth of the San Diego River south of the jetty from the entrance channel to Mission Bay to the north. The northwestern portion of the beach is wide and sandy beach for dogs and their owners. The San Diego River Bikeway runs east–west along the southern border of Smiley Lagoon to the entrance of Ocean Beach – Dog Beach north of an L-shaped parking lot that serves the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites. The large parking lot, located just behind the beach, is bordered along the northern and western perimeters with concrete k-rails used to prevent sand displacement from the beach onto the parking lot. Along the eastern border of the parking lot is Brighton Park, a grassy area interspersed with concrete picnic benches.

On its western border, the Ocean Beach – Dog Beach project site extends from the cobble jetty west of Temporary Lifeguard Tower 5 (Stub Jetty) to a cobble groin (Avalanche Groin) at the southern end of the site (and the northern end of the Ocean Beach – Pier project site). Volleyball courts are provided at the southern end of this site. In addition to this portion of the beach, the Ocean Beach – Dog Beach project site consists of the parking lot, Brighton Park, and a restroom facility immediately south of the parking lot, which includes showers and water fountains. Refer to Figure 2-3, Ocean Beach – Dog Beach Project Site, and Section 2.3.1, Pilot Project: Ocean Beach – Dog Beach, for a complete description of the existing setting on this project site.

The City implements the annual winter berm program on the Ocean Beach – Dog Beach project site, in which a linear sand berm (approximately 6 to 8 feet high and 30 feet wide) is constructed in the fall (generally in October) to prevent coastal flooding and erosion and is flattened in the spring (generally in March) to reduce the effects of erosion by incorporating additional sand. Construction of the winter berms occurs during daylight hours (generally between 6:00 a.m. and 6:00 p.m.); however, maintenance and repairs occur over an average period of 5 days as needed at any time of the day or night, depending on the severity of the repairs needed and the tide. Construction of the berm uses trucks and front-end loaders. A 10-yard dump truck is used to transport sand as needed to construct the berm, although the material is generally sourced from littoral (i.e., the shore of local coastal) sources near each site. Approximately 75 truckloads of sand are used to construct the winter berm along Ocean Beach (including the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites). Refer to Section 2.3.1 for a complete discussion of the City's winter berm program.

La Jolla Shores

The La Jolla Shores project site consists of two grassy park areas (Kellogg Park to the south and La Jolla Shores Park to the north) separated by a paved parking lot immediately east of a boardwalk and sandy beach area to the west. The two park areas are interspersed with concrete picnic tables; fire pits; large eucalyptus, palm, and other trees; and green hedges. A playground structure is in the southwestern corner of Kellogg Park. Each park area includes public restrooms. Additionally, both parks are bordered by palm trees, contributing to the beach community aesthetic of the area. The La Vereda pedestrian path separates the sandy beach to the west and the parks and parking lot to the east. The western border of the pedestrian path is lined with a 2-foot-tall seawall, and the eastern border is lined with peach-colored concrete benches and blue and gray trash receptacles.

The sandy beach is often scattered with beachgoers' umbrellas, beach blankets, and other beach accessories. Views from the project site facing east include apartments, condos, and single-family residences along Camino Del Oro, as well as tall palm trees and the hills of La Jolla in the background. Views from the project site facing west include the Pacific Ocean, as well as any surfers, swimmers, and boats in the water. Views from the project site facing south include primarily sandy beach and the La Jolla Shores Hotel. Views from the project site facing north include large single-family residences, sandy beach, and the Ellen Browning Scripps Memorial Pier in the background. Refer to Figure 2-5, La Jolla Shores Project Site, and Section 2.3.2, La Jolla Shores, for a complete description of the existing setting on this project site.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site consists of the portion of Tourmaline Street west of La Jolla Boulevard, including the vegetated area immediately north of this roadway, the Tourmaline Beach parking lot, and a ramp entrance to the beach below. The beach is rocky and used primarily by surfers. At the southern end of the parking lot, near the entrance to the beach, is a public restroom. The parking lot is at a lower elevation than its surroundings and is bordered to the north and south by steep vegetated slopes. Views from the project site to the north are of a steep vegetated slope, a sandy beach, and cliffsides topped with single-family residences. Views from the project site to the south are also of the steep vegetated slope and the sandy beach with Crystal Pier in the background. Views from the parking lot to the east are of Tourmaline Street, which slopes down toward the parking lot and the Casa Del Sur apartment complex southwest of Tourmaline Street and La Jolla Boulevard. Views from the project site to the west are of the Pacific Ocean. Refer to Figure 2-7, Pacific Beach - Tourmaline Surf Park Project Site, and Section 2.3.3, Pacific Beach – Tourmaline Surf Park, for a complete description of the existing setting on this project site.

The City implements the winter berm program adjacent and north of the Pacific Beach – Tournaline Surf Park project site. This winter berm is approximately 6 to 8 feet high, up to 20 feet wide, and approximately 400 feet long and is constructed in the fall to reduce impacts of flooding to the beach amenities and preserve the pedestrian and vehicle access along the ramp. Approximately 50 truckloads are used to transport material to the shores along all of Pacific Beach, including the berm south of the Pacific Beach – Tournaline Surf Park project site. Refer to Section 2.3.3 for a complete discussion of the City's winter berm program.

Mission Beach

The Mission Beach project site is an approximately 2.18-mile-long west-facing beach that runs from Pacific Beach in the north to the entrance channel to Mission Bay to the south. The beach is bounded by the Pacific Ocean to the west and Ocean Front Walk (the Mission Beach Boardwalk) to the east. A 3-foot seawall provides a border on the west side of Ocean Front Walk. To the east of Ocean Front Walk are primarily large, beach-front single-family residences with east–west

pedestrian paths between every three or four residences that provide pedestrian access to the boardwalk and beach. Refer to Figure 2-9, Mission Beach Project Site, and Section 2.3.4, Mission Beach, for a complete description of the existing setting on this project site.

The winter berm is constructed in the fall to reduce impacts of flooding to Ocean Front Walk and the commercial and recreational uses to the east. Between 25 to 40 truckloads of sand are used to construct the winter berm along Mission Beach. Refer to Section 2.3.4 for a complete discussion of the City's winter berm program.

Ocean Beach – Pier

The Ocean Beach – Pier project site primarily consists of sandy beach between small single-family residences to the east and the Pacific Ocean to the west. The beach is wide at the northern end and becomes narrower and tapers off to the south as it reaches the Ocean Beach Pier. North of the project site is the southern edge of the L-shaped parking lot described above. The northeastern part of the beach is often divided into volleyball courts and used by beach volleyball players. At the northwest corner of the project site, west of the volleyball courts, is a small groin made of cobbles. South of the volleyball courts are two grassy areas (Saratoga Park to the north and Ocean Beach Veterans Plaza to the south) separated by a small, paved parking lot. The Ocean Beach Veterans Plaza is often used by art vendors and for community events, such as silent discos and yoga classes. Views from the project site to the north consist primarily of the pier and hardscape concrete along the water. Views from the project site to the east are of single- and multi-family housing and some commercial areas within the downtown area of Ocean Beach. Views from the project site to the west meet the Pacific Ocean. Refer to Figure 2-11, Ocean Beach – Pier Project Site, and Section 2.3.5, Ocean Beach – Pier, for a complete description of the existing setting on this project site.

The City currently implements a winter berm program on the project site from the Avalanche Groin to the Ocean Beach Pier that includes a sand berm that is approximately 6 to 8 feet high and 30 feet wide. Generally, this berm is smaller and narrower at the southern end closer to the pier. The winter berm is then flattened during the spring to provide additional sediment that reduces the effects of coastal erosion. Approximately 75 truckloads of sand are used to construct the winter berm along Ocean Beach (including the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites). Refer to Section 2.3.5 for a complete discussion of the City's winter berm program.

Sunset Cliffs

The Sunset Cliffs project site includes a long stretch of cliffside and coastal trail adjacent to the Pacific Ocean to the west and Sunset Cliffs Boulevard to the east. The winding trail follows the cliffside and provides views of the Pacific Ocean, cliffs, and a few scattered beach areas below. The trail is used by locals, tourists, dogwalkers, and beachgoers alike. Several lookout points are located along the cliffs. Four small parking lots for Sunset Cliffs are located west of Sunset Cliffs

Boulevard and north of Froude Street. South of Hill Street, there is parallel parking available on the west side of Sunset Cliffs Boulevard. To the east of Sunset Cliffs Boulevard are large single-family coastal residences with windows, balconies, and decks that look out over the cliffs toward the ocean. Refer to Figure 2-13, Sunset Cliffs Project Site, and Section 2.3.6, Sunset Cliffs, for a complete description of the existing setting on this project site.

5.1.1.2 Scenic Resources

Nearly 28 percent of all existing land use in the City consists of parks, open space, and recreation areas. These areas are reserved for environmental protection or public recreation, and they protect San Diego's unique natural landscape and scenic beauty. Natural scenic vistas can be seen from the more than 36,300 acres of parks and open space in the City, such as Sunset Cliffs Natural Park, Mission Trails Regional Park, Marian Bear Memorial Park, Rose Canyon Open Space Park, Tecolote Canyon Natural Park and Nature Center, San Diego River Park, Los Peñasquitos Canyon Preserve, Black Mountain Open Space Park, and San Pasqual–Clevenger Canyon Open Space Park (City of San Diego 2007).

5.1.2 Significance Determination Thresholds

The thresholds used to evaluate potential impacts related to aesthetics are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (City of San Diego 2023). A significant impact could occur if implementation of the CRMP Phase 1 would:

- Result in a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point);
- Conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare or shade which would adversely affect day or nighttime views in the area.

5.1.3 Impact Analysis

5.1.3.1 Issue 1: Scenic Vistas

Would the proposed CRMP Phase 1 result in a substantial adverse effect on a scenic vista?

A scenic vista is a view from a particular location or composite views along a roadway or trail. Scenic vistas often refer to views of natural lands but may also be compositions of natural and developed areas or even entirely of developed and unnatural areas, such as a scenic vista of a rural town and surrounding agricultural lands. What is scenic to one person may not be scenic to another; therefore, the assessment of what constitutes a scenic vista must consider the perceptions of a variety of viewer groups.

The items that can be seen within a scenic vista are visual resources. Adverse impacts to individual visual resources or the addition of structures or developed areas may or may not adversely affect the vista. Determining the level of impact to a scenic vista requires analyzing the changes to the vista as a whole and to individual visual resources.

Pilot Project: Ocean Beach – Dog Beach

Neither the City's General Plan nor the Ocean Beach Community Plan and Local Coastal Program (LCP) Land Use Plan (Ocean Beach Community Plan) identify any designated scenic vistas or scenic view corridors within the Ocean Beach Community Planning Area. Given the coastal and open space nature of the Ocean Beach – Dog Beach project site, it may be considered a scenic vista from public viewing locations along the beach itself and the San Diego River Bikeway.

The Pilot Project on the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The multi-use pathway would ultimately extend through the Ocean Beach – Pier project site. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway, which may improve the aesthetic of the dune compared to the existing condition. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop in the parking lot. Refer to Figures 3-3 and 3-4, Pilot Project at Ocean Beach – Dog Beach Concept Renderings, and Section 3.4.3.1, Site Conditions and Constraints, for a complete description of the Pilot Project on the Ocean Beach – Dog Beach project site.

Construction of the sand dune and multi-use path would require the use of standard construction equipment (e.g., loaders, dozers, tracked excavators). Use of construction equipment on the project site may temporarily impact scenic views of the Pacific Ocean; however, construction impacts would be short term and temporary. Following the completion of construction activities, construction equipment would be removed from the site.

The elevated sand dune would be similar in height and width to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which may also improve the aesthetic of the dune compared to the annual winter berm. Views of the Pacific Ocean would not be obstructed by the sand dune or multi-use path when viewed from public viewing locations along the beach.

Additionally, due to the elevated height of the San Diego River Bikeway, scenic views of the Pacific Ocean from the bikeway would not be obstructed by the Pilot Project.

The optional restroom relocation component would likely improve scenic views by creating an unobstructed view along the beach. The optional express shuttle stop would be in the existing parking lot and, therefore, would not impact scenic views from a public viewing location.

Given that the proposed sand dune and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations along the beach and the San Diego River Bikeway and that the sand dune would be similar in height and width to the annual winter berm, impacts from the Pilot Project related to effects on a scenic vista would be less than significant, and no mitigation is required.

La Jolla Shores

Neither the City's General Plan nor the La Jolla Community Plan and LCP Land Use Plan (La Jolla Community Plan) identify any scenic vistas or scenic view corridors in the La Jolla Community Planning Area. However, the La Jolla Community Plan describes La Jolla's main attractions as its scenic shoreline parks and recreational areas, coastal bluffs and beaches, steep slopes and hillsides, and native plant species and wildlife.

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1, La Jolla Shores, for a complete description of the La Jolla Shores project.

Construction of either the earthen dikes and terraced seatwall under the Amphitheater Design Option or the waterfront park under the Reconfigured Park Design Option would require the use of standard construction equipment (e.g., loaders, dozers, tracked excavators). Use of construction equipment on the project site may temporarily impact scenic views of the Pacific Ocean from public viewing locations at the existing recreational areas and parking lot; however, construction impacts would be short term and temporary. Given that the proposed features under both design options would be inland of the beach and the La Vereda pedestrian path, as well as the playground, bathrooms, and educational infrastructure in the southwestern corner of Kellogg Park, views of the Pacific Ocean would remain unobstructed from these public viewing locations throughout the duration of construction. Nevertheless, construction of both proposed design options would temporarily impact expansive views across the project site when facing north or south as well as views for pedestrians and cars along Camino Del Oro. Following the completion of construction activities, all construction equipment would be removed from the site.

As described above, the proposed features under both design options would be inland of the beach and the La Vereda pedestrian path, as well as the playground, bathrooms, and educational infrastructure in the southwestern corner of Kellogg Park; therefore, views of the Pacific Ocean would remain unobstructed from these public viewing locations. The earthen dike would be approximately 15 to 20 feet wide, and the crest level of the dike would be designed to provide resilience behind the seawall, at a height between 2 to 4 feet above the existing elevation of the La Vereda pedestrian path. The final crest height of the earthen dike would be established following additional technical analysis of projected sea-level rise and coastal flooding at the site. Assuming the final crest height of the earthen dike is 4 feet above the existing elevation of the La Vereda pedestrian path and grassy recreational areas (worst-case analysis), most viewers at La Jolla Shores Park and Kellogg Park would still have unobstructed views of the Pacific Ocean. The Reconfigured Park Design Option could also include implementation of an earthen dike along the western border of the waterfront park; however, the waterfront park may not require the earthen dike, which would eliminate any potential for impacts to views of the Pacific Ocean from the recreational area.

Additionally, both design options may result in long-term benefits to scenic views at the La Jolla Shores project site. For example, increasing the backshore protection along the project site would reduce flooding impacts at these recreational facilities and associated impacted views during high tides and extreme storms. Additionally, the terraced amphitheater design of the potential seatwall included as part of the Amphitheater Design Option, and potentially ocean-facing side of the earthen dikes would offer enhanced coastal viewing areas due to the elevated nature of the features (refer to Figure 3-5).

Therefore, the La Jolla Shores project would not substantially impact views of the Pacific Ocean from public viewing locations along the grassy recreational areas inland of the proposed coastal flood protections. Impacts from the La Jolla Shores project site related to effects on a scenic vista would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The City's General Plan does not identify any scenic vistas or scenic view corridors in the Pacific Beach Community Planning Area. However, the Pacific Beach Community Plan and LCP Land Use Plan (Pacific Beach Community Plan) identifies view corridors along east–west aligned streets on Figure 4 of the plan. Tourmaline Street is not identified as one of these view corridors, and the Pacific Beach – Tourmaline Surf Park project site would not be visible from any of the designated

view corridors. The Pacific Beach Community Plan Parks and Open Space Element notes that the majority of the parks and recreational facilities in Pacific Beach are oriented to the shoreline, including the sand beaches of Mission Bay and the Pacific Ocean, Tourmaline Park, Palisades Park (north and south), Pacific Beach (Ocean Boulevard) Park, Fanuel Street Park, and Crown Point Shores. Given the coastal and open space nature of the Pacific Beach – Tourmaline Surf Park project site, it may be considered a scenic vista from public viewing locations along the beach itself and the picnic areas adjacent to Tourmaline Street.

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into a sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the northern edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2, Pacific Beach – Tourmaline Surf Park, for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Construction of the sand and cobble dune would require the use of standard construction equipment (e.g., loaders, dozers, tracked excavators). Use of construction equipment on the project site may temporarily impact scenic views of the Pacific Ocean; however, construction impacts would be short term and temporary. Following the completion of construction activities, construction equipment would be removed from the site.

The sand and cobble dune would be similar in height and width to the existing shoreline protection feature. For instance, the proposed sand and cobble dune would occupy approximately 8,750 square feet (0.2 acre), an increase of approximately 1,750 square feet (0.04 acre) compared to the footprint of the existing shoreline protection feature, which is approximately 7,000 square feet (0.16 acre). The existing cobble riprap material would be buried within the dune where it is currently located. The crest level of the dune would be designed to mimic the elevation of the existing cobble riprap and access ramp, which descends from approximately 20 feet North American Vertical Datum of 1988 (NAVD 88)¹ on the northern end near the top of the ramp to roughly 12 feet NAVD 88 at the southern end of the ramp. Thus, the dune would be similar to the existing cobble riprap, the Pacific Beach – Tourmaline Surf Park project would not obstruct or otherwise impact existing views of the Pacific Ocean from public viewing locations along the

¹ The North American Vertical Datum of 1988 (NAVD 88) is the current vertical control datum for the contiguous United States and Alaska, which was established by the minimum-constraint adjustment of the Canadian-Mexican-United States leveling observations. A vertical datum is a surface of zero elevation to which heights of various points are referenced. NAVD 88 consists of a leveling network on the North American Continent, ranging from Alaska, through Canada, across the United States, affixed to a single origin point on the continent (NOAA 2018a; 2018b).

beach or the picnic areas adjacent to Tourmaline Street. Further, the sand and cobble dune and restoration area would be vegetated with native plants, which may improve the aesthetic of the dune compared to the existing cobble riprap.

Given that the proposed sand and cobble dune would not obstruct scenic views of the Pacific Ocean from public viewing locations along the beach and picnic areas adjacent to Tourmaline Street and that the dune would be similar in height and width to the existing cobble riprap, impacts from the Pacific Beach – Tourmaline Surf Park project related to effects on a scenic vista would be less than significant, and no mitigation is required.

Mission Beach

Neither the City's General Plan nor the Mission Beach Precise Plan and LCP Land Use Plan (Mission Beach Precise Plan) identify any scenic vistas or scenic view corridors in the Mission Beach Community Planning Area. Given the coastal and open space nature of the Mission Beach project site, it may be considered a scenic vista from public viewing locations along the beach itself and Ocean Front Walk.

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north—south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

Construction of the sand dune and potential perched beach would require the use of standard construction equipment (e.g., loaders, dozers, tracked excavators). Use of construction equipment on the project site may temporarily impact scenic views of the Pacific Ocean; however, construction impacts would be short term and temporary. Following the completion of construction activities, construction equipment would be removed from the site.

The elevated sand dune would be similar in height and width to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which may improve the aesthetic of the dune compared to the annual winter berm. The sand dune would be constructed along the back of the beach adjacent to Ocean Front Walk; therefore, views of the Pacific Ocean would not be obstructed by the sand dune when viewed from public viewing locations along the beach. Additionally, the crest level of the sand dune would be designed to mimic the elevation of the existing winter berm that is

built along the beach annually at a height of approximately 5 feet above existing grades or 2 feet above the seawall (17 feet NAVD 88). Given that the height of the proposed sand dune would be only 2 feet above the existing seawall, the sand dune is unlikely to obstruct scenic views of the Pacific Ocean public viewing locations along Ocean Front Walk. Views of the ocean from more inland areas at Mission Beach Park may be affected by the proposed sand dune; however, views of the ocean from these more inland areas are already limited due to distance and the existing seawall. Additionally, the perched beach proposed under the Perched Beach Design Option would be elevated and would provide a beach area with unobstructed views of the Pacific Ocean (refer to Figure 3-9). Similar to the proposed sand dune, the perched beach would be constructed to the minimum required height for coastal flood protection to avoid impacts to views of the Pacific Ocean for pedestrians along the realigned Ocean Front Walk. Therefore, both sand and the ocean horizon would still be visible from the realigned Ocean Front Walk. Inland views from the grassy recreational area and parking lot would only be slightly obstructed by the elevated perched beach and sand dune.

Neither the proposed sand dune nor the perched beach would obstruct scenic views of the Pacific Ocean from public viewing locations along the beach or Ocean Front Walk, and the sand dune would be similar in height and width to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. Therefore, impacts from the Mission Beach project related to effects on a scenic vista would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Neither the City's General Plan nor the Ocean Beach Community Plan identify any scenic vistas or scenic view corridors within the Ocean Beach Community Planning Area. Given the coastal and open space nature of the Ocean Beach – Pier project site, it may be considered a scenic vista from public viewing locations along the beach, Saratoga Park, Ocean Beach Veterans Plaza, and the paved pedestrian pathway adjacent to Ocean Beach Veterans Plaza.

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4, Ocean Beach – Pier, for a complete description of the Ocean Beach – Pier project. Construction of the sand dune and multi-use path would require the use of standard construction equipment (e.g., loaders, dozers, tracked excavators). Use of construction equipment on the project site may temporarily impact scenic views of the Pacific Ocean; however, construction impacts would be short term and temporary. Following the completion of construction activities, construction equipment would be removed from the site.

The elevated sand dune would be similar in height and width to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which may improve the aesthetic of the dune

compared to the annual winter berm. Views of the Pacific Ocean would not be obstructed by the sand dune or multi-use path when viewed from public viewing locations along the beach. Additionally, due to the elevated height of Saratoga Park, Ocean Beach Veterans Plaza, and the paved pedestrian pathway adjacent to Ocean Beach Veterans Plaza, scenic views of the Pacific Ocean from these areas would not be obstructed by the Ocean Beach – Pier project.

Given that the proposed sand dune and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations along the beach and adjacent open space and recreational areas, and that the sand dune would be similar in height and width to the annual winter berm, impacts from the Ocean Beach – Pier project related to effects on a scenic vista would be less than significant, and no mitigation is required.

Sunset Cliffs

Neither the City's General Plan nor the Peninsula Community Plan and LCP Land Use Plan (Peninsula Community Plan) identify any scenic vistas or scenic view corridors within the Peninsula Community Planning Area. However, according to the Peninsula Community Plan, the community is unique due to several physical factors, including but not limited to the following:

- A coastline consisting of bluffs, rocky and sandy beaches, and the bay.
- Numerous hillsides and canyons which act as natural boundaries forming distinctive neighborhoods.
- Extensive areas of large trees and natural vegetation.

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures (refer to Figure 3-12, Sunset Cliffs Project with Optional Northern Parking). Refer to Section 3.4.4.5, Sunset Cliffs, for a complete description of the Sunset Cliffs project.

Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, would not include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Therefore, there is potential for

construction activities that could temporarily impact views of the Pacific Ocean from public viewing locations along Sunset Cliffs trail and Sunset Cliffs Boulevard. Following the completion of construction activities, all construction equipment would be removed from the site.

Operation of the road reconfiguration program would convert Sunset Cliffs Boulevard from a twoway bidirectional roadway for vehicular travel to a one-way roadway with improved pedestrian and bicycle facilities seaward (west) of the vehicle lane (refer to Figure 3-9). As such, implementation of the Sunset Cliffs project may slightly obstruct scenic views of the Pacific Ocean from vehicles traveling along Sunset Cliffs Boulevard due to pedestrian and bicycle traffic on these improved facilities. While slightly obstructed, ocean views would remain visible from vehicles traveling along Sunset Cliffs Boulevard. Additionally, the proposed multi-use path would provide sweeping scenic views of the ocean to pedestrians and cyclists on the Sunset Cliffs project site. Further, implementation of the trail enhancement, interpretative signage, drainage improvements, and habitat enhancement would generally improve the visual quality of the Sunset Cliffs project site and provide enhanced areas for public viewing of scenic views across Sunset Cliffs. In addition, the optional realignment of parking from the northern parking lots further inland along Sunset Cliffs Boulevard would provide more space and better views for users of Sunset Cliffs trail along this northern portion of the project site. The optional components to enhance trails, improve inland drainage, install native plants, and implement erosion control measures would further enhance existing scenic views along the northern portion of the project site. Therefore, impacts from the Sunset Cliffs project related to effects on a scenic vista would be less than significant, and no mitigation is required.

5.1.3.2 Issue 2: Scenic Resources Within a Scenic Highway

Would the proposed CRMP Phase 1 substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Pilot Project: Ocean Beach – Dog Beach

According to the California Department of Transportation (Caltrans) State Scenic Highway Map Viewer (Caltrans 2024), the nearest officially designated state scenic highway to the project site is the segment of State Route (SR-) 163 within Balboa Park, located approximately 5.6 miles east of the Ocean Beach – Dog Beach project site. The nearest eligible state scenic highway is Interstate (I-) 5, located approximately 2.7 miles east of the Ocean Beach – Dog Beach project site. Due to distance and varying topography, the project site is not visible from either SR-163 or I-5. Additionally, the project would not substantially damage scenic resources, such as trees, rock outcroppings, or historic buildings. The proposed sand dune on the Ocean Beach – Dog Beach project site would be visually similar to the existing winter berm that is installed every fall for the winter season. Therefore, the project would not damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is required.

La Jolla Shores

According to the Caltrans State Scenic Highway Map Viewer (Caltrans 2024), the nearest officially designated state scenic highway to the project site is the segment of SR-163 within Balboa Park, located approximately 9.9 miles southeast of the La Jolla Shores project site. The nearest eligible state scenic highway is I-5, located approximately 1.3 miles east of the La Jolla Shores project site. Due to distance and varying topography, the project site is not visible from either SR-163 or I-5. While some trees would need to be removed for the La Jolla Shores project, particularly under the Reconfigured Park Design Option, the La Jolla Shores project would not substantially damage other scenic resources, such as rock outcroppings or historic buildings. Potential removal of trees at the La Jolla Shores project site would not occur within a state scenic highway. Therefore, the La Jolla Shores project would not damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

According to the Caltrans State Scenic Highway Map Viewer (Caltrans 2024), the nearest officially designated state scenic highway to the project site is the segment of SR-163 within Balboa Park, located approximately 7.6 miles southeast of the Pacific Beach – Tourmaline Surf Park project site. The nearest eligible state scenic highway is I-5, located approximately 2.1 miles east of the Pacific Beach – Tourmaline Surf Park project site is not visible from either SR-163 or I-5. Additionally, the Pacific Beach – Tourmaline Surf Park project would not substantially damage scenic resources, such as trees, rock outcroppings, or historic buildings. The proposed sand dune on the Pacific Beach – Tourmaline Surf Park project site every fall for the winter season. Therefore, the Pacific Beach – Tourmaline Surf Park project would not damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is required.

Mission Beach

According to the Caltrans State Scenic Highway Map Viewer (Caltrans 2024), the nearest officially designated state scenic highway to the project site is the segment of SR-163 within Balboa Park, located approximately 5.9 miles southeast of the Mission Beach project site. The nearest eligible state scenic highway is I-5, located approximately 2.7 miles east of the Mission Beach project site. Due to distance and varying topography, the project site is not visible from either SR-163 or I-5. While some palm trees would need to be removed for the Mission Beach project, particularly under the Perched Beach Design Option, the Mission Beach project would not substantially damage other scenic resources, such as rock outcroppings or historic buildings. Potential removal of palm trees at the Mission Beach project site would not occur within a state scenic highway. Additionally, the proposed sand dune on the Mission Beach project site under both design options would be visually

similar to the existing winter berm that is installed near the project site every fall for the winter season. Therefore, the Mission Beach project would not damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is required.

Ocean Beach – Pier

According to the Caltrans State Scenic Highway Map Viewer (Caltrans 2024), the nearest officially designated state scenic highway to the project site is the segment of SR-163 within Balboa Park, located approximately 5.6 miles east of the Ocean Beach – Pier project site. The nearest eligible state scenic highway is I-5, located approximately 2.9 miles east of the Ocean Beach – Pier project site. Due to distance and varying topography, the project site is not visible from either SR-163 or I-5. Additionally, the Ocean Beach – Pier project would not substantially damage scenic resources, such as trees, rock outcroppings, or historic buildings. The proposed sand dune on the Ocean Beach – Pier project site every fall for the winter season. Therefore, the Ocean Beach – Pier project would not damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is required.

Sunset Cliffs

According to the Caltrans State Scenic Highway Map Viewer (Caltrans 2024), the nearest officially designated state scenic highway to the project site is the segment of SR-163 within Balboa Park, located approximately 5.8 miles east of the Sunset Cliffs project site. The nearest eligible state scenic highway is I-5, located approximately 3.5 miles east of the Sunset Cliffs project site. Due to distance and varying topography, the project site is not visible from either SR-163 or I-5. Therefore, the Sunset Cliffs project would not damage scenic resources within a state scenic highway. No impact would occur, and no mitigation is required.

5.1.3.3 Issue 3: Visual Character or Quality

Would the proposed CRMP Phase 1 substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point)?

Pilot Project: Ocean Beach – Dog Beach

The Ocean Beach – Dog Beach project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Park and Public Ownership in the Ocean Beach Community Plan. Surrounding land uses include residential and commercial uses. Refer to Section 5.1.3.4, Issue 4: Zoning and Regulations Governing Scenic Quality, for analysis of zoning and regulations governing scenic quality.

The Pilot Project on the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. As such, the Pilot Project on the Ocean Beach – Dog Beach project site would be consistent with the Park, Open Space, & Recreation and Park and Public Ownership land use designations for the site.

As described in Section 5.1.3.1, Issue 1: Scenic Vistas, the proposed sand dune and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations. The proposed sand dune and multi-use path would also include pedestrian and emergency access points along the project site so it would not block beach access.

Furthermore, under the existing conditions, construction equipment is currently brought onto the site annually to construct the winter berm, which is flattened each spring/summer once the storm season ends and is rebuilt each fall. The Pilot Project would not require such regular use of unsightly construction equipment at the Ocean Beach – Dog Beach site. Maintenance of the dune is anticipated to involve hand watering the dune vegetation and the potential seeding of the dunes until vegetation is established, foredune nourishment (after extreme storm waves), invasive species and trash removal, accessway maintenance, and activities to manage wind-blown sand. The berm that is currently constructed on the site each winter is also a simple linear sand berm that is not designed to consider aesthetics in the same way that the proposed new vegetated sand dune and multi-use path are being designed. Incorporating vegetation onto the dune will reintroduce a more accurate natural aesthetic to the environment since naturally occurring coastal dunes are typically inhabited by local flora and fauna. Moreover, the proposed dunes will restore the coastal ecosystem to a more historically accurate state. Therefore, the Pilot Project would not substantially degrade the visual character of the site.

No other components of the Pilot Project, including the proposed multi-use path, optional restroom relocation, or optional express shuttle stop in the parking lot, would substantially degrade the existing visual character or quality of public views of the site and its surroundings. Therefore, the Pilot Project on the Ocean Beach – Dog Beach project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts to visual character or quality would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Dedicated Open Space Park in the La Jolla Community Plan. Surrounding land uses

include residential, commercial employment, retail, services park, and other open space and recreation uses. Refer to Section 5.1.3.4 for the analysis of zoning and regulations governing scenic quality.

The Amphitheater Design Option would construct earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park. As such, the La Jolla Shores project would be consistent with the Park, Open Space, & Recreation and Dedicated Open Space Park land use designations for the site.

As described in Section 5.1.3.1, neither the earthen dikes and terraced seatwall under the Amphitheater Design Option nor the waterfront park under the Reconfigured Park Design Option would obstruct scenic views of the Pacific Ocean from public viewing locations along the beach or La Vereda pedestrian path. Increasing the backshore protection along the project site would reduce flooding impacts and associated poor visual quality of the site during high tides and extreme storms. The earthen dikes would be vegetated with grass or drought-tolerant and native species, and would maintain and remain in line with the natural and open space aesthetic of the adjacent existing park areas. This would also provide an opportunity to enhance the flora and attract local fauna found in La Jolla Shores. Additionally, the terraced amphitheater design of the terraced seatwall and potentially ocean-facing side of the earthen dikes would offer enhanced coastal viewing areas due to the elevated nature and additional seating that would be offered by these features. The Reconfigured Park Design Option could also include implementation of an earthen dike along the western border of the waterfront park, which, as described above, would not substantially degrade the visual character of the site. Therefore, the La Jolla Shores project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts to visual character or quality would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site does not have a land use designation in the City's General Plan and is designated as Parks/Open Space in the Pacific Beach Community Plan. Surrounding land uses include residential uses. Refer to Section 5.1.3.4 for analysis of zoning and regulations governing scenic quality.

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into a sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the Pacific Beach – Tourmaline Surf Park project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground

vault for water quality treatment. As such, the Pacific Beach – Tourmaline Surf Park project would be consistent with the Parks/Open Space land use designation for the site.

As described in Section 5.1.3.1, the proposed sand and cobble dune would not obstruct scenic views of the Pacific Ocean from public viewing locations. The permanent vegetated sand dune would be an improvement compared to the visual quality of the existing cobble riprap at the site, which detracts from the overall visual character of the beach. Rather than being adversely affected, the visual character of the proposed Pacific Beach – Tourmaline Surf Park project would be returned to a more natural and historically accurate state by burying the existing riprap and restoring native coastal dune habitat. In addition, the optional components would improve visual quality of the site by covering or undergrounding the existing drainage culvert, which conveys stormwater and may contain trash and other debris. Therefore, the Pacific Beach – Tourmaline Surf Park project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts to visual character or quality would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Beach in the Mission Beach Precise Plan. Surrounding land uses include residential, commercial, and other open space, and recreation uses. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. As such, the Mission Beach project would be consistent with the Park, Open Space, & Recreation and Beach land use designations for the site. Refer to Section 5.1.3.4 for analysis of zoning and regulations governing scenic quality.

As described in Section 5.1.3.1, the proposed sand dune would not obstruct scenic views of the Pacific Ocean from public viewing locations. Furthermore, under the existing conditions, construction equipment is currently brought onto the site annually to construct the winter berm, which is flattened each spring/summer once the storm season ends and is rebuilt each fall. The Mission Beach project would not require such regular use of unsightly construction equipment at the site. The berm that is currently constructed on the site each winter is also a simple linear sand berm that is not designed to consider aesthetics in the same way that the proposed new vegetated sand dune and multi-use path are being designed. Incorporating vegetation onto the dune will reintroduce a more accurate natural aesthetic to the environment since naturally occurring coastal dunes are typically inhabited by local flora and fauna. Moreover, the proposed dunes will restore the coastal ecosystem to a more historically accurate state. Therefore, the Mission Beach project would not substantially degrade the visual character of the site.

Additionally, the perched beach proposed under the Perched Beach Design Option would be elevated and would provide a beach area with unobstructed views of the Pacific Ocean (refer to Figure 3-9). Similar to the proposed sand dune, the perched beach would be constructed to the minimum required height for coastal flood protection to avoid impacts to views of the Pacific Ocean for pedestrians along the realigned Ocean Front Walk. Therefore, the Mission Beach project site would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts to visual character or quality would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Park and Public Ownership in the Ocean Beach Community Plan. Surrounding land uses include residential and commercial uses. The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. As such, the Ocean Beach – Pier project would be consistent with the Park, Open Space, & Recreation and Park and Public Ownership land use designations for the site. Refer to Section 5.1.3.4 for analysis of zoning and regulations governing scenic quality.

As described in Section 5.1.3.1, the proposed sand dune and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations. Furthermore, under the existing conditions, construction equipment is currently brought onto the site annually to construct the winter berm, which is flattened each spring/summer once the storm season ends and is rebuilt each fall. The Ocean Beach – Pier project would not require such regular use of unsightly construction equipment at the Ocean Beach - Pier site. Maintenance of the dune is anticipated to involve hand watering the dune vegetation and the potential seeding of the dunes until vegetation is established, foredune nourishment (after extreme storm waves), invasive species and trash removal, accessway maintenance, and activities to manage wind-blown sand. The berm that is currently constructed on the site each winter is also a simple linear sand berm that is not designed to consider aesthetics in the same way that the proposed new vegetated sand dune and multi-use path are being designed. Incorporating vegetation onto the dune will reintroduce a more accurate natural aesthetic to the environment since naturally occurring coastal dunes are typically inhabited by local flora and fauna. Moreover, the proposed dunes will restore the coastal ecosystem to a more historically accurate state. Therefore, the Ocean Beach – Pier project would not substantially degrade the visual character of the site or quality of public views of the site and its surroundings. Impacts to visual character or quality would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Public, Semi-Public: Park in the Peninsula Community Plan. Surrounding land uses include residential, commercial employment, retail, services park, and other open space, and recreation uses. The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. As such, the Sunset Cliffs project would be consistent with the Park, Open Space, & Recreation and Public, Semi-Public: Park land use designations and zoning for the site. Refer to Section 5.1.3.4 for analysis of zoning and regulations governing scenic quality.

As described in Section 5.1.3.1, the proposed road reconfiguration and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations for pedestrians and cyclists and would not substantially obstruct ocean views for vehicles along Sunset Cliffs Boulevard. Further, the proposed trail enhancement, interpretative signage, drainage improvements, and habitat enhancement as well as the optional parking realignment would generally improve the visual quality of the Sunset Cliffs project site. Incorporating new native plant vegetation as part of the proposed trail and habitat enhancement, and removing and converting the existing pavement of the parking lots to a more natural material (such as decomposed granite or bare earth) as part of the optional parking realignment, will reintroduce a more natural and historically accurate aesthetic to the environment. Moreover, the proposed trail enhancements will provide new and enhanced areas for public viewing of scenic views across Sunset Cliffs. Therefore, the Sunset Cliffs project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. Impacts to visual character or quality would be less than significant, and no mitigation is required.

5.1.3.4 Issue 4: Zoning and Regulations Governing Scenic Quality

Would the proposed CRMP Phase 1 conflict with applicable zoning and other regulations governing scenic quality?

Pilot Project: Ocean Beach - Dog Beach

According to the Ocean Beach Community Plan, the Ocean Beach community's vision is dependent on the preservation of open space, sensitive habitat, public park lands, and other recreational uses. Applicable urban design goals of the Ocean Beach Community Plan include the following:

- A coastal community that values the coastline and topography as an amenity and provides an attractive built environment.
- New development with a high degree of design excellence.
- New development that is environmentally friendly and attains Leadership in Energy and Environmental Design (LEED) and/or California Green Building Standards (CALGreen) or equivalent.
- Connectivity of neighborhoods and commercial districts to activity centers and adjacent communities.
- Coastal views protected and enhanced.
- Pedestrian-friendly walkable neighborhoods.

The Ocean Beach – Dog Beach project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Park and Public Ownership in the Ocean Beach Community Plan. No zoning is designated for the site. The Pilot Project on the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Therefore, the Pilot Project on the Ocean Beach – Dog Beach – Dog Beach project site would be consistent with the Park, Open Space, & Recreation and Park and Public Ownership land use designations for the site.

Additionally, the Pilot Project on the Ocean Beach – Dog Beach project site would be consistent with and would help implement several urban design goals of the Ocean Beach Community Plan. For example, the proposed elevated sand dune is intended to provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and by providing a reservoir of sand to the beach that can be used during erosive conditions. Additionally, the proposed multi-use path would connect the existing western terminus of the San Diego River Bikeway to the Ocean Beach Pier and include a Class I bikeway and separated pedestrian trail to reduce risk of collisions. Therefore, the Pilot Project would be consistent with Ocean Beach Community Plan urban design goals related to preserving the coastline as an amenity and providing an attractive built environment, implementing environmentally friendly development, providing connectivity between neighborhoods and commercial districts to activity centers and adjacent communities, protecting and enhancing coastal views, and improving pedestrian facilities for a walkable neighborhood. As described in Section 5.1.3.1, the proposed sand dune and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations, and the permanent vegetated sand dune would represent a beneficial impact compared to the visual quality of the annual winter berm. Therefore, the Pilot Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Community Plan identifies the La Jolla's Natural Resources and Open Space System for their natural beauty and visual interest. The plan includes the main attractions of La Jolla, which are its scenic shoreline parks and recreational areas, coastal bluffs and beaches, steep slopes and hillsides, and native plant species and wildlife. Applicable Natural Resources and Open Space System goals of the La Jolla Community Plan include the following:

- Preserve the natural amenities of La Jolla such as its open space, hillsides, canyons, bluffs, parks, beaches, tidepools, and coastal waters.
- Maintain the identified public views to and from these amenities in order to achieve a beneficial relationship between the natural or unimproved and developed areas of the community.
- Enhance existing public access to La Jolla's beaches and coastline areas (for example La Jolla Shores Beach and Children's Pool areas) in order to facilitate greater public use and enjoyment of these and other coastal resources.

The La Jolla Shores project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Dedicated Open Space Park in the La Jolla Community Plan. Zoning for the site is also identified as Park, Open Space, & Recreation. The La Jolla Shores project would construct either two separate earthen dikes along the western edge of La Jolla Shores Park and Kellogg Park separated by a seatwall along the western edge of the existing parking lot or would reconfigure the grassy recreational areas and parking lot to create one continuous waterfront park. As such, the La Jolla Shores project would be consistent with the Park, Open Space, & Recreation and Dedicated Open Space Park land use designations and zoning for the site.

Additionally, the La Jolla Shores project would be consistent with and would help implement several Natural Resources and Open Space System goals of the La Jolla Community Plan. For example, both design options are intended to provide protection from projected sea-level rise and coastal flooding at the La Jolla Shores project site, which would preserve the natural amenities, such as the parks and open space inland of the proposed coastal flood protections, and maintain public views to and from these amenities. Increasing the backshore protection along the project site would reduce flooding impacts and associated poor visual quality and impacted views of the site during high tides and extreme storms. The earthen dikes would be vegetated with grass or drought-tolerant and native species, which would maintain the natural and open space aesthetic of the park areas. The terraced amphitheater design of the terraced seatwall and potentially ocean-facing side of the earthen dikes would offer enhanced coastal viewing areas due to the elevated nature of the features. Additionally, the Amphitheater Design Option would maintain and enhance public access to La

Jolla Shores beach by integrating accessways through the terraced seatwall at key points with both staired terraces and access ramps compliant with the Americans with Disabilities Act (ADA). Once vegetation along the proposed earthen dikes is established, beachgoers would likely be able to walk over the earthen dikes. Therefore, the La Jolla Shores project would be consistent with La Jolla Community Plan Natural Resources and Open Space System goals related to maintaining and enhancing beach amenities, views, and access. As described in Section 5.1.3.1, neither the proposed earthen dikes and terraced seatwall nor the waterfront park would obstruct scenic views of the Pacific Ocean from public viewing locations. Therefore, the La Jolla Shores project would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Parks and Open Space Element goals of the Pacific Beach Community Plan that are applicable to the Pacific Beach – Tourmaline Surf Park project include the following:

- Provide sufficient community park and recreational facilities to meet the needs of the existing and future resident population.
- Promote the development, maintenance, and safety of beach, park, and bay recreational facilities within community and in those areas adjacent to Pacific Beach (such as the Mission Bay Golf Course or the Tourmaline Surf Park) to serve both residents and visitors, while ensuring that such facilities will not adversely affect the community in terms of increased traffic or parking overflow.
- Conserve and enhance the natural amenities of the community such as its open space, topography, beach, and plant life and achieve a desirable relationship between the natural and developed areas of the community, as is exemplified by Kate Sessions Park.
- Improve access to beach, bay, and park areas along the shoreline to benefit residents and visitors.
- Maintain and enhance public views to the Pacific Ocean, Mission Bay, the Northern Wildlife Preserve and Kate Sessions Park.

Specific policies related to the Pacific Beach – Tourmaline Surf Park project include ensuring "that public views as identified in this plan of the Beach, Bay and Kate Sessions Park are retained," (Policy 8) and maintaining and improving "facilities at existing parks, beaches, and bay areas" (Policy 9).

The Pacific Beach – Tourmaline Surf Park project site does not have a land use designation in the City's General Plan and is designated as Parks/Open Space in the Pacific Beach Community Plan. No zoning is identified for the site. The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into a sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native

vegetation. Optional components of the Pacific Beach – Tourmaline Surf Park project would include covering or undergrounding the existing drainage culvert along the northern edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. As such, the Pacific Beach – Tourmaline Surf Park project would be consistent with the Parks/Open Space land use designation for the site.

Additionally, the Pacific Beach – Tourmaline Surf Park project would be consistent with and would help implement several Parks and Open Space Element goals of the Pacific Beach Community Plan. For example, the proposed sand and cobble dune is intended to provide flood protection, which would conserve and enhance the beach, and maintain public safety at and improve access to the beach. While current access to the beach is primarily along the access ramp and descending the northern end of the riprap, there is some foot traffic across the riprap for beach access. The Pacific Beach – Tourmaline Surf Park project would plant vegetation that is resilient to minor trampling, but access across the dune may need to be temporarily limited as plants take root and potentially discouraged indefinitely. Potential impacts to beach access would be avoided by enhancing the usability and safety of the informal accessway along the north end of the riprap as well as not formally restricting access across the dune. Additionally, increasing the backshore protection along the project site would reduce flooding impacts and associated poor visual quality of the site and impacted access during high tides and extreme waves. Further, the Pacific Beach -Tournaline Surf Park project would maintain and enhance public views to the Pacific Ocean in accordance with Parks and Open Space Element goals of the Pacific Beach Community Plan. Therefore, the Pacific Beach – Tournaline Surf Park project would be consistent with Pacific Beach Community Plan Parks and Open Space Element goals related to maintaining and enhancing beach access, safety, and views. As described in Section 5.1.3.1, the proposed sand and cobble dune and restoration area would not obstruct scenic views of the Pacific Ocean from public viewing locations, and the vegetated dune would represent a beneficial impact compared to the visual quality of the existing cobble riprap. Therefore, the Pacific Beach – Tourmaline Surf Park project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

Mission Beach

Applicable priorities related to visual resources identified in the Mission Beach Precise Plan include the preservation of public views of the ocean and Mission Bay in new development; the height and bulk of new development; landscaping in new development to upgrade aesthetic character; and protection of Mission Beach as a special community for visitor and recreation use.

The Aesthetics and Design Element goals of the Mission Bay Park Master Plan and the Mission Bay Design Guidelines Manual primarily focus on views of Mission Bay from surrounding hillside development and roadways. The goals of the Aesthetics and Design Element state that, as a unique and limited coastal resource, Mission Bay Park should be the following:

- A park whose image, as defined by its landscape architecture, and public works manifests and magnifies its unique and distinctive aquatic nature.
- A park comprising an interconnected system of diverse recreational environments, or "parks within a park."
- A park that extends beyond its boundaries by offering "image bytes" or encapsulated views of its open waters and landscape to surrounding roadways, neighboring streets, and distant viewing points.

The Mission Beach project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Beach in the Mission Beach Precise Plan. Zoning for the site is also identified as Park, Open Space, & Recreation. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. As such, the Mission Beach project would be consistent with the Park, Open Space, & Recreation and Beach land use designations and zoning for the site.

Additionally, the Mission Beach project would be consistent with and would help implement the Aesthetics and Design Element goals of the Mission Beach Precise Plan. For example, the proposed elevated sand dune under both design options is intended to provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and by providing a reservoir of sand to the beach that can be used during erosive conditions. The perched beach proposed under the Perched Beach Design Option would be elevated and would provide a beach area with unobstructed views of the Pacific Ocean (refer to Figure 3-9). Therefore, the Mission Beach project would be consistent with Mission Beach Precise Plan Aesthetics and Design Element goals related to preserving the aquatic nature of the site, maintaining diverse recreational environments, and protecting and enhancing coastal views. As described in Section 5.1.3.1, neither the proposed sand dune nor the perched beach would obstruct scenic views of the Pacific Ocean from public viewing locations, and the permanent vegetated sand dune would represent a beneficial impact compared to the visual quality of the annual winter berm. Therefore, the Mission Beach project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach Community Plan includes a community vision dependent on the preservation of open space, sensitive habitat, public park lands, and other recreational uses. Applicable urban design goals of the Ocean Beach Community Plan include the following:

- A coastal community that values the coastline and topography as an amenity and provides an attractive built environment.
- New development with a high degree of design excellence.
- New development that is environmentally friendly and attains LEED and/or CALGreen standards or equivalent.
- Connectivity of neighborhoods and commercial districts to activity centers and adjacent communities.
- Coastal views protected and enhanced.
- Pedestrian-friendly walkable neighborhoods.

The Ocean Beach – Pier project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Park and Public Ownership in the Ocean Beach Community Plan. No zoning is designated for the site. The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north– south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Therefore, the Ocean Beach – Pier project would be consistent with the Park, Open Space, & Recreation and Park and Public Ownership land use designations for the site.

Additionally, the Ocean Beach – Pier project would be consistent with and would help implement several urban design goals of the Ocean Beach Community Plan. For example, the proposed elevated sand dune is intended to provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and by providing a reservoir of sand to the beach that can be used during erosive conditions. Additionally, the proposed multi-use path would connect the existing western terminus of the San Diego River Bikeway to the Ocean Beach Pier and include a Class I bikeway and separated pedestrian trail to reduce risk of collisions. Therefore, the Ocean Beach – Pier project would be consistent with Ocean Beach Community Plan urban design goals related to preserving the coastline as an amenity and providing an attractive built environment, implementing environmentally friendly development, providing connectivity between neighborhoods and commercial districts to activity centers and adjacent communities, protecting and enhancing coastal views, and improving pedestrian facilities for a walkable neighborhood. As described in Section 5.1.3.1, the proposed sand dune and multiuse path would not obstruct scenic views of the Pacific Ocean from public viewing locations, and the permanent vegetated sand dune would represent a beneficial impact compared to the visual quality of the annual winter berm. Therefore, the Ocean Beach – Pier project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Peninsula Community Plan's overall community goals include conserving existing open space, including canyons, hillsides, wetlands, and shorelines; enhancing and protecting physical and visual access to the bay and ocean shoreline; maintaining and complementing the existing scale, architectural features, and vegetation in the Peninsula area; and providing additional park and recreation facilities (City of San Diego 1987). According to the Peninsula Community Plan, the community is unique due to a number of physical factors, including the following:

- A coastline consisting of bluffs, rocky and sandy beaches, and the bay.
- Numerous hillsides and canyons which act as natural boundaries forming distinctive neighborhoods.
- Extensive areas of large trees and natural vegetation.
- Well-defined neighborhoods with a variety of well-preserved architectural styles and housing types.
- A number of historically significant buildings and resources.

The Peninsula Community Plan includes several objectives to preserve and enhance significant views of the bay and ocean and those natural and human-made features that make the area unique.

The Sunset Cliffs project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Public, Semi-Public: Park in the Peninsula Community Plan. Zoning for the site is also identified as Park, Open Space, & Recreation. The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. As such, the Sunset Cliffs project would be consistent with the Park, Open Space, & Recreation and Public, Semi-Public: Park land use designations and zoning for the site.

Additionally, the Sunset Cliffs project would be consistent with the Peninsula Community Plan's objectives to preserve and enhance significant views of the ocean as well as those natural and human-made features that make the area unique. For example, the proposed road reconfiguration program would maintain vehicular access and improve access for pedestrians and cyclists along Sunset Cliffs Boulevard, which would continue to be impacted by cliff erosion and narrowing widths between the cliff edge and residential areas to the east. As described in Section 5.1.3.1, the proposed road reconfiguration and multi-use path would not obstruct scenic views of the Pacific Ocean from public viewing locations for pedestrians and cyclists and would not substantially obstruct ocean views for vehicles along Sunset Cliffs Boulevard. Further, the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional parking realignment would generally improve the visual quality of the Sunset Cliffs project site

and provide enhanced areas for recreation and public viewing of scenic views across Sunset Cliffs. Therefore, the Sunset Cliffs project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant, and no mitigation is required.

5.1.3.5 Issue 5: Light and Glare

Would the proposed CRMP Phase 1 create a new source of substantial light or glare or shade which would adversely affect day or nighttime views in the area?

Pilot Project: Ocean Beach – Dog Beach

Sources of light within and around the Ocean Beach – Dog Beach project site include those typical of an urban community, such as lighting for recreational facilities, parking lots and roadway infrastructure, building lighting for nearby residential and commercial land uses, vehicle headlights, and signage.

Construction activities associated with the Pilot Project would be limited to the hours between 7:00 a.m. to 7:00 p.m. during weekdays and, if necessary, on Saturdays in accordance with San Diego Municipal Code (SDMC) Section 59.5.0404. Because construction would occur during daylight hours, construction lighting is not anticipated to be necessary. If necessary, construction lighting shall be shielded and directed toward the construction and staging areas to prevent spill over into adjacent properties or sensitive habitat areas. Additionally, the use of construction lighting, if necessary, would be short term and temporary. Therefore, impacts related to light or glare from construction lighting would be less than significant, and no mitigation is required.

The Pilot Project would include installation of a multi-use path, construction of an elevated sand dune, and an optional relocation or reconstruction of the restrooms within the grassy landscaped areas adjacent to the parking lot. The Pilot Project on the Ocean Beach – Dog Beach project site may require the realignment of existing lamps for streetscape and public recreational areas. The Pilot Project on the Ocean Beach – Dog Beach project site would be required to comply with the applicable outdoor lighting regulations of SDMC Section 142.0740 et seq., which would require development to minimize negative impacts from light pollution including light trespass, glare, and urban sky glow. Compliance with these regulations would preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Additionally, new outdoor lighting fixtures must minimize light trespass in accordance with CALGreen, where applicable, or otherwise shall direct, shield, and control light to keep it from falling onto surrounding properties.

Furthermore, if the existing restroom on the Ocean Beach – Dog Beach project site is reconstructed, it would not be reconstructed with reflective materials. SDMC Section 142.0730 requires that development limit the amount of reflective material on the exterior of a building that has a light reflectivity factor greater than 30 percent to a maximum of 50 percent. Additionally, per SDMC Section 142.0730(b), reflective building materials are not permitted where it is determined that their

use would contribute to potential traffic hazards, diminish the quality of riparian habitat, or reduce enjoyment of public open space. Therefore, reflective building materials would not be allowed in the potential reconstruction of the existing restroom. Through regulatory compliance, the Pilot Project on the Ocean Beach – Dog Beach project site would not create substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Sources of light within and around the La Jolla Shores project site include those typical of an urban community, such as lighting for recreational facilities, parking lots and roadway infrastructure, building lighting for nearby residential and commercial land uses, vehicle headlights, and signage.

Refer to the discussion under Pilot Project: Ocean Beach – Dog Beach earlier in this section for a description of the potential for construction impacts related to light and glare from the use of construction lighting. Construction impacts would be less than significant, and no mitigation is required.

The proposed La Jolla Shores project would construct either two separate earthen dikes along the western edge of La Jolla Shores Park and Kellogg Park separated by a seatwall along the western edge of the existing parking lot under the Amphitheater Design Option or would reconfigure the grassy recreational areas and parking lot to create one continuous waterfront park. Implementation of the La Jolla Shores project would not introduce new permanent artificial lighting to the project site beyond what currently exists at the project site. Therefore, the La Jolla Shores project would not create substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Sources of lighting within the Pacific Beach – Tourmaline Surf Park project site are currently limited to vehicle headlights. No streetlamps or other roadway infrastructure lighting occurs on the project site. Lighting near the project site may also include lighting typical of an urban community, such as lighting for roadway infrastructure, building lighting for nearby residential and commercial land uses, vehicle headlights, and signage.

Refer to the discussion under Pilot Project: Ocean Beach – Dog Beach earlier in this section for a description of the potential for construction impacts related to light and glare from the use of construction lighting. Construction impacts would be less than significant, and no mitigation is required.

The proposed Pacific Beach – Tourmaline Surf Park project would construct an elevated sand dune with a rock core along the existing rock revetment on the site and would restore the existing vegetated median between the restrooms and the access ramp. Implementation of the Pacific Beach – Tourmaline Surf Park project would not introduce new permanent artificial lighting to the project

site. Therefore, the Pacific Beach – Tourmaline Surf Park project would not create substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Mission Beach

Sources of light on and around the Mission Beach project site include lighting along Ocean Front Walk, building lighting for nearby residential and commercial land uses (e.g., the roller coaster at Belmont Park), lighting for recreational facilities, parking lots and roadway infrastructure, vehicle headlights, and signage.

Refer to the discussion under Pilot Project: Ocean Beach – Dog Beach earlier in this section for a description of the potential for construction impacts related to light and glare from the use of construction lighting. Construction impacts would be less than significant, and no mitigation is required.

The Mission Beach project would construct an elevated sand dune along the back of the beach (west of the seawall) under the Dune Design Option. Under the Perched Beach Design Option, in addition to the elevated sand dune, the grassy recreational space at Mission Beach Park would be converted to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. Implementation of the Perched Beach Design Option would require the realignment of the existing lamps along the 350-foot section of the existing seawall that would be realigned further inland. The realigned section of the seawall would include the same lamps that currently line this seawall. The Perched Beach Design Option would be required to comply with the applicable outdoor lighting regulations of SDMC Section 142.0740 et seq., which would require development to minimize negative impacts from light pollution including light trespass, glare, and urban sky glow. Compliance with these regulations would preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination. Additionally, new outdoor lighting fixtures must minimize light trespass in accordance with CALGreen, where applicable, or otherwise shall direct, shield, and control light to keep it from falling onto surrounding properties. Implementation of the Mission Beach project would not introduce new permanent artificial lighting to the project site. Therefore, the Mission Beach project would not create substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Sources of light within and around the Ocean Beach – Pier project site include those typical of an urban community, such as lighting for recreational facilities, parking lots and roadway infrastructure, building lighting for nearby residential and commercial land uses, vehicle headlights, and signage.

Refer to the discussion under Pilot Project: Ocean Beach – Dog Beach earlier in this section for a description of the potential for construction impacts related to light and glare from the use of construction lighting. Construction impacts would be less than significant, and no mitigation is required.

The Ocean Beach – Pier project includes installation of a multi-use path and construction of an elevated sand dune. The Ocean Beach – Pier project may require the realignment of existing lamps for streetscape and public recreational areas. However, as described for the Pilot Project, the realignment of lighting included as part of the Ocean Beach – Pier project would be required to comply with SDMC Section 142.0740 et seq. and CALGreen to minimize light trespass, glare, and urban sky glow. Therefore, through regulatory compliance, the Ocean Beach – Pier project would not create substantial light or glare that would adversely affect daytime or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

Sources of light within and around the Sunset Cliffs project site include streetlamps along the eastern side of Sunset Cliffs Boulevard, building lighting for nearby residential and commercial land uses, and vehicle headlights.

Refer to the discussion under Pilot Project: Ocean Beach – Dog Beach earlier in this section for a description of the potential for construction impacts related to light and glare from the use of construction lighting. Construction impacts would be less than significant, and no mitigation is required.

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. There is currently no permanent lighting along Sunset Cliffs trail that would have the potential to be affected by implementation of the Sunset Cliffs project. Operation of the Sunset Cliffs project would not require the use of additional lighting or reflective surfaces. Additionally, implementation of the Sunset Cliffs Boulevard. Therefore, impacts would be less than significant, and no mitigation is required.

5.1.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project on the Ocean Beach – Dog Beach project site would not result in a substantial adverse effect on a scenic vista, substantially damage scenic resources within a state scenic highway, substantially degrade the existing visual character or quality of public views of the site and its surroundings, conflict with applicable zoning and other regulations governing scenic quality, or create a new source of substantial light, glare, or shade that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would not result in a substantial adverse effect on a scenic vista, substantially damage scenic resources within a state scenic highway, substantially degrade the existing visual character or quality of public views of the site and its surroundings, conflict with applicable zoning and other regulations governing scenic quality, or create a new source of substantial light, glare, or shade that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not result in a substantial adverse effect on a scenic vista, substantially damage scenic resources within a state scenic highway, substantially degrade the existing visual character or quality of public views of the site and its surroundings, conflict with applicable zoning and other regulations governing scenic quality, or create a new source of substantial light, glare, or shade that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would not result in a substantial adverse effect on a scenic vista, substantially damage scenic resources within a state scenic highway, substantially degrade the existing visual character or quality of public views of the site and its surroundings, conflict with applicable zoning and other regulations governing scenic quality, or create a new source of substantial light, glare, or shade that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not result in a substantial adverse effect on a scenic vista, substantially damage scenic resources within a state scenic highway, substantially degrade the existing visual character or quality of public views of the site and its surroundings, conflict with applicable zoning and other regulations governing scenic quality, or create a new source of substantial light, glare, or shade that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would not result in a substantial adverse effect on a scenic vista, substantially damage scenic resources within a state scenic highway, substantially degrade the existing visual character or quality of public views of the site and its surroundings, conflict with applicable zoning and other regulations governing scenic quality, or create a new source
of substantial light, glare, or shade that would adversely affect day or nighttime views in the area. Impacts would be less than significant, and no mitigation is required.

5.1.5 Mitigation Framework

Impacts to aesthetics would be less than significant; therefore, no mitigation is required.



Figure 5.1-1. Ocean Beach – Dog Beach – Existing Views

Ocean Beach – Dog Beach eastbound (left); Ocean Beach – Dog Beach northbound (right)



Ocean Beach – Dog Beach southbound (left); Ocean Beach – Dog Beach westbound (right)





La Jolla Shores eastbound (left); La Jolla Shores northbound (right)



La Jolla Shores southbound (left); La Jolla Shores westbound (right)



Figure 5.1-3. Pacific Beach – Tourmaline – Existing Views

Pacific Beach – Tourmaline eastbound (left); Pacific Beach – Tourmaline northbound (right)



Pacific Beach – Tourmaline southbound (left); Pacific Beach – Tourmaline westbound (right)



Figure 5.1-4. Mission Beach – Existing Views

Mission Beach northbound (left); Mission Beach southbound (right)



Figure 5.1-5. Ocean Beach – Pier – Existing Views

Ocean Beach – Pier eastbound (left); Ocean Beach – Pier northbound (right)



Ocean Beach – Pier southbound (left); Ocean Beach – Pier westbound (right)



Figure 5.1-6. Sunset Cliffs – Existing Views

Sunset Cliffs northbound (right); Sunset Cliffs southbound (left)



Sunset Cliffs westbound (right)

5.2 Air Quality

This section of the Program Environmental Impact Report (PEIR) describes the existing air quality conditions in the San Diego Air Basin (SDAB), which encompasses the entire San Diego region, including the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area, and evaluates the potential impacts related to air quality that could result from implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the U.S. Environmental Protection Agency, California Air Resources Board (CARB), and San Diego County Air Pollution Control District (SDAPCD). An analysis of greenhouse gas emissions and associated impacts is included in Section 5.6, Greenhouse Gas Emissions.

5.2.1 Existing Conditions

5.2.1.1 Location and Climate

The San Diego region, including the project area, is influenced by proximity to the Pacific Ocean and a semi-permanent high-pressure zone that sits over the Pacific Ocean during much of the year and forms a fog belt (marine layer). This high-pressure system results in warm, dry summers and mild, occasionally wet winters. The project sites are subject to frequent offshore breezes. The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds blowing pollutants away from the coast toward inland areas. Consequently, air quality near the coast is generally better than what occurs at the base of the coastal mountain range.

The project sites, like the rest of San Diego County's coastal areas, have a Mediterranean climate characterized by warm, dry summers and mild, wet winters. Average temperatures for this area range from 59 degrees Fahrenheit (°F) to 71°F. Typically, August is the warmest and driest month, February is the wettest month, and December is the coldest month of the year. Average precipitation in the rainy season ranges between 0.63 inch and 2.1 inches per month (October to March). The average annual precipitation for the survey area between 2002 and 2022 was approximately 9 inches. In 2022, the total annual rainfall was 5.4 inches, approximately 1.7 inches less than the previous year (NRCS 2023). As of April 2023, when the biological resources fieldwork was conducted, the total annual precipitation in the area was 9.6 inches, approximately 7.2 inches greater than April 2022 and 0.2 inch higher than the average annual precipitation between 2002 and 2022.

Fluctuations in the strength and pattern of winds from the Pacific High Pressure Zone interacting with the daily local cycle produce periodic temperature inversions that influence the dispersal or containment of air pollutants in the SDAB. Beneath the inversion layer pollutants become

"trapped" as their ability to disperse diminishes. The mixing depth is the area under the inversion layer. Generally, the morning inversion layer is lower than the afternoon inversion layer. The greater the change between the morning and afternoon mixing depths, the greater the ability of the atmosphere to disperse pollutants.

The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high-pressure system develops over the Nevada to Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.

Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and the low pressure over Baja California draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and send this cloud of contamination ashore in the SDAB. When this event does occur, the combination of transported and locally produced contaminants produces the worst air quality measurements recorded in the basin.

5.2.1.2 Air Pollutants

To protect public health and welfare, the federal and state governments regulate criteria air pollutants and certain air toxics. In California, these pollutants are regulated through the federal Clean Air Act, which established the National Ambient Air Quality Standards (NAAQS) and the California Clean Air Act; the latter established the more restrictive California Ambient Air Quality Standards (see Table 5.2-1, Federal and State Ambient Air Quality Standards for Criteria Pollutants). The air pollutants for which both federal and state standards have been promulgated and which are most relevant to air quality planning and regulation in the air basin are ozone (O₃), carbon monoxide (CO), respirable particulate matter (PM₁₀), fine particulate matter (PM_{2.5}), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), and lead (Pb). Toxic air contaminants (TACs) are regulated separately from criteria air pollutants. These pollutants that are not currently regulated by the NAAQS, including hydrogen sulfide (H₂S), vinyl chloride, and sulfates. Refer to Table 5.2-1 for federal and state ambient air quality standards.

Criteria	Averaging	California Standards	Federal Standards		
Pollutant	Time		Primary	Secondary	
O ₃	8-Hour	0.07 ppm (137 µg/m ³)	0.07 ppm (137 µg/m ³)	Same as Primary Standard	
	1-Hour	0.09 ppm (180 µg/m ³)	—	_	
00	8-Hour	9 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	—	
0	1-Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None	
	24-Hour	50 µg/m³	150 µg/m³	Same as Primary Standard	
PM10	Annual Arithmetic Mean	20 µg/m³	—	_	
	24-Hour	—	35 µg/m³	Same as Primary Standard	
PM _{2.5}	Annual Arithmetic Mean	12 µg/m³	12 µg/m³	15 µg/m³	
	1-Hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m³)	Same as Primary Standard	
NO ₂	Annual Arithmetic Mean	0.03 ppm (57 µg/m ³)	0.53 ppm (100 µg/m ³)	Same as Primary Standard	
	24-Hour	0.04 ppm (105 µg/m ³)	—	—	
SO ₂	3-Hour	_	—	0.5 ppm (1,300 µg/m ³)	
	1-Hour	0.25 ppm (655 µg/m³)	75 ppb (196 µg/m³)	—	
Pb	30 Day Average	1.5 μg/m³	—	_	
	Rolling 3-Month Average	—	0.15 µg/m³	Same as Primary Standard	
Sulfates	24-Hour	25 µg/m³	—	_	
H ₂ S	1-Hour	0.03 ppm (42 µg/m ³)			
Vinyl Chloride	24-Hour	0.01 ppm (26 µg/m³)	_	_	

Table 5.2-1. Federal and State Ambient Air Quality Standards for Criteria Pollutants

Source: CARB 2016.

Notes: $\mu g/m^3 = microgram per cubic meter; CO = carbon monoxide; H₂S = hydrogen sulfide; mg/m³ = milligram per cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; Pb = lead; PM_{2.5} = fine particulate matter; PM₁₀ = respirable particulate matter; ppb = parts per billion; ppm = parts per million; SO₂ = sulfur dioxide$

Ozone

 O_3 is a gas that is produced by a photochemical reaction (triggered by heat and sunlight) between nitrogen oxide (NO_x) and volatile organic compounds (VOCs). NO_x and VOCs are also commonly referred to as reactive organic gases. NO_x is formed during the combustion of fuels, while VOCs are formed during combustion and evaporation of organic solvents. Conditions that produce high concentrations of O₃ are direct sunshine, stagnation in source areas, high ground surface temperatures, and a strong inversion layer that restricts vertical mixing. O₃ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. O₃ is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Children, older adults, people with respiratory disorders, and people who exercise strenuously outdoors are the most sensitive to O₃.

Carbon Monoxide

CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest near congested transportation corridors and intersections, especially during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The health effects of CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulties in people with chronic diseases, reduced lung capacity, and impaired mental abilities. Those most at risk are fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (i.e., oxygen deficiency, as seen at high altitudes).

Respirable Particulate Matter and Fine Particulate Matter

PM₁₀ and PM_{2.5} consist of extremely small, suspended particles with diameters less than 10 microns and less than 2.5 microns, respectively. PM₁₀ generally comes from fugitive dust (windblown dust and dust generated from mobile sources), while PM_{2.5} is generally associated with combustion processes but is also formed in the atmosphere as a secondary pollutant through chemical reactions. Most particulate matter in urban areas is produced by fuel combustion, motor vehicle travel, and construction activities. Construction grading and demolition dust accounts for 30 percent of all PM_{10} emissions in the SDAB. Road dust (both paved and unpaved roads) from sources such as vehicle tire wear on paved roads, accounts for 47 percent of all PM₁₀ emissions. Children, older adults, and people with pre-existing respiratory or cardiovascular disease appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$. Potential impacts of elevated levels of PM₁₀ and PM_{2.5} include increased mortality rates, respiratory infections, number and severity of asthma attacks, and number of hospital admissions. Daily fluctuations in PM2.5 concentration levels have been related to hospital admissions for acute respiratory conditions in children, school absences, decreases in respiratory lung volumes in normal children, and increased medication use in children and adults with asthma. Recent studies show the development of lung function in children is reduced with long-term exposure to particulate matter.

Nitrogen Dioxide

 NO_2 is a reddish-brown toxic gas with a characteristic sharp, biting odor. It is a prominent air pollutant resulting from NO_x emitted primarily by motor vehicles, making it a strong indicator of vehicle emissions. Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

Sulfur Dioxide

 SO_2 is a colorless, extremely irritating gas or liquid. The largest sources of SO_2 are fossil fuel combustion at power plants and other industrial facilities. Smaller sources of SO_2 emissions include industrial processes such as extracting metal from ore and the burning of high sulfur containing fuels by locomotives, large ships, and non-road equipment. SO_2 is linked with adverse effects on the respiratory system. Asthmatics are particularly sensitive to SO_2 , with only a few minutes of exposure to low levels of the gas potentially resulting in airway constriction.

Lead

Pb occurs in the atmosphere as particulate matter. The use of leaded gasoline is no longer permitted for on-road motor vehicles; therefore, most Pb combustion emissions are associated with aircraft, and some racing and off-road vehicles. Substantial Pb emissions also occur in the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters. Despite these sources, Pb emissions in the U.S. decreased by 99 percent from 1980 to 2022 (USEPA 2023). Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased levels of lead are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death.

Toxic Air Contaminants

TACs are a diverse group of air pollutants including both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, heavy duty trucks, motor vehicles, construction equipment, and industrial operations. TACs are different than criteria pollutants in that ambient air quality standards have not been established for TACs, largely because there are hundreds of air toxics and their effects on health tend to be local rather than regional. CARB has designated nearly 200 compounds as TACs. Additionally, CARB has implemented control measures for many compounds that pose high risks and show potential for effective control. TACs can cause chronic and acute adverse effects on human health. These health impacts include increased risk of cancer due to continual inhalation of toxic air pollutants. Most of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (i.e., diesel particulate matter [DPM]).

Volatile Organic Compounds

VOCs are organic chemicals that have a high vapor pressure at ordinary room temperature and include any compound of carbon, excluding CO, carbon dioxide (CO₂), carbonic acid (H₂CO₃), metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. The high vapor pressure of VOCs results from a low boiling point, which

causes large numbers of molecules to evaporate or sublimate from the liquid or solid form of the compound and enter the surrounding air. For example, formaldehyde, which evaporates from paint, has a boiling point of only -2° F. VOCs are numerous, varied, and ubiquitous, and include both human-made and naturally occurring chemical compounds. Most scents or odors are of VOCs. Some VOCs are dangerous to human health or cause harm to the environment. Anthropogenic VOCs are regulated by law, especially indoors, where concentrations are the highest. Harmful VOCs typically are not acutely toxic but have compounding long-term health effects.

Odors

Odors are not regulated under the federal or California Clean Air Act; however, they are considered under the California Environmental Quality Act (CEQA). Odors can potentially affect human health in several ways. Odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Additionally, VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. According to the South Coast Air Quality Management District CEQA Air Quality Handbook (1993), 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. Sources of odors may include odors from the ocean, commercial kitchens (particularly those with outdoor grilling or wood-burning ovens), and short-term odors generated by construction activities such as painting and asphalt paving.

5.2.1.3 Regional Air Quality

Measurements of ambient concentrations of criteria pollutants are used by the U.S. Environmental Protection Agency and CARB to assess and classify the air quality of each air basin, county, or, in some cases, a specific developed area. The classification is determined by comparing monitoring data with federal and state air quality standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in "attainment." If the pollutant exceeds the standard, the area is described as being in marginal, moderate, serious, severe, or extreme "non-attainment," depending on the magnitude of the air quality standard exceedance. In order to reach attainment again, the NAAQS may not be exceeded more than once per year. A non-attainment area can reach attainment when the NAAQS have been met for a period of 10 consecutive years. During this time period, the area is in "maintenance." If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified."

The SDAB is designated as a federal and state non-attainment area for 8-hour O₃ and a state nonattainment area for 1-hour O₃, PM₁₀, and PM_{2.5}. The SDAB is in attainment for the federal ambient air quality standards for 1-hour O₃, CO, PM_{2.5}, NO₂, SO₂, and Pb and the state ambient air quality standards for CO, NO₂, SO₂, Pb, and sulfates (see Table 5.2-2, San Diego Air Basin Federal and State Attainment Status for Criteria Pollutants).

Criteria Pollutant	Federal Designation	State Designation		
O ₃ (8-Hour)	Non-attainment	Non-attainment		
O ₃ (1-Hour)	Attainment ¹	Non-attainment		
СО	Attainment	Attainment		
PM ₁₀	Unclassifiable ²	Non-attainment		
PM _{2.5}	Attainment	Non-attainment ³		
NO ₂	Attainment	Attainment		
SO ₂	Attainment	Attainment		
Pb	Attainment	Attainment		
Sulfates	No Federal Standard	Attainment		
H ₂ S	No Federal Standard	Unclassified		

Table 5.2-2. San Diego Air Basin Federal and State Attainment Status for Criteria Pollutants

Source: SDAPCD 2023.

Notes: $CO = carbon monoxide; H_2S = hydrogen sulfide; NO_2 = nitrogen dioxide; O_3 = ozone; Pb = lead; PM_{2.5} = fine particulate matter; PM_{10} = respirable particulate matter; SO_2 = sulfur dioxide.$

¹ The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

² At the time of designation, if the available data does not support a designation of attainment or non-attainment, the area is designated as unclassifiable.

³ CARB has not reclassified the region to attainment yet due to (1) incomplete data, and (2) the use of non-California Approved Samplers. While data collected does meet the requirements for designation of attainment with federal PM_{2.5} standards, the data completeness requirements for state PM_{2.5} standards substantially exceed federal requirements and mandates and have historically not been feasible for most air districts to adhere to given local resources. The SDAPCD has begun replacing most regional filter-based PM_{2.5} monitors as they reach the end of their useful life with continuous PM_{2.5} air monitors to ensure collected data meets stringent completeness requirements in the future. The SDAPCD anticipates these new monitors will be approved as California Approved Samplers once CARB reviews the list of approved monitors, which has not been updated since 2013.

5.2.1.4 Carbon Monoxide Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. CO is a product of incomplete combustion of fossil fuel; unlike O₃, CO is emitted directly out of a vehicle exhaust pipe at a congested major roadway intersection with sensitive receptors nearby and where vehicles are either idling or moving at a stop-and-go pace. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." Section 9.14 of the South Coast Air Quality Management District CEQA Air Quality Handbook (1993) identifies CO as a "localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots."

5.2.1.5 Sensitive Receptors

Sensitive receptors are populations that are more susceptible to the effects of air pollution than is the population at large. According to CARB, sensitive receptors include children less than 14 years of age, adults over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. As adopted by the South Coast Air Quality Management District in their CEQA Air Quality handbook (Chapter 4), a sensitive receptor is a person in the population who is more susceptible to health effects due to exposure to an air contaminant than is the population at large. Sensitive receptors (and the facilities that house them) in proximity to localized CO sources, TACs, or odors are of particular concern. The federal and state ambient air quality standards are designed to protect public health and are generally regarded as conservative for healthy adults because there is greater concern to protect adults who are ill or have long-term respiratory problems and young children whose lungs are not fully developed. Air quality regulators typically define sensitive receptors as schools (preschool–12th grade), hospitals, residential care facilities, day-care centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality. However, for the purposes of this analysis, the definition of a sensitive receptor also includes residences because they may house sensitive receptors. Sensitive receptors are identified in Table 5.2-3, Sensitive Receptors in Proximity to the Project Sites.

Project Site	Nearby Sensitive Receptors	Approximate Distance to Project Site		
Ocean Beach – Dog	Residences north of West Point Loma Boulevard	0–10 feet		
Beach	Residences south of West Point Loma Boulevard	200 feet		
	Residences southeast of Spray Steet	50–75 feet		
	Residences along Brighton Avenue	20–50 feet		
	Ocean Villa Inn (Hotel)	0–10 feet		
	Ocean Beach Athletic Area Robb Field	100 feet		
	Sacred Heart Academy Preschool	1,360 feet		
La Jolla Shores	Residences north of La Vereda/La Jolla Shores Park	50-75 feet		
	Residences east of El Paseo Grande	50 feet		
	La Jolla Shores Hotel	50–75 feet		
	La Jolla Beach & Tennis Club (Hotel)	100 feet		
Pacific Beach —	Residences north of Tourmaline Street	90 feet		
Tourmaline Surf Park	Residences south of Tourmaline Street	70 feet		
	Residences north of Pacific View Drive	50-75 feet		
	Residences along Ocean Boulevard	100 feet		
	Residences east of La Jolla Boulevard	130 feet		
Mission Beach	Residences north of Ventura Place	35 feet		
	Residences south of San Fernando Place	35 feet		
	Belmont Park/Mission Beach Park	25 feet		
	Residences east of Mission Boulevard	530 feet		
	Bonita Cove Park	650 feet		

Table 5.2-3. Sensitive	Receptors	in Proximity	/ to the	Project Sites
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Project Site	Nearby Sensitive Receptors	Approximate Distance to Project Site		
Ocean Beach – Pier	Residences northwest of Abbott Street	0–10 feet		
	Ocean Beach (Hotel)	50 feet		
	Residences along Ocean Front Way	10–25 feet		
Sunset Cliffs	Residences east of Sunset Cliffs Boulevard	50–75 feet		
	The Inn at Sunset Cliffs (Hotel)	200 feet		
	Secure Vacation Rentals	0–25 feet		

Table 5.2-3. Sensitive Receptors in Proximity to the Project Sites

Source: Analyzed by Harris 2023.

5.2.2 Significance Determination Thresholds

5.2.2.1 CEQA Guidelines

Thresholds used to evaluate potential impacts related to air quality are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (City of San Diego 2023b). A significant impact could occur if implementation of the project would:

- a. Conflict with or obstruct implementation of the applicable air quality plan;
- b. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors);
- c. Expose sensitive receptors to substantial pollutant concentrations; or
- d. Result in odors adversely affecting a substantial number of people.

The following sections outline the thresholds used to evaluate each of the above criteria.

5.2.2.2 Conflict with Applicable Air Quality Plan

The federal and California Clean Air Acts require that air basins designated non-attainment for criteria pollutants prepare and implement plans to attain the standards. At the time of this analysis, the Air Quality Plans for the SDAB include the CO maintenance plan, the federal 2012 maintenance plan for O_3 NAAQS, and the Regional Air Quality Strategy (RAQS). The two pollutants addressed in the RAQS are VOC and NO_x , which are precursors to the formation of O_3 . Projected increases in motor vehicle usage, population, and industrial growth create challenges in controlling emissions to maintain and further improve air quality. The RAQS was most recently revised in December 2016. However, a 2022 RAQS Revision is currently underway.

The basis for the mobile-source emission estimates in the RAQS is the distribution of population in the region as projected by San Diego Association of Governments. The SDAPCD refers to approved General Plans to forecast, inventory, and allocate regional emissions from land use and development-related sources. These emissions budgets are used in statewide air quality attainment planning efforts. As such, projects that are consistent with the General Plan and the assumptions used in the development of the RAQS would not conflict with or obstruct attainment of the air quality levels, which would help the region achieve ambient air quality standards. Projects that propose development at an intensity equal to or less than population growth projections and land use intensity are inherently consistent. However, projects that amend or propose development greater than the projections in the RAQS would not necessarily result in an inconsistency with the air quality plan. Since the focus of the RAQS is on emissions, amending an adopted General Plan or Community Plan to change land use development would require further analysis to determine consistency with RAQS and the State Implementation Plan.

5.2.2.3 Cumulative Increase in Emissions/Air Quality Standards

The SDAPCD has established trigger levels that determine when a new or modified stationary source would require an air quality analysis. These trigger levels are used by the City in its CEQA Significance Determination Thresholds (City of San Diego 2023) as one of the considerations when determining the potential significance of cumulative air quality impacts for projects within the City. As these thresholds are only appropriate for a project-level analysis and not a program-level analysis of buildout of all the project sites, these thresholds are only used in evaluating a typical project as a representative scenario of impacts that could occur. The air quality impact screening levels for determining whether air quality impacts are significant are shown in Table 5.2-4, Air Quality Impact Screening Levels.

Critoria Dollutant	Emission Rate					
Chiena Poliulani	Pounds/Hour	Pounds/Day	Tons/Year			
СО	100	550	100			
PM ₁₀	—	100	15			
PM _{2.5} ¹	—	67	10			
NOx	25	250	40			
SO _X	25	250	40			
Pb	—	3.2	0.6			
VOC	_	137	15			

 Table 5.2-4. Air Quality Impact Screening Levels

Source: SDAPCD 2020, 2022a, 2022b; City of San Diego 2023.

Notes: $CO = carbon monoxide; NO_x = nitrogen oxides; Pb = lead; PM_{2.5} = fine particulate matter; PM_{10} = respirable particulate matter; SO_x = sulfur oxides; VOC = volatile organic compounds$

¹ The City does not specify a threshold for $PM_{2.5}$. Threshold here is based on the SDAPCD, Rules 20.1, 20.2, and 20.3.

The above thresholds are applicable to individual development projects and not a program-level analysis such as the CRMP Phase 1. The project-level thresholds are intended to ensure many individual projects would not obstruct the timely attainment of the NAAQS and California Ambient Air Quality Standards. Generally, discretionary program-level planning activities, such as General Plans, Community Plans, or Ordinance Amendments, are evaluated for consistency with the local Air Quality Plans as a measure of significance.

5.2.2.4 Sensitive Receptors and Substantial Pollutant Concentrations

Sensitive receptors are evaluated for potential impacts related to criteria pollutants, CO hotspots, and TACs, as detailed below.

Criteria Air Pollutant Emissions

The City has developed screening thresholds to analyze the potential impacts related to criteria air pollutant emissions; however, none of these screening thresholds apply to the CRMP Phase 1.

Localized Carbon Monoxide Hotspots Impacts

Although the SDAB is currently an attainment area for CO, exhaust emissions can potentially cause a direct, localized "hotspot" impact at or near a proposed development. Because increased CO concentrations are usually associated with roadways that are congested and with heavy traffic volumes, many agencies have established preliminary screening criteria to determine with fair certainty that, if not violated, project-generated, long-term operational local mobile-source emissions of CO would not result in, or substantially contribute to, emissions concentrations that exceed the 1-hour ambient air quality standard of 20 parts per million (ppm) or the 8-hour standard of 9.0 ppm.

Toxic Air Contaminants

For SDAPCD-permitted projects in general, the SDAPCD does not identify a significant impact if the potential health risks from the CRMP Phase 1 would be below the health risk public notification thresholds specified by SDAPCD Rule 1210 (Toxic Air Contaminant Public Health Risks – Public Notification and Risk Reduction). The public notification thresholds are as follows:

- Maximum individual cancer risks equal to or greater than 10 in one million, or
- Cancer burden equal to or greater than 1.0, or
- Total acute noncancer health hazard index equal to or greater than 1.0, or
- Total chronic noncancer health hazard index equal to or greater than 1.0.

Therefore, for the purposes of evaluating the potential health risks associated with the air toxics addressed in this assessment, a significant impact could occur if the worst-case incremental cancer risk was greater than or equal to 10 in 1 million or if the worst-case total acute or chronic health hazard index was greater than or equal to 1.0.

5.2.2.5 Odors

Two situations increase the potential for odor problems: (1) when a new odor source is located near existing receptors, and (2) when new receptors are developed near existing sources of odor. Projects that involve offensive odors may be a nuisance to neighboring uses, including businesses, residences, sensitive receptors, and public areas. For example, heavy industrial projects and

livestock farming operations with the potential to expose sensitive receptors to objectionable odors could be deemed to have a significant impact. SDAPCD Rule 51 (Nuisance) prohibits the emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of the public. Projects required to obtain permits from the SDAPCD, typically industrial and some commercial projects, are evaluated by SDAPCD staff for potential odor nuisance and conditions, where necessary, to prevent occurrence of public nuisance.

5.2.3 Impact Analysis

5.2.3.1 Issue 1: Consistency with Applicable Air Quality Plan

Would the proposed CRMP Phase 1 conflict with or obstruct implementation of the applicable air quality plan?

Pilot Project: Ocean Beach – Dog Beach

As described in Section 5.2.2.2, Conflict with Applicable Air Quality Plan, projects that propose development at an intensity equal to or less than population growth projections and land use intensity assumed in the RAQS are inherently consistent with the plan emissions projections. The Pilot Project would make improvements to an existing recreational area and does not include any components that would generate population growth or increase land use intensity. The Pilot Project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is less than significant, and no mitigation is required.

La Jolla Shores

Similar to the Pilot Project, the La Jolla Shores project would make improvements to an existing recreational area and does not include any components that would generate population growth or increase land use intensity. Therefore, the La Jolla Shores project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Similar to the Pilot Project, the Pacific Beach – Tourmaline Surf Park project would make improvements to an existing recreational area and does not include any components that would generate population growth or increase land use intensity. Therefore, the Pacific Beach – Tourmaline Surf Park project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is less than significant, and no mitigation is required.

Mission Beach

Similar to the Pilot Project, the Mission Beach project would make improvements to an existing recreational area and does not include any components that would generate population growth or

increase land use intensity. Therefore, the Mission Beach project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is less than significant, and no mitigation is required.

Ocean Beach – Pier

Similar to the Pilot Project, the Ocean Beach – Pier project would make improvements to an existing recreational area and does not include any components that would generate population growth or increase land use intensity. Therefore, the Ocean Beach – Pier project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is less than significant, and no mitigation is required.

Sunset Cliffs

Similar to the Pilot Project, the Sunset Cliffs project would make improvements to an existing recreational area and transportation corridor and does not include any components that would generate population growth or increase land use intensity. Therefore, the Sunset Cliffs project would not conflict with or obstruct implementation of the applicable air quality plan. This impact is less than significant, and no mitigation is required.

5.2.3.2 Issue 2: Cumulative Increase in Emissions/Air Quality Standards

Would the proposed CRMP Phase 1 result in cumulatively considerable net increase of any criteria pollutant for which the project area is non-attainment under an applicable federal or state ambient air quality standard (including release emissions which exceed quantitative thresholds for ozone precursors)?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project's construction criteria pollutant emissions are estimated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.23, and based on the anticipated Pilot Project footprint and material import estimates, which are summarized in Section 3.4.3.2, Pilot Project Description. In addition to the proposed multi-use path and elevated sand dune, construction assumes demolition of the existing restroom and construction of a replacement facility as a worst-case analysis of project-related construction emissions. Approximately 140 working days are assumed for construction during the dry season. The CalEEMod default trip distance for vendor trips (7.63 miles) is conservatively assumed for dune material import, although it is likely that material would be imported from adjacent littoral sources (e.g., beach intertidal zone or the San Diego River flood shoal). Detailed modeling inputs are provided in Appendix B, Biological Resources Technical Report. Table 5.2-5, Construction Emissions, summarizes the worst-case maximum daily criteria pollutant emissions that would occur during construction of the Pilot Project, and total construction emissions assuming simultaneous construction of all CRMP Phase 1 projects.

Project	Maximum Daily Emissions (pounds/day)					
Project	VOC	NOx	CO	SOx	PM ₁₀	PM _{2.5}
Pilot Project	4.89	43.7	44.3	0.09	4.08	2.3
La Jolla Shores	3.56	31.9	32.2	0.06	9.7	2.2
Pacific Beach	3.56	31.6	32	0.06	8.04	2.04
Mission Beach	3.57	32.3	32.3	0.06	13.7	2.61
Ocean Beach Pier	3.56	31.9	32.2	0.06	3.57	1.59
Sunset Cliffs	1.12	10.1	10.4	0.03	5.84	3.01
Total Simultaneous Construction	20.26	181.5	183.4	0.36	44.93	13.75
Threshold	137	250	550	250	100	67
Significant Impact?	No	No	No	No	No	No

Table 5.2-5. Construction Emissions

Source: See Appendix B.

Notes: $CO = carbon monoxide; NO_x = nitrogen oxides; Pb = lead; PM_{2.5} = fine particulate matter; PM₁₀ = respirable particulate matter; SO_x = sulfur oxides; VOC = volatile organic compounds$

As shown in Table 5.2-5, construction of the Pilot Project, including simultaneous construction with other CRMP Phase 1 projects, would not result in emissions that would exceed the City of San Diego thresholds. Following construction, the Pilot Project would not be a source of new criteria pollutants. The Pilot Project would make improvements to existing recreational facilities at the Ocean Beach – Dog Beach project site. Maintenance of the proposed sand dune and multi-use path would result in occasional criteria pollutant emissions from operation of maintenance equipment. However, emissions would be minimal on the limited number of days that maintenance would occur and would be similar to existing maintenance efforts for the annual winter berm program. Use of the proposed multi-use path and optional express shuttle stop would have the potential to reduce regional mobile emissions. Therefore, impacts related to construction and operation of the Pilot Project would be less than significant, and no mitigation is required.

La Jolla Shores

Construction criteria pollutant emissions for the La Jolla Shores project are estimated using the CalEEMod, Version 2022.1.1.23, and are based on the anticipated project footprint and material import estimates, which are summarized in Section 3.4.4.1, La Jolla Shores. Construction assumes reconfiguration of the existing recreational areas and parking lot and construction of one continuous earthen dike along the western border of the reconfigured waterfront park under the Reconfigured Park Design Option, to represent a conservative worst-case scenario. Approximately 140 working days are assumed for construction during the dry season. The CalEEMod default trip distance for vendor trips (7.63 miles) is assumed for dike material import. Detailed modeling inputs are provided in Appendix B. Table 5.2-5 summarizes the worst-case maximum daily criteria pollutant emissions that would occur during construction of the La Jolla Shores project, and total construction emissions assuming simultaneous construction of all CRMP Phase 1 projects.

As shown in Table 5.2-5, construction of the La Jolla Shores project, including simultaneous construction with other CRMP Phase 1 projects, would not result in emissions that would exceed the City of San Diego thresholds. Following construction, the La Jolla Shores project would not be a source of new criteria pollutants. The La Jolla Shores project would provide coastal flood protections at an existing recreational area. Maintenance would result in occasional criteria pollutant emissions from operation of maintenance equipment. However, emissions would be minimal on the limited number of days that maintenance would occur. Therefore, impacts related to construction and operation of the La Jolla Shores project would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Construction criteria pollutant emissions for the Pacific Beach – Tourmaline Surf Park project are estimated using the CalEEMod, Version 2022.1.1.23, and based on the anticipated project footprint and material import estimates, which are summarized in Section 3.4.4.2, Pacific Beach – Tourmaline Surf Park. In additional to the proposed sand and cobble dune, modeling assumes the optional component to cover the existing drainage culvert to provide pedestrian access. Approximately 140 working days are assumed for construction during the dry season. The CalEEMod default trip distance for vendor trips (7.63 miles) is conservatively assumed for dune material import, although it is likely that material would be imported from the adjacent beach. Detailed modeling inputs are provided in Appendix B. Table 5.2-5 summarizes the worst-case maximum daily criteria pollutant emissions that would occur during construction of the Pacific Beach – Tourmaline Surf Park project, and total construction emissions assuming simultaneous construction of all CRMP Phase 1 projects.

As shown in Table 5.2-5, construction of the Pacific Beach – Tourmaline Surf Park project, including simultaneous construction with other CRMP Phase 1 projects, would not result in emissions that would exceed the City of San Diego thresholds. Following construction, the Pacific Beach – Tourmaline Surf Park project would not be a source of new criteria pollutants. The Pacific Beach – Tourmaline Surf Park project would make improvements to an existing recreational facility. Maintenance of the sand and cobble dune would result in occasional criteria pollutant emissions from operation of maintenance equipment. However, emissions would be minimal on the limited number of days that maintenance would occur and would be similar to existing maintenance efforts. Therefore, impacts related to construction and operation of the Pacific Beach – Tourmaline Surf Park project would be less than significant, and no mitigation is required.

Mission Beach

Construction criteria pollutant emissions for the Mission Beach project are estimated using the CalEEMod, Version 2022.1.1.23, and based on the anticipated Mission Beach project footprint and material import estimates, which are summarized in Section 3.4.4.3, Mission Beach.

Construction modeling conservatively assumes construction of the elevated sand dune and the perched beach under the Perched Beach Design Option, to represent a conservative worst-case scenario. Approximately 140 working days are assumed for construction during the dry season. The CalEEMod default trip distance for vendor trips (7.63 miles) is conservatively assumed for dune material import, although it is likely that material would be imported from the adjacent beach. Detailed modeling inputs are provided in Appendix B. Table 5.2-5 summarizes the worst-case maximum daily criteria pollutant emissions that would occur during construction of the Mission Beach project, and total construction emissions assuming simultaneous construction of all CRMP Phase 1 projects.

As shown in Table 5.2-5, construction of the Mission Beach project, including simultaneous construction with other CRMP Phase 1 projects, would not result in emissions that would exceed the City of San Diego thresholds. Following construction, the Mission Beach project would not be a source of new criteria pollutants. The Mission Beach project would provide coastal flood protection at an existing recreational facility. Maintenance of the dune would result in occasional criteria pollutant emissions from operation of maintenance equipment. However, emissions would be minimal on the limited number of days that maintenance would occur and would be similar to existing maintenance efforts. Therefore, impacts related to construction and operation of the Mission Beach project would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Construction criteria pollutant emissions for the Ocean Beach – Pier project are estimated using the CalEEMod, Version 2022.1.1.23, and based on the anticipated project footprint and material import estimates, which are summarized in Section 3.4.4.4, Ocean Beach – Pier. Approximately 140 working days are assumed for construction during the dry season. The CalEEMod default trip distance for vendor trips (7.63 miles) is conservatively assumed for dune material import, although it is likely that material would be imported from the adject beach. Detailed modeling inputs are provided in Appendix B. Table 5.2-5 summarizes the worst-case maximum daily criteria pollutant emissions that would occur during construction of the Ocean Beach – Pier project, and total construction emissions assuming simultaneous construction of all CRMP Phase 1 projects.

As shown in Table 5.2-5, construction of the Ocean Beach – Pier project, including simultaneous construction with other project components, would not result in emissions that would exceed the City of San Diego thresholds. Following construction, the Ocean Beach – Pier project would not be a source of new criteria pollutants. The Ocean Beach – Pier project would make improvements to an existing recreational facility. Maintenance of the proposed sand dune and multi-use path would result in occasional criteria pollutant emissions from operation of maintenance equipment. However, emissions would be minimal on the limited number of days that maintenance would occur and would be similar to existing maintenance efforts. Use of the multi-use path would have the potential to

reduce regional mobile emissions. Therefore, impacts related to construction and operation of the Ocean Beach – Pier project would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would primarily involve the use of temporary traffic calming devices, and eventual restriping and installation of barriers, that are easily modified and would not require the use of heavy construction equipment. Likewise, habitat restoration is not anticipated to require heavy construction equipment. Drainage improvements and parking realignment may require some use of construction equipment, such as loaders or dozers. Emissions from parking realignment are estimated using the CalEEMod, Version 2022.1.1.23, and based on the anticipated project footprint summarized in Section 3.4.4.5, Sunset Cliffs. Construction assumes demolition of the existing parking area, grading, and replacement of the parking area with natural material. The CalEEMod default schedule is assumed. Detailed modeling inputs are provided in Appendix B. Table 5.2-5 summarizes the worst-case maximum daily criteria pollutant emissions that would occur during construction of all CRMP Phase 1 projects.

As shown in Table 5.2-5, construction of the Sunset Cliffs project, including simultaneous construction with other project components, would not result in emissions that would exceed the City of San Diego thresholds. Following construction, the Sunset Cliffs project would not be a source of new criteria pollutants. The Sunset Cliffs project would make improvements to an existing recreational facility and transportation corridor. Maintenance of the multi-use path and trail would result in occasional criteria pollutant emissions from operation of maintenance equipment. However, emissions would be minimal on the limited number of days that maintenance would occur and would be similar to existing maintenance efforts. The proposed road reconfiguration program would improve safety for non-motorized travel and may reduce regional mobile emissions from increased pedestrian or bicycle use. Therefore, impacts related to construction and operation of the Sunset Cliffs project would be less than significant, and no mitigation is required.

5.2.3.3 Issue 3: Sensitive Receptors

Would the proposed CRMP Phase 1 expose sensitive receptors to substantial pollutant concentrations?

Pilot Project: Ocean Beach – Dog Beach

As described in Section 5.2.2.4, Sensitive Receptors and Substantial Pollutant Concentrations, a project would have the potential to result in a significant impact to sensitive receptors if it would substantially contribute to traffic congestion, develop new wood-burning fireplaces or other stationary emissions sources, or have the potential to generate substantial dust during construction. Operation of the Pilot Project would not increase traffic generation or include any stationary

sources of criteria pollutants or TACs. The screening level for significant dust emissions during construction is whether a project would require more than 4 acres of grading per day. The Pilot Project's total construction footprint would be approximately 2 acres and would not exceed the 4 acres per day screening level. Impacts to sensitive receptors would be less than significant, and no mitigation is required.

La Jolla Shores

Similar to the Pilot Project, the La Jolla Shores project would make improvements to an existing recreational facility and would not increase traffic generation or include any stationary sources of criteria pollutants or TACs that would result in potential impacts to sensitive receptors during operation. Total grading area for the La Jolla Shores project would be approximately 0.75 acre and would not exceed the 4 acres per day screening level for potential construction impacts to sensitive receptors. Impacts to sensitive receptors would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Similar to the Pilot Project, the Pacific Beach – Tourmaline Surf Park project would make improvements to an existing recreational facility and would not increase traffic generation or include any stationary sources of criteria pollutants or TACs that would result in potential impacts to sensitive receptors during operation. Total grading area for the Pacific Beach – Tourmaline Surf Park project would be approximately 0.4 acre and would not exceed the 4 acres per day screening level for potential construction impacts to sensitive receptors. Impacts to sensitive receptors would be less than significant, and no mitigation is required.

Mission Beach

Similar to the Pilot Project, the Mission Beach project would make improvements to an existing recreational facility and would not increase traffic generation or include any stationary sources of criteria pollutants or TACs that would result in potential impacts to sensitive receptors during operation. Total grading area for the Mission Beach project would be approximately 1 acre and would not exceed the 4 acres per day screening level for potential construction impacts to sensitive receptors. Impacts to sensitive receptors would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Similar to the Pilot Project, the Ocean Beach – Pier project would make improvements to an existing recreational facility and would not increase traffic generation or include any stationary sources of criteria pollutants or TACs that would result in potential impacts to sensitive receptors during operation. Total grading area for the Ocean Beach – Pier project would be approximately 1.5 acres and would not exceed the 4 acres per day screening level for potential construction impacts to sensitive receptors. Impacts to sensitive receptors would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would make improvements to an existing recreational facility and transportation corridor and would not include any stationary sources of criteria pollutants or TACs. The Sunset Cliffs project would reconfigure traffic flow on Sunset Cliffs Boulevard. Road reconfiguration options would be implemented temporarily on a trial basis and transportation studies would be implemented during the road reconfiguration program to determine ramifications of the potential roadway reconfigurations and better inform the design of a more permanent solution. Once an optimized design approach is established following multiple trials, this southern portion of the roadway would be permanently reconfigured. Congestion that results from changes to traffic flow would be short-term. Although vehicular circulation would be redistributed, the Sunset Cliffs project itself would not create additional trips. Additionally, the Sunset Cliffs project would improve non-vehicular accessibility (i.e., bicycle circulation and pedestrian circulation) due to improving safety for bicyclists and pedestrians through the separated multi-use path for bicyclists and pedestrians. Improved safety for non-motorized travel would potentially reduce vehicle trips on the roadway. The Sunset Cliffs project may require minor earthwork for drainage improvements and parking realignment but would not exceed the 4 acres per day screening level for potential construction impacts to sensitive receptors. Impacts to sensitive receptors would be less than significant, and no mitigation is required.

5.2.3.4 Issue 4: Odors

Would the proposed CRMP Phase 1 result in odors adversely affecting a substantial number of people?

Pilot Project: Ocean Beach – Dog Beach

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies.

The Pilot Project would not change existing land uses at the Ocean Beach – Dog Beach project site, and the improved recreational facilities and proposed sand dune would not include uses that involve offensive odors, such as heavy industrial projects and livestock farming operations. The optional bathroom would replace an existing facility and would not result in a new potential source of odor. Project construction would have the potential to result in minor odor exposure from diesel exhaust. However, impacts would be short-term and limited to the area immediately surrounding equipment operation. Odor impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Similar to the Pilot Project, the La Jolla Shores project would not include uses that involve offensive odors, such as heavy industrial projects and livestock farming operations. Odor from construction of the La Jolla Shores project would be short-term and limited to the area immediately surrounding equipment operation. Odor impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Similar to the Pilot Project, the Pacific Beach – Tourmaline Surf Park project would not include uses that involve offensive odors, such as heavy industrial projects and livestock farming operations. Odor from construction of the Pacific Beach – Tourmaline Surf Park project would be short-term and limited to the area immediately surrounding equipment operation. Odor impacts would be less than significant, and no mitigation is required.

Mission Beach

Similar to the Pilot Project, the Mission Beach project would not include uses that involve offensive odors, such as heavy industrial projects and livestock farming operations. Odor from construction of the Mission Beach project would be short-term and limited to the area immediately surrounding equipment operation. Odor impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Similar to the Pilot Project, the Ocean Beach - Pier project would not include uses that involve offensive odors, such as heavy industrial projects and livestock farming operations. Odor from construction of the Ocean Beach - Pier project would be short-term and limited to the area immediately surrounding equipment operation. Odor impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

Similar to the Pilot Project, the Sunset Cliffs project would not include uses that involve offensive odors, such as heavy industrial projects and livestock farming operations. Minimal construction equipment would be required to implement drainage improvements. Odor impacts would be less than significant, and no mitigation is required.

5.2.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would be not conflict with an applicable air quality plan, result in significant criteria pollutant emissions, expose sensitive receptors to significant air pollutant concentrations, or generate substantial odors. Impacts related to air quality would be less than significant. No mitigation is required.

La Jolla Shores

The La Jolla Shores project would be not conflict with an applicable air quality plan, result in significant criteria pollutant emissions, expose sensitive receptors to significant air pollutant concentrations, or generate substantial odors. Impacts related to air quality would be less than significant. No mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would be not conflict with an applicable air quality plan, result in significant criteria pollutant emissions, expose sensitive receptors to significant air pollutant concentrations, or generate substantial odors. Impacts related to air quality would be less than significant. No mitigation is required.

Mission Beach

The Mission Beach project would be not conflict with an applicable air quality plan, result in significant criteria pollutant emissions, expose sensitive receptors to significant air pollutant concentrations, or generate substantial odors. Impacts related to air quality would be less than significant. No mitigation is required.

Ocean Beach – Pier

The Ocean Beach - Pier project would be not conflict with an applicable air quality plan, result in significant criteria pollutant emissions, expose sensitive receptors to significant air pollutant concentrations, or generate substantial odors. Impacts related to air quality would be less than significant. No mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would be not conflict with an applicable air quality plan, result in significant criteria pollutant emissions, expose sensitive receptors to significant air pollutant concentrations, or generate substantial odors. Impacts related to air quality would be less than significant. No mitigation is required.

5.2.5 Mitigation Framework

Impacts to air quality would be less than significant; therefore, no mitigation is required.
5.3 Biological Resources

This section of the Program Environmental Impact Report (PEIR) describes the existing biological resources at the six project sites described in Section 2.3, Project Locations, in Chapter 2.0, Environmental Setting, and evaluates the potential impacts related to biological resources that could result from implementation of the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1).

The analysis in this section is based on review of available plans and technical information, including the Biological Resources Technical Report (BRTR) prepared by Harris & Associates (2024) for CRMP Phase 1 (Appendix C).

5.3.1 Existing Conditions

Harris & Associates conducted database and publications reviews and three biological reconnaissance surveys for the BRTR by walking transects throughout the survey area on April 12–13 and August 1, 2023. During the surveys, the biologists mapped vegetation communities, documented observed plant and wildlife species, and evaluated the potential for occurrence of sensitive plant and wildlife species.

The six project sites, along with a 100-foot survey buffer surrounding each site, are collectively referred to as the "survey area" in this section. The combined total for the survey area is 141.64 acres, including approximately 58.64 acres for the six project sites and approximately 83.00 acres for the surrounding buffer areas. It should be noted that the project site for the Mission Beach project was extended to include the Perched Beach Design Option (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option, and Section 3.4.4.3) following completion of the reconnaissance surveys. Therefore, while the Mission Beach survey buffer encompasses the entire Mission Beach project site, a portion of the survey buffer does not extend 100 feet beyond the project site.

5.3.1.1 Vegetation Communities and Land Cover Types

The survey area consists of 11 vegetation communities and land cover types (six wetland communities and five upland vegetation communities and land cover types) as described below. These vegetation types in the survey area are summarized in Table 5.3-1, Existing Wetland and Vegetation Communities and Land Cover Types in Survey Area, and listed for each project site in Table 5.3-2, Wetland Vegetation Communities and Land Cover Types in Survey Area, and Table 5.3-3, Upland and Other Vegetation Communities and Land Cover Types in Survey Area. Refer to Figure 5.3-1, Vegetation Communities and Land Cover Types – Index, and Figures 5.3-1a through 5.3-1g.

	Biology		Survey Area Total Acres ²							
General Vegetation Type	Vegetation Community	Tier/Wetland ¹	CRMP Phase 1 Area	Survey Buffer	Survey Area Grand Total ²					
Aquatic, Wetland, and Associated Communities										
Subtidal Ocean	Marine Habitat	Wetland	—	12.12	12.12					
Intertidal Ocean	Marine Habitat	Wetland	—	0.74	0.74					
Estuarine	Marine Habitat	Wetland	0.26	0.99	1.25					
Southern Coastal Salt Marsh	Marine Habitat	Wetland	0.06	0.82	0.88					
Beach	Marine Habitat	Wetland	33.74	15.37	49.11					
Concrete Channel	Disturbed Land	IV	0.05	0.35	0.40					
		Subtotal	34.11	30.39	64.50					
	Upland Commun	ities and Other L	and Cover Types							
Southern Foredunes ³ (Disturbed)	Southern Foredunes	I	0.59	0.42	1.01					
Diegan Coastal Sage Scrub ³ (Disturbed)	Coastal Sage Scrub	II	0.86	1.10	1.96					
Sandstone Cliff	None	None	0.11	9.28	9.39					
Non-Native Woodland	Eucalyptus Woodland	IV	0.45	0.55	1.00					
Developed	Disturbed Land	IV	22.50	41.27	63.77					
		Subtotal	24.51	52.62	77.13					
		Grand Total	58.64	83.00	141.64					

Table 5.3-1. Existing Wetland and Vegetation Communities and
Land Cover Types in Survey Area

Notes: Biology Guidelines = City of San Diego Biology Guidelines

¹ City MSCP Subarea Plan tiers and wetland identification are from the Biology Guidelines (City of San Diego 2018).

² Totals may not sum due to rounding.

³ Sensitive vegetation community in the City of San Diego Biology Guidelines (City of San Diego 2018).

Subtidal Ocean (Wetland) – The subtidal ocean zone along the Pacific Ocean coast extends seaward from the low tide line to and including the depth of ocean floor that supports canopy forming kelps in the proper substrate, usually down to 120 feet below the surface (Oberbauer et al. 2008; refer to Figure 5.3-2, Subtidal Ocean at the Sunset Cliffs Project Site). Subtidal ocean is considered a wetlands community according to the City of San Diego Biology Guidelines (Biology Guidelines) (City of San Diego 2018).

A total of approximately 12.12 acres of subtidal ocean was documented and is limited to the CRMP Phase 1 area survey buffer (Figures 5.3-1 and 5.3-1a through 5.3-1g). The subtidal ocean is along the western edges of the survey area, extends west from the low tide line to the open Pacific Ocean and includes permanently inundated marine habitats. **Intertidal Ocean (Wetland) –** Intertidal ocean includes the area exposed by low tide up to and including the spray zone (Oberbauer et al. 2008). The intertidal ocean zone along the Pacific Ocean coast includes rocky zones periodically submerged by water depending on the tides. This zone is typically unvegetated, but species of algae (*Algae* sp.) and Scouler's surfgrass (*Phyllospadix scouleri*) often occur. Intertidal ocean is considered a wetlands community according to the Biology Guidelines (City of San Diego 2018).

A total of approximately 0.74 acre of intertidal ocean was documented and is limited to the survey buffer of the Sunset Cliffs project site (Figures 5.3-1, 5.3-1f, and 5.3-1g). Intertidal ocean in the survey buffer of the Sunset Cliffs project site includes rocky tidepools between the low tide line and spray zone. Various algae species were observed growing in patches in the tidepools, but this community is primarily unvegetated.

Estuarine (Wetland) – Estuarine habitats occur on periodically and permanently flooded substrates and open water portions of semi-enclosed coastal waters where tidal seawater is diluted by flowing fresh water (Oberbauer et al. 2008; refer to Figure 5.3-3, Estuarine Habitat on the Ocean Beach – Dog Beach Project Site). Salinity and depth vary dramatically in estuarine habitats, resulting in high species richness but low diversity of phyla. Within San Diego County, estuarine habitats commonly occur at the drowned mouths of perennial rivers that are tributaries to the Pacific Ocean.

A total of approximately 1.25 acres of estuarine habitat was documented and is limited to the eastern portion of the Ocean Beach – Dog Beach project site, with 0.26 acre on the site and 0.99 acre in the survey buffer (Figures 5.3-1 and 5.3-1a). The estuarine habitat in the survey area is known as the western extent of Smiley Lagoon and was flooded with approximately 2 feet of water during the August 2023 survey period. The substrate of the estuarine habitat in the survey area was primarily submerged mud with a thick layer of algae growing over most of the bottom. The estuarine habitat in the survey area is fringed with southern coastal salt marsh, which is discussed in detail in the next subsection.

Southern Coastal Salt Marsh (Wetland) – Southern coastal salt marsh is a wetland habitat that develops where the water table is at or just above the ground surface, such as around the margins of bays, lagoons, and estuaries along the coast (Oberbauer et al. 2008). Southern coastal salt marsh occurs at locations with warmer water and air temperatures and has a longer growing season than northern coastal salt marsh. Southern coastal salt marsh is considered a wetlands community according to the Biology Guidelines (City of San Diego 2018).

A total of approximately 0.88 acre of southern coastal salt marsh was documented and is limited to the eastern portion of the Ocean Beach – Dog Beach project site, with 0.06 acre on the site and 0.82 acre in the survey buffer (Figures 5.3-1 and 5.3-1a). Southern coastal salt marsh in the survey area is dominated by saltgrass (*Distichlis spicata*) and pickleweed (*Salicornia pacifica*), with a small amount of alkali heath (*Frankenia salina*) along the edges.

Beach (Wetland) – Beach is characterized as sandy and/or cobbly habitat on coastal strands, lagoons, or lakes, with ocean beaches comprising a shoreline feature of deposited sand formed by waves and tides off the coast (Oberbauer et al. 2008; refer to Figure 5.3-4, Sandy Beach on the Mission Beach Project Site). Beaches are typically unvegetated areas; however, upper portions may be sparsely populated with herbaceous species. Beach is a wetlands community according to the Biology Guidelines (City of San Diego 2018).

A total of approximately 49.11 acres of beach was documented, with 33.74 acres occurring on the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites, and the remaining 15.37 acres in the survey area buffer (Figures 5.3-1 and 5.3-1a through 5.3-1g). The beaches throughout the survey area are unvegetated and vary from fine sand to cobble and rocky shoreline, and eroded sandstone surrounded by loose sand.

Concrete Channel – Concrete channel is not categorized by Oberbauer et al. (2008) but most closely resembles non-vegetated channel in function as a waterway (refer to Figure 5.3-5, Concrete Channel Adjacent to the North of the Pacific Beach – Tourmaline Surf Park Project Site). Concrete channel is a concrete-lined waterway, typically artificially constructed to direct urban stormwater flows downstream to larger aquatic areas, including creeks, rivers, lakes, and ultimately the ocean. Concrete channels can also be previously naturally occurring drainage channels that have been lined with concrete to reduce erosion for urban stormwater control purposes. Concrete channel is not included in the Biology Guidelines vegetation or land cover tiers but would be considered a Tier IV land cover, because it has an artificial substrate, does not support vegetation, and provides limited aquatic wildlife habitat. However, because concrete channels function as waterways and have the potential to be under the jurisdiction of and regulated by the water resource agencies (California Department of Fish and Wildlife [CDFW], Regional Water Quality Control Board [RWQCB], and U.S. Army Corps of Engineers [USACE]), concrete channel is categorized as an aquatic land cover type.

A total of approximately 0.40 acre of concrete channel was documented, with 0.05 acre occurring on Pacific Beach – Tourmaline Surf Park project site and 0.35 acre in the survey buffer of this site (Figures 5.3-1 and 5.3-1c). A large concrete stormwater culvert occurs at the eastern and upstream end of the concrete channel. The concrete channel in the survey area is unvegetated and to conveys stormwater from the urban residential areas east of the survey area directly to the Pacific Ocean to the west.

Southern Foredunes (Disturbed), Tier I – Southern foredunes are dominated by succulents, perennial herbs, and subshrubs, with a high proportion of woody plants up to 30 centimeters tall (Oberbauer et al. 2008; refer to Figure 5.3-6, Disturbed Coastal Dune Habitat). Southern foredunes are found in areas of sand accumulation along the coast between Point Conception and the U.S./Mexico International border. This habitat is characterized by a drier, warmer, and less strong and persistent onshore wind (Oberbauer et al. 2008). Typical southern foredune species include

red sand verbena (*Abronia maritima*), beach sand verbena (*Abronia umbellata*), beach bur (*Ambrosia chamissonis*), beach saltbush (*Atriplex leucophylla*), sea rocket (*Cakile maritima*), beach morning glory (*Calystegia soldanella*), beach evening primrose (*Camissonia cheiranthifolia*), saltgrass, and (sometimes) non-native iceplant (*Carpobrotus edulis*). Southern foredunes are considered a Tier I sensitive vegetation community according to the Biology Guidelines (City of San Diego 2018).

A total of approximately 1.01 acres of disturbed southern foredunes was documented, with 0.59 acre occurring in the eastern portion of the Ocean Beach – Dog Beach project site and the remaining 0.42 acre in the eastern portion of the Ocean Beach – Dog Beach survey buffer (Figures 5.3-1 and 5.3-1a). On the Ocean Beach – Dog Beach project site, the southern foredunes are the westernmost end of a larger southern foredune habitat that extends between the sandy beach of Ocean Beach Dog Beach and Smiley Lagoon. This portion of the dunes appears to have been previously mechanically disturbed from past construction of the San Diego River Bikeway to the south and is currently continuously disturbed by the high volume of human and domestic pet (dog) activity associated with Ocean Beach Dog Beach to the west and north. The area appears to be part of restoration efforts and shows evidence of purposefully planted (installed) vegetation. Species occurring in this disturbed southern foredune habitat in the survey area include beach common fiddleneck (*Amsinckia intermedia*), California brittle bush (*Encelia californica*), and coastal goldenbush (*Isocoma menziesii*).

Diegan Coastal Sage Scrub (Disturbed), Tier II (Upland Community) – Diegan coastal sage scrub is composed of a variety of soft, low, aromatic shrubs, characteristically dominated by drought-deciduous species, such as California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), and sages (*Salvia spp.*), with scattered evergreen shrubs, including lemonade berry (*Rhus integrifolia*) and laurel sumac (*Malosma laurina*) (Oberbauer et al. 2008; refer to Figure 5.3-7, Disturbed Diegan Coastal Sage Scrub Habitat). Diegan coastal sage scrub is considered a Tier II sensitive vegetation community according to the Biology Guidelines (City of San Diego 2018).

A total of approximately 1.96 acres of Diegan coastal sage scrub was documented, with 0.86 acre occurring in the eastern portion of the Ocean Beach – Dog Beach project site and the remaining 1.10 acres in the eastern portion of the Ocean Beach – Dog Beach survey buffer (Figures 5.3-1 and 5.3-1a). On the Ocean Beach – Dog Beach project site, the Diegan coastal sage scrub is continuously mechanically disturbed by the high volume of human and domestic pet (dog) activity associated with Ocean Beach Dog Beach to the west and north and residences to the east. The area appears to be part of restoration efforts and shows evidence of purposefully planted (installed) vegetation. The Diegan coastal sage scrub dominant plant species on the Ocean Beach – Dog Beach project site include California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), California brittle bush, rattail sixweeks grass (*Festuca myuros*), soft brome (*Bromus hordeaceus*), and various prickly pear cactus (*Opuntia* sp.) species.

Sandstone Cliff – Sandstone cliff is not categorized by Oberbauer et al. (2008) but most closely resembles disturbed habitat because of occurring in highly populated coastal areas, being characterized by predominantly non-native species introduced through human action, and receiving water from precipitation or runoff (refer to Figure 5.3-8, Sandstone Cliff Habitat on the Sunset Cliffs Project Site). Sandstone cliff is not included in the Biology Guidelines vegetation or land cover tiers but would likely be considered an upland community based on the sparse vegetation it supports and its proximity and functional connectivity to other upland habitats (City of San Diego 2018).

Approximately 9.39 acres of sandstone cliffs were documented, with 0.11 acre on the Pacific Beach – Tourmaline Surf Park and Sunset Cliffs project sites, and the remaining 9.28 acres in the survey buffer of these project sites (Figures 5.3-1, 5.3-1c, 5.3-1f, and 5.3-1g). The sandstone cliffs in the survey area are primarily unvegetated, with patches of sparse, predominantly non-native plant species, including ice plants (*Carpobrotus edulis* and *Mesembryanthemum crystallinum*), pampas grass (*Cortaderia selloana*), and cheeseweed (*Malva parviflora*). Small patches of native seacliff buckwheat (*Eriogonum parviflorum*) occur on the sandstone cliffs in the survey buffer of the Sunset Cliffs project site; however, the sparse vegetation that occurs on the sandstone cliffs is highly disturbed by the high volume of human and domestic pet (dog) activity associated with the coastal walking trail and residential development directly to the east.

Non-Native Woodland, Tier IV (Upland Community) – Non-native woodland consists of exotic trees, usually intentionally planted, which are not maintained or artificially irrigated (Oberbauer et al. 2008). Characteristic species in non-native woodland include eucalyptus (*Eucalyptus* sp.), tamarisk (*Tamarix* sp.), pines (*Pinus* sp.), or other non-native species. Non-native woodland is considered a Tier IV land cover according to the Biology Guidelines (City of San Diego 2018).

A total of approximately 1.00 acre of non-native woodland was documented, with 0.45 acre occurring in the northeastern portion of the Pacific Beach – Tourmaline Surf Park project site and the remaining 0.55 acre in the northeastern survey buffer of this site (Figures 5.3-1 and 5.3-1c). The non-native woodland on the Pacific Beach – Tourmaline Surf Park project site and the survey buffer is dominated by pines and eucalyptus trees, with bare ground and herbaceous weedy species in the understory.

Developed Land, Tier IV (Other Land Cover Type) – Developed land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported. Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials (Oberbauer et al. 2008; see Figure 5.3-9, Paved [Developed] Pedestrian Pathway [La Vereda] on the La Jolla Shores Project Site). Examples of these areas may include graded landscapes or areas, graded firebreaks, graded

construction pads, construction staging areas, or areas that are repeatedly used in ways that prevent revegetation (e.g., parking lots, trails that have persisted for years). Although not listed in the Biology Guidelines, developed land is assumed to be a Tier IV land cover (City of San Diego 2020).

A total of approximately 63.77 acres of developed land occurs along the eastern portion of the survey area and is the dominant land cover type (Figures 5.3-1 and 5.3-1a through 5.3-1g). Approximately 22.50 acres of developed land occur in the CRMP Phase 1 area with the remaining 41.27 acres in the survey buffer. The developed land in the survey area includes paved parking lots, roadways, and sidewalks, as well as residential and commercial buildings and associated landscaped areas. One portion of the developed land in the Sunset Cliffs survey buffer consists of areas of the sandstone cliffs that have been modified with riprap and gabion walls placed there for cliff stabilization and erosion control (Figures 5.3-1, 5.3-1f, and 5.3-1g).

				Survey Area (acres)													
General Vegetation	Biology Guidelines Vegetation	Tier/	La J Sho	olla res	Pac Bea Tourn Surf	cific ch – naline Park	Mis: Bea	sion ach	Oc Bea Dog E	ean ch – Beach	Oc Bea Pi	ean ch – ier	Sur Cli	nset iffs	Survey Tot (acr	/ Area al ² res)	Survey Area Grand Total ²
Гуре	Community	wetland	P5	5 B	PS	SB	PS	SB	PS	SB	PS	SB	PS	SB	РА	SB	(acres)
	Wetland Communities																
Subtidal Ocean	Marine Habitat	Wetland	—	3.05		0.36	—	3.67	—	0.24	_	2.64	_	2.16	—	12.12	12.12
Intertidal Ocean	Marine Habitat	Wetland	-	_		_	_		-		_		_	0.74	_	0.74	0.74
Estuarine	Marine Habitat	Wetland		_	_	—	—		0.26	0.99	_	_	_	—	0.26	0.99	1.25
Southern Coastal Salt Marsh	Marine Habitat	Wetland	_	_	_	_	_	_	0.06	0.82	_	_	_	_	0.06	0.82	0.88
Beach	Marine Habitat	Wetland	11.18	4.11	1.48	2.08	8.13	1.36	4.93	3.69	8.02	1.25	_	2.87	33.74	15.37	49.11
Concrete Channel	Disturbed Land	IV	_	_	0.05	0.35	_	_	_	_	_	_	_	—	0.05	0.35	0.40
		Total ²	11.18	7.16	1.53	2.79	8.13	5.03	5.25	5.74 8.02	3.89		5.77	34.11	30.39		-
Wetland Ve Land	egetation Commu d Cover Types G	unities and rand Total ²	18.	34	4.	32	13	.16	11	.00	11	.91	5.	77		64.50)

Table 5.3-2. Wetland Vegetation Communities and Land Cover Types in Survey Area

Notes: PS = Project Site; PA = CRMP Phase 1 Area; SB = Survey Buffer; Biology Guidelines = City of San Diego Biology Guidelines

¹ City MSCP Subarea Plan tiers and wetland identification are from the Biology Guidelines (City of San Diego 2018).

² Totals may not sum due to rounding.

				Survey Area (acres)													
General Vegetation	Biology Guidelines Vegetation	Tier/	La J Sho	lolla pres	Pac Bea Tourn Surf	cific ch – naline Park	Mis: Bea	sion ach	Oc Bea Dog B	ean ch – Beach	Oco Bea Pi	ean ch – er	Su Cl	nset liffs	Surve To (aci	y Area tal² res)	Survey Area Grand Total ²
Туре	Community	Wetland ¹	PS	SB	PS	SB	PS	SB	PS	SB	PS	SB	PS	SB	PA	SB	(acres)
	I		r		r	U	bland C	ommun	ities	r					[1	
Southern Foredunes ³ (Disturbed)	Southern Foredunes	I	_		_	_		_	0.59	0.42				_	0.59	0.42	1.01
Diegan Coastal Sage Scrub ³ (Disturbed)	Coastal Sage Scrub	II	_	—	_	_	—	_	0.86	1.10	_	_	_	_	0.86	1.10	1.96
Sandstone Cliff	None	None	_	_	0.09	1.75	_	_	_	—	_	_	0.02	7.53	0.11	9.28	9.39
Non-Native Woodland	Eucalyptus Woodland	IV	_		0.45	0.55		_	_	_				-	0.45	0.55	1.00
						Oth	er Land	Cover	Types								
Developed	Disturbed Land	IV	9.84	7.44	1.59	3.22	0.79	3.14	6.14	5.69	3.88	5.58	0.26	16.20	22.50	41.27	63.77
		Total ²	9.84	7.44	2.13	5.52	0.79	3.14	7.59	7.21	3.88	5.58	0.28	23.73	24.51	52.62	_
Upl Communit	land and Other ies and Land C G	Vegetation over Types rand Total ²	17	.28	7.	65	3.	93	14	.80	9.4	46	24	l.01		77.13	

Table 5.3-3. Upland and Other Vegetation Communities and Land Cover Types in Survey Area

Notes: PA = CRMP Phase 1 Area; PS = Project Site; SB = Survey Buffer; Biology Guidelines = City of San Diego Biology Guidelines

¹ City MSCP Subarea Plan tiers and wetland identification are from the Biology Guidelines (City of San Diego 2018).

² Totals may not sum due to rounding.

³ Sensitive vegetation community in the Biology Guidelines (City of San Diego 2018).

5.3.1.2 Jurisdictional Aquatic Resources

A total of approximately 64.50 acres of aquatic resources (approximately 34.11 acres in six project sites and 30.39 acres in the survey buffer) that may be considered wetland and non-wetland waters and, therefore, may potentially fall under the jurisdiction of the USACE, RWQCB, California Coastal Commission (CCC), and CDFW, and/or be considered wetlands regulated by the City were observed in the survey area (Figure 5.3-10, Jurisdictional Aquatic Resources – Index, and Figures 5.3-10a through 5.3-10g). Table 5.3-4, Jurisdictional Aquatic Resources in Survey Area, provides a summary of these potential aquatic resources that may fall under the jurisdiction of the USACE, RWQCB, CCC, CDFW, and/or City.

General	Biology Guidelines Vegetation		Survey (a	Area Total¹ cres)		
Vegetation Type	Community	Jurisdiction	PA	SB		
Wetland Waters						
Southern Coastal Salt Marsh (52120)	Marine Habitat	USACE/RWQCB/CCC/CDFW/City	0.06	0.82		
Non-Wetland Waters						
Subtidal Ocean	Marine Habitat	USACE/RWQCB/CCC/CDFW/City	—	12.12		
Intertidal Ocean	Marine Habitat	USACE/RWQCB/CCC/CDFW/City	—	0.74		
Estuarine	Marine Habitat	USACE/RWQCB/CCC/CDFW/City	0.26	0.99		
Beach	Marine Habitat	USACE/RWQCB/CCC/CDFW/City	33.74	15.37		
Concrete channel	Disturbed Land	USACE/RWQCB/CCC/CDFW/City	0.05	0.35		
		Total ¹	34.11	30.39		
		6	4.50			

Table 5.3-4. Jurisdictional Aquatic Resources in Survey Area

Note: CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; PA = CRMP Phase 1 Area; RWQCB = Regional Water Quality Control Board; SB = Survey Buffer; Biology Guidelines = City of San Diego Biology Guidelines; USACE = U.S. Army Corps of Engineers

¹ Acreage may not sum due to rounding.

5.3.1.3 Observed Species

Plant Species

A total of 60 plant taxa were observed in the survey area—33 (55 percent) were native and 27 (45 percent) were non-native. Of the 60 observed plants, three species, California box-thorn (*Lycium californicum*), Nuttall's acmispon (*Acmispon prostratus*), and southwestern spiny rush (*Juncus acutus*), are designated as sensitive. No in-water surveys occurred, and therefore, the observed plant species list does not include all the aquatic plant species that may be in existence in the subtidal and intertidal ocean areas. Appendix B of the BRTR (Appendix C to this PEIR) lists the vascular plant species observed during the surveys.

Wildlife Species

A total of 41 wildlife species were observed in the survey area, including 29 birds, three mammals, two fish, and seven invertebrates. Of the 41 wildlife species observed, seven species, Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), California brown pelican (*Pelecanus occidentalis californicus*), California sea lion (*Zalophus californianus*), Caspian tern (*Hydroprogne caspia*), double-crested cormorant (*Phalacrocorax auritus*), long-billed curlew (*Numenius americanus*), and monarch butterfly (*Danaus plexippus*), are designated as sensitive. Of these seven sensitive wildlife species, three (Belding's savannah sparrow, California brown pelican, and long-billed curlew) are City of San Diego Multiple Species Conservation Program (MSCP) Program Subarea Plan (SAP) covered species. As stated in the previous subsection, Plant Species, no in-water surveys were performed during the 2023 survey efforts, and wildlife species that may occur in the subtidal and intertidal ocean areas were therefore not observed. Only those species observable on the surface or in air (and present) at the time of the survey were recorded. Appendix B of the BRTR (Appendix C to this PEIR) lists all wildlife species detected in the survey area during the 2023 biological resources surveys.

Native habitat available within the survey area, including estuarine, southern coastal salt marsh, coastal sage scrub, coastal dune, and open beach, as well as non-native habitat including non-native woodland and ornamental trees, provide foraging and nesting habitat for migratory and resident bird species. In addition, the non-native woodland, ornamental trees, coastal sage scrub, and other open areas are likely to provide foraging and roosting habitat for bats. Marine habitats, including southern coastal salt marsh, estuarine, open water, and tidepools, provide suitable habitat for marine mammal and marine and anadromous fish species. The coastal scrub and coastal dune in the northeastern portion of the Ocean Beach – Dog Beach project site and the disturbed habitat on the Sunset Cliffs project site provide cover and foraging opportunities for terrestrial reptiles and small mammals. The estuarine and southern coastal salt marsh communities, limited to the eastern portion of the Ocean Beach – Dog Beach project site and small mammals. The estuarine and southern coastal salt marsh communities, limited to the eastern portion of the Ocean Beach – Dog Beach project site and survey area, provide foraging and nesting habitat for birds as well as foraging habitat for anadromous fishes. High-quality native habitats that could support both common and sensitive wildlife species occur in the survey area. However, these habitats are limited mainly to the marine habitats in the western (seaward) edges of the survey area and are bordered by disturbed habitat and urban development.

5.3.1.4 Sensitive Species

Sensitive species are those recognized by federal, state, or local agencies as being potentially vulnerable to impacts because of rarity, local or regional reductions in population numbers, isolation/restricted genetic flow, or other factors. Special-status plants include those listed as threatened or endangered, proposed for listing, or candidates for listing by the U.S. Fish and Wildlife Service (USFWS) and CDFW; considered sensitive by the CDFW; included in the

California Rare Plant Rank (CRPR) inventory maintained by the California Native Plant Society; listed as a MSCP SAP covered species; and/or defined by the City as narrow endemic.

Sensitive wildlife species include those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS and CDFW; considered sensitive by the CDFW; California Watch List (WL); or MSCP SAP covered species.

Critical Habitat

No critical habitat for sensitive plant or wildlife species occurs in or within 5 miles of the survey area (CDFW 2023a, 2023b; SanGIS 2023; USFWS 2023).

Sensitive Plant Species Observed

The following three sensitive plant species were observed in the survey area (refer to Figure 5.3-11):

- California box-thorn (Lycium californicum), CRPR 4.2 Sunset Cliffs project site.
- Nuttall's acmispon (*Acmispon prostratus*), CRPR 1B.1 Ocean Beach Dog Beach project site.
- Southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*), CRPR 4.2 Ocean Beach Dog Beach project site.

These three species are not covered under the MSCP SAP.

Sensitive Plant Species Not Observed With a Moderate or High Potential to Occur

The following 11 sensitive plant species were not observed during the biological resources surveys, but based on the literature and database review conducted for the BRTR, as well as City-documented sensitive species data collected between 2006 and 2023, were determined to have a moderate or high potential to occur (refer to Figure 5.3-12, Sensitive Species with Potential to Occur – Index, and Figures 5.3-12a through 5.3-12f):

- Aphanisma (*Aphanisma blitoides*), CRPR 1B.2, MSCP SAP Covered Suitable habitats are on the Ocean Beach Dog Beach project site.
- Coast wallflower (*Erysimum ammophilum*), CRPR 1B.2, MSCP SAP Covered Suitable habitats are on the Ocean Beach Dog Beach project site.
- Coast woolly-heads (*Nemacaulis denudata* var. *denudata*), CRPR 1B.2 Suitable habitats are on the Ocean Beach Dog Beach project site.
- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), CRPR 1B.1 Suitable habitats are on the Ocean Beach Dog Beach project site.
- Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*), CRPR 1B.2 Suitable habitats are on the Ocean Beach Dog Beach project site.

- Estuary seablite (*Suaeda esteroa*), CRPR 1B.2 Suitable habitats are on the Ocean Beach Dog Beach project site.
- Red sand verbena (*Abronia maritima*), CRPR 4.2 Suitable habitats are on the Ocean Beach Dog Beach project site and documented in the northern portion of Smiley Lagoon in 2023.
- Salt marsh bird's-beak (*Chloropyron maritimum* ssp. *maritimum*), Federal Endangered (FE), State Endangered (SE), CRPR 1B.2, MSCP SAP Covered Suitable habitats are on the Ocean Beach Dog Beach project site.
- San Diego barrel cactus (*Ferocactus viridescens*), CRPR 2B.1, MSCP SAP Covered Suitable habitats are on the Ocean Beach Dog Beach project site.
- San Diego marsh elder (*Iva hayesiana*), CRPR 2B.2 Suitable habitats are on the Ocean Beach Dog Beach project site.
- South coast saltbush (*Atriplex pacifica*), CRPR 1B.2 Suitable habitats are on the Ocean Beach Dog Beach project site.

Of these 11 sensitive plant species, Aphanisma, coast wallflower, Salt marsh bird's-beak and San Diego barrel cactus are covered by the MSCP SAP (City of San Diego 1997).

Sensitive Wildlife Species Observed

The following seven sensitive wildlife species were observed in the survey area during the biological surveys conducted for the CRMP Phase 1 (refer to Figure 5.3-11, Sensitive Species Observed – Index, and Figures 5.3-11a through 5.3-11d):

- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), SE, MSCP SAP Covered Ocean Beach Dog Beach survey area.
- California brown pelican (*Pelecanus occidentalis californicus*), Fully Protected (FP), MSCP SAP Covered Numerous individuals were observed flying along the coast in the survey area and observed foraging in the open water habitat west of the survey area (refer to Figure 5.3-13, California Brown Pelicans Flying above the Ocean).
- California sea lion (*Zalophus californianus*), Marine Mammal Protection Act species

 Offshore southwest of the Sunset Cliffs project site. Suitable foraging habitat is
 present along the coast within the survey area.
- Caspian tern (*Hydroprogne caspia*), Bird of Conservation Concern (BCC) Sunset Cliffs project site. Suitable foraging habitat and available prey occur within the open water habitat in the survey area.
- Double-crested cormorant (*Phalacrocorax auritus*), WL Sunset Cliffs and Ocean Beach Dog Beach project sites. In the open water and perching along the edge of the sandstone cliffs in the survey area. No suitable nesting habitat is present but the large

area of open water along the western edge of the survey area provides suitable foraging habitat.

- Long-billed curlew (*Numenius americanus*), WL, MSCP SAP Covered Sunset Cliffs project site. No suitable nesting habitat is present, but suitable foraging habitat and available prey occurs within the beaches in the western portions of the survey area.
- Monarch butterfly (*Danaus plexippus*), Federal Candidate (FC) Ocean Beach Dog Beach. Developed portions of the survey area with a large number of mature ornamental trees, including eucalyptus and pines, provide suitable overwintering habitat.

Of the seven sensitive wildlife species observed in the survey area, Belding's savannah sparrow, long-billed curlew, and California brown pelican are covered under the MSCP SAP (City of San Diego 1997).

Sensitive Wildlife Species Not Observed With a Moderate or High Potential to Occur

The following 15 sensitive wildlife species were not observed during the biological resources surveys, but based on the literature and database review conducted for the BRTR, as well as City-documented sensitive species data collected between 2006 and 2023, were determined to have a moderate or high potential to occur in the survey area (refer to Figure 5.3-12, Sensitive Species with Potential to Occur – Index, and Figures 5.3-12a through 5.3-12f):

- American peregrine falcon (*Falco peregrinus anatum*), FDL, BCC/SDL, FP/MSCP SAP Covered Suitable foraging habitats are along the coastline throughout the survey area, particularly on the Ocean Beach Dog Beach project site; however, no suitable nesting habitat is present.
- Belding's Orange-Throated Whiptail (*Aspidoscelis hyperythra beldingi*), WL, MSCP SAP Covered Suitable habitats are on the Ocean Beach Dog Beach project site.
- Black tern (*Chlidonias niger*), SSC Suitable foraging habitats are along the coastline throughout the survey area, particularly on the Ocean Beach Dog Beach project site; however, no suitable nesting habitat is present.
- California least tern (*Sternula antillarum browni*), FE/SE, FP, MSCP SAP Covered Suitable foraging habitats are in the open water of the survey area; however, no suitable nesting habitat is present.
- Cooper's hawk (*Accipiter cooperii*), WL, MSCP SAP Covered Suitable foraging habitats are present throughout the survey area and suitable nesting habitat is limited to the ornamental trees along the edges of the developed land throughout the survey area.
- Costa's hummingbird (*Calypte costae*), BCC Suitable foraging and nesting habitats occur in the Diegan coastal sage scrub in the eastern portion of the Ocean Beach Dog Beach project site. Suitable foraging habitat is also present in the ornamental vegetation in the urban/developed land throughout the survey area.

- Elegant tern (*Thalasseus elegans*), WL, MSCP SAP Covered Suitable foraging habitats are along the coastline throughout the survey area, particularly on the Ocean Beach Dog Beach project site; however, no suitable nesting habitat is present.
- Light-footed Ridgway's rail (*Rallus obsoletus levipes*) FE, SE, FP, MSCP SAP Covered – Suitable foraging habitats are on the Ocean Beach – Dog Beach project site; however, no suitable nesting habitat is present.
- Mexican long-tongued bat (*Choeronycteris mexicana*), SSC Suitable foraging and roosting habitat is present in the ornamental vegetation and structures of the developed land throughout the survey area.
- Northern harrier (*Circus hudsonius*), SSC/MSCP SAP Covered Suitable foraging habitats occur throughout the survey area, particularly on the Ocean Beach Dog Beach project site. Suitable nesting habitat is limited to the ornamental trees along the edges of the developed land throughout the survey area.
- Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*), SSC Suitable habitats are on the Ocean Beach Dog Beach project site.
- Osprey (*Pandion haliaetus*), WL Suitable foraging habitats occur throughout the survey area, particularly on the Ocean Beach Dog Beach project site. Suitable nesting habitat is available in the developed land throughout the survey area, particularly the light poles and other human-made structures in these areas.
- Reddish egret (*Egretta rufescens*), MSCP SAP Covered Suitable foraging habitats are along the coastline throughout the survey area, particularly on the Ocean Beach Dog Beach project site; however, no suitable nesting habitat is present.
- San Diegan Legless Lizard (*Anniella stebbinsi*), SSC Suitable habitats are on the Ocean Beach Dog Beach project site.
- Wandering skipper (*Panoquina errans*), MSCP SAP Covered Suitable foraging habitats and larval host plants are limited to the Ocean Beach Dog Beach project site.

Of these 15 sensitive wildlife species, American peregrine falcon, Belding's orange-throated whiptail, California least tern, Cooper's hawk, elegant tern, light-footed Ridgway's rail, northern harrier, reddish egret, and wandering skipper are covered by the MSCP SAP (City of San Diego 1997).

Nesting Birds

The survey area contains suitable nesting habitat for several bird and raptor species protected under the California Fish and Game Code and Migratory Bird Treaty Act. The majority of habitat for nesting birds in the survey area is along the eastern portion of the survey area, within and along the edges of the developed land (refer to Figure 5.3-12 and Figures 5.3-12a through 5.3-12f).

Roosting Bats

The survey area contains suitable roosting and foraging habitat for both common and sensitive bat species. The numerous ornamental trees and palms within and along the edges of the developed land in eastern portion of the survey area could provide suitable roosting habitat for tree-roosting bats, such as the hoary bat (*Lasiurus cinereus*), western red bat (*Lasiurus blossevillii*), and potentially, the western yellow bat (*Lasiurus xanthinus*). Western red bat and western yellow bat are both CDFW species of special concern. The ornamental agave and cacti along the eastern edges of the survey area provide suitable foraging habitat for Mexican long-tongued bat (CDFW species of special concern) during migration and winter months. Further, the buildings in the developed land of the survey area provide suitable roosting habitat for Mexican long-tongued bat and other structure-dwelling bats such as the big brown bat (*Eptesicus fuscus*). The shoreline and coast along the western edge of the survey area also provide suitable foraging habitat for bats roosting in the area that forage over sources of open water, such as the western mastiff bat (*Eumops perotis*).

While no bats were observed using the survey area for roosting or foraging during the biological resources surveys, no nighttime focused acoustic surveys were conducted, and the availability of suitable habitat indicates that bats are likely roosting and foraging in the survey area (refer to Figure 5.3-12 and Figures 5.3-12a through 5.3-12f).

Wildlife Corridors and Habitat Linkages

Wildlife corridors provide routes for local movement and also regional linkages and corridors, often following linear topographic, vegetation, or water features.

Wildlife corridors and linkages are areas that maintain ecosystem function and processes, including large animal movement and function through the establishment of the MHPA within the City's MSCP SAP. Core areas have multiple connections to help ensure that the balance in the ecosystem will be maintained. The survey area does not intersect with a designated core or linkage area as identified within the Final MSCP Plan.

The CRMP Phase 1 survey area is likely to be used as a wildlife movement corridor and provides suitable nesting, foraging, and dispersal areas primarily for marine and anadromous fish, marine mammals, bats, and bird species because of the presence of native vegetation communities (including some of the last remaining dunes in the City) and its connection to the Pacific coast and open waters along the western edge of the survey area as well as Smiley Lagoon to the east. The survey area provides some movement opportunities for terrestrial species such as reptiles, mesocarnivores (i.e., raccoons), and other smaller mammals. However, the surrounding dense urban development restricts the use of the survey area to major movement routes for large mammals, including mule deer (*Odocoileus hemionus*) and mountain lion (*Puma concolor*).

The CRMP Phase 1 survey area also holds value for migrating birds flying through to wintering grounds that are protected by the Migratory Bird Treaty Act. The survey area is within the path of the Pacific Flyway, along which millions of birds, especially waterfowl, migrate annually between Alaska and Canada, through California, to Mexico and South America. Coastal San Diego provides an important stopover area for a large variety of birds during their annual migration.

5.3.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to biological resources are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (2023). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the Multiple Species Conservation Program (MSCP), Vernal Pool Habitat Conservation Plan (VPHCP), or other local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS);
- b. Result in a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS;
- c. Result in a substantial adverse impact on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- e. Conflict with the provisions of the MSCP, VPHCP, other adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan, such as introducing a land use within an area adjacent to the MHPA [Multi-Habitat Planning Area] that would result in adverse edge effects or introduce invasive species of plants into a natural open space area.

5.3.2.1 Direct Impacts

A direct impact is a physical change in the environment that is caused by and immediately related to the CRMP Phase 1. Construction and restoration activities associated with implementation of the CRMP Phase 1 could result in direct impacts to biological resources including but not limited to the following:

- Direct removal of vegetation and/or land cover during construction activities by means of excavation, demolition, grading, vegetation clearing/grubbing/crushing
- Placement of fill/sediment within jurisdictional aquatic resources, including the Pacific Ocean

- Dredging and/or hydrologic restoration activities in jurisdictional resources and encroachment into wetland buffers
- Human incursion into sensitive habitats
- Mortality of sensitive wildlife species from vehicular collision
- Destruction or abandonment of nests

Lands containing Tier I, II, IIIA, and IIIB (Table 3 of the Biology Guidelines) and all wetlands (Tables 2A and 2B of the Biology Guidelines) are considered sensitive and declining habitats (Table 5.3-5, Significance of Potential Impacts to Vegetation Communities and Jurisdictional Resources). As such, impacts to these resources would be significant, with two exceptions (City of San Diego 2018):

- a. If the total proposed project upland impacts affect less than 0.1 acre, then they would not be considered significant and would not require mitigation.
- b. Any proposed project impacts to non-native grasslands totaling less than 1.0 acre that are completely surrounded by urban development would not be considered significant and would not require mitigation.

Lands designated as Tier IV (e.g., developed land) are not considered to have significant habitat value, and any proposed impacts to these communities would not be considered significant. Since the survey areas for all six sites are entirely within the Coastal Overlay Zone (COZ), any impacts to wetlands as part of the CRMP Phase 1 would be significant.

Table 5.3-5. Significance of Potential Impacts to Vegetation Communities andJurisdictional Resources

Resource Type	Impact Threshold	Significance of Impact
Native Uplands (Tier I, II, IIIA, or IIIB)	Total less than 0.1 acre	Not significant
	Total 0.1 acre or greater	Significant, requires mitigation
Disturbed and Developed Land (Tier IV)	Any impacts	Not significant
Jurisdictional Waters	Any impacts within the COZ	Significant, requires mitigation
Wetlands	Any impact within the COZ	Significant, requires mitigation

Source: City of San Diego 2012a.

Notes: COZ = Coastal Overlay Zone

Impacts to individual sensitive plant species, aside from impacts to sensitive habitat, may also be considered significant based upon the rarity and extent of impacts. In general, conformance with the MSCP SAP provides incidental take coverage for covered species (both plants and wildlife) such that impacts to those species would not be considered significant (due to conservation of the species provided by MSCP SAP implementation). Exceptions to this would be impacts that occur to narrow endemic covered species, non-covered species that are state- or federally listed species and/or species identified in the Biology Guidelines Section III B 1(d) Species Specific Mitigation (City of San Diego 2018). It is assumed that if avoidance or minimization of impact is not feasible, any direct impacts to sensitive plant species could be mitigated either through habitat restoration,

on-site preservation, and/or translocation of species in restored habitat that is within the Multi-Habitat Planning Area (MHPA) boundary. Further, implementation of Area-Specific Management Directives (ASMDs) for certain species covered under the MSCP SAP would be required as conditions of future project-level approvals. Impacts to plant species ranked CRPR 3 and 4 would not be considered significant since any populations identified on site would not represent a significant percentage of the population in terms of the ability for the species to persist (i.e., CRPR 4 species are not considered "rare" from a statewide perspective) (Table 5.3-6, Significance of Potential Impacts to Sensitive Plant Species).

	•	•
Species Rarity	Location of Species	Significance of Impact
MSCP SAP Covered Species	Any	Not significant
MSCP SAP Narrow Endemic	Any	Significant, requires mitigation
Species with Specific Mitigation per Biology Guidelines Section III B 1(d)	Any	Significant, requires mitigation
Federally or State Listed Non-MSCP SAP Covered Species	Any	Significant, requires mitigation
CRPR 1B.1, 1B.2, and 2B.2	Any	Significant, requires habitat-based mitigation
CRPR 3 and 4	Any	Not significant

Table 5.3-6. Significance of Potential Impacts to Sensitive Plant Species

Notes: CRPR = California Rare Plant Rank; MSCP = Multiple Species Conservation Program; SAP = City of San Diego Multiple Species Conservation Program Subarea Plan

The City's permit to "take" covered species under the MSCP SAP is based on the concept that approximately 90 percent of lands within the MHPA will be preserved. The CRMP Phase 1 would limit activities within the MHPA to habitat protection and restoration activities and the treatment of invasive species in the City-owned sections of the preserve; these activities are compatible uses within the MHPA. Therefore, no MHPA boundary line adjustments are anticipated.

Habitat protection and restoration activities conducted in the survey area would be consistent with the requirements in the City's MSCP SAP, the Biology Guidelines, and Environmentally Sensitive Lands (ESL) regulations for conducting such activities in wetlands and wetland buffers located in both the MHPA and COZ. Further, consistent with the MSCP SAP, the CRMP Phase 1 would implement the ASMDs for species covered under the MSCP SAP that occur or have a moderate to high potential to occur in the survey area, as applicable. Additionally, the CRMP Phase 1 would also result in long-term direct benefits to wetland habitat and wildlife species that use these areas within and adjacent to the MHPA and COZ through the enhancement of nature-based coastal resiliency methods and enhancement of previously disturbed habitat along the coast. For example, several studies suggest that beach grooming and sediment filling can result in substantial impacts to sandy beach ecosystems and that natural dune formation can help restore beaches as well as adapt these coasts to climate change effects (Schooler et al. 2019; Johnston et al. 2023). The CRMP Phase 1 projects' consistency with the City's MSCP SAP, specifically Sections 1.5.1 and 1.5.2 of the MSCP SAP regarding preservation and

restoration of viable sensitive biological resources, including wildlife habitat is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C).

5.3.2.2 Indirect Impacts

Indirect impacts are reasonably foreseeable effects caused by project implementation on remaining or adjacent biological resources outside a direct impact area, such as downstream and adverse edge effects. Indirect impacts include short-term effects immediately related to construction/installation activities and long-term or chronic effects occurring after construction. Indirect impacts that would result in loss of area or function of wetlands, Tier I–III upland vegetation habitats, or sensitive species may be considered significant.

Additional potential short-term indirect impacts to biological resources that could occur from the CRMP Phase 1 are related to overall project construction activities and may include dust, construction-related noise, hydroacoustic effects, siltation, general human presence, changes within the survey area that affect forage and nesting, and construction-related soil erosion and runoff. Potential long-term indirect impacts to biological resources may also occur as a result of the CRMP Phase 1 through adverse edge effects, including introduction of non-native species and increased human presence during construction. Since the Ocean Beach – Dog Beach project site and the survey buffer of the Sunset Cliffs project site would be within and adjacent to the MHPA and these projects could result in potential indirect impacts to the Pacific Ocean and connected habitats, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, Land Use Adjacency Guidelines. The CRMP Phase 1 projects' consistency with the MHPA Land Use Adjacency Guidelines (LUAGs) is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). For typical development in the COZ, the City's Land Development Code ESL Regulations and Biology Guidelines require a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained.

In accordance with the MSCP SAP and pursuant to the San Diego RWQCB Municipal Permit and the City's Stormwater Standards Manual (City of San Diego 2012b), projects are required to implement site design, source control, and treatment control best management practices (BMPs) to reduce potential indirect impacts to sensitive biological resources. The CRMP Phase 1 projects' consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Development projects are required to meet National Pollutant Discharge Elimination System (NPDES) regulations and incorporate BMPs during construction and permanent BMPs as defined by the City's Stormwater Standards Manual as part of project development.

5.3.3 Impact Analysis

5.3.3.1 Issue 1: Sensitive Plant and Wildlife Species

Would the proposed CRMP Phase 1 result in a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in the Multiple Species Conservation Program (MSCP), Vernal Pool Habitat Conservation Plan (VPHCP), or other local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?

No vernal pools were observed in the survey areas for any of the individual project sites (refer to Appendix C). Therefore, none of the CRMP Phase 1 projects are subject to the VPHCP. No impacts would occur to vernal pools or associated plant and wildlife species. The analyses below describe the potential for direct and indirect impacts to sensitive plant and wildlife species identified in the MSCP, other plans, policies, and regulations, and by the CDFW and USFWS.

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native species and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The multi-use pathway would ultimately extend through the Ocean Beach – Pier project site. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway, which may improve the aesthetic of the dune when compared to the existing condition. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3, Pilot Project at Ocean Beach – Dog Beach Concept Renderings, and 3-4, Pilot Project at Ocean Beach – Dog Beach with the Optional Restroom Relocation, and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

Sensitive Plant Species

Direct Impacts

No focused sensitive plant species surveys were conducted in the survey area during the 2023 Harris surveys. Two sensitive plant species, Nuttall's acmispon and southwestern spiny rush, were observed in the Diegan coastal sage scrub in the eastern portion of the Ocean Beach – Dog Beach survey area during the 2023 Harris biological surveys. Nuttall's acmispon is a CRPR 1B.1 species but not designated as narrow endemic or covered under the MSCP SAP. Southwestern spiny rush is a CRPR 4.2 species and not designated as narrow endemic or covered under the MSCP SAP. Impacts to plant species ranked CRPR 4, not considered "rare" from a statewide perspective, would not be considered significant impacts since any populations identified on site would not represent

a significant percentage of the population in terms of the ability for the species to persist. Therefore, potential impacts to southwestern spiny rush would be considered less than significant, and no mitigation is required.

Based on the literature and database review, 12 additional sensitive plant species, Aphanisma, California box-thorn, coast wallflower, coast woolly-heads, Coulter's goldfields, decumbent goldenbush, estuary seablite, red sand-verbena, salt marsh bird's-beak, San Diego marsh-elder, San Diego barrel cactus, and south coast saltbush, were determined to have a moderate or high potential to occur in the Ocean Beach – Dog Beach survey area but were not observed during the 2023 Harris biological resources surveys as summarized in Section 5.3.1.4 above and described in Table 4 (Section 5.4) of the BRTR (Appendix C).

Of these 12 species, Aphanisma, coast wallflower, salt marsh bird's-beak, and San Diego barrel cactus are covered under the MSCP SAP, but are not designated as narrow endemic species. The MSCP SAP requires ASMDs for two of these species, including salt marsh bird's-beak and San Diego barrel cactus. Implementation of the ASMDs for salt marsh bird's-beak and San Diego barrel cactus, which were determined to have high and moderate potentials to occur in the survey area, respectively, would be required as a condition of future project-level approval. Further, in the event salt marsh birds-beak and San Diego barrel cactus cannot be avoided, translocation and/or seed collection of impacted individuals into the proposed sand dune and Diegan coastal sage scrub restoration areas would be incorporated into future project-specific restoration plan designs. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, with conformance with the MSCP SAP and the applicable species-specific ASMDs as described in in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C), direct impacts to the four MSCP SAP covered sensitive plant species would be less than significant, and no species-specific mitigation is required, although habitat based compensatory mitigation may be required based on subsequent site-specific analysis of future project-level impacts.

In addition, California box-thorn and red sand-verbena were documented in the western and northern portions of Smiley Lagoon, respectively, during City biological resources surveys conducted in 2023 and determined to have a high potential to occur in the Ocean Beach – Dog Beach survey area, but were not observed during the 2023 Harris surveys. California box-thorn and red sand-verbena are CRPR 4.2 species and not designated as narrow endemic or covered under the MSCP SAP. Impacts to plant species ranked CRPR 4 would not be considered significant since any populations identified on site would not represent a significant percentage of the population in terms of the ability for the species to persist. Therefore, potential impacts to California box-thorn and red sand-verbena from implementation of the Pilot Project would be considered less than significant, and no mitigation is required.

Potential direct impacts could occur to the one sensitive plant observed, Nuttall's acmispon, and remaining six sensitive plant species determined to have moderate or high potentials to occur in the Ocean Beach – Dog Beach survey area, including coast woolly-heads, Coulter's goldfields, decumbent goldenbush, estuary seablite, San Diego marsh-elder, and south coast saltbush. These seven plants are CRPR 1B.1, 1B.2, and 2B.2 species, but none are covered under the MSCP SAP. In the event any of the seven sensitive plant species observed and with moderate or high potentials to occur are identified within the Ocean Beach – Dog Beach project site potential impact area during future project-specific surveys, direct impacts are considered potentially significant without mitigation.

An analysis of the exact acreage of impacts that would occur to these sensitive plant species in the Ocean Beach – Dog Beach project site as a result of the Pilot Project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pilot Project in accordance with the City's ESL Regulations, Biological Guidelines, and MSCP SAP, and any impacts to sensitive plant species would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pilot Project.

In the event the seven sensitive plant species observed or with moderate or high potential to occur in the Ocean Beach – Dog Beach survey area, Nuttall's acmispon, coast woolly-heads, Coulter's goldfields, decumbent goldenbush, estuary seablite, San Diego marsh-elder, and south coast saltbush, or other sensitive plant species are identified within the potential impact area, including MSCP SAP covered and narrow endemic plant species, non-MSCP SAP covered federally and/or statelisted plant species, or non-MSCP SAP covered CRPR 1B.1, 1B.2, or 2B.2 species, potential impacts are considered potentially significant without mitigation. Implementation of mitigation measure MM BIO-1 would reduce potential indirect impacts to sensitive plant species through conducting sensitive plant species focused surveys prior to construction of the Pilot Project.

It should be noted that the Pilot Project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Dog Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Dog Beach project site increases the potential for impacts to sensitive plant species. Therefore, implementation of the permanent sand dunes as part of the Pilot Project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Temporary indirect impacts to sensitive plant species could result during construction of the Pilot Project, and may include dust, which could disrupt plant vitality in the short term, or constructionrelated soil erosion and runoff. Permanent edge effects could result during operation of the Pilot Project and may include intrusions by humans and therefore, possible trampling of individual plants, invasion by exotic plant and wildlife species, exposure to urban pollutants (fertilizers, pesticides, herbicides, and other hazardous materials), soil erosion, litter, fire, and hydrologic changes (e.g., surface and groundwater level and quality). As discussed previously, the Pilot Project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Ocean Beach - Dog Beach project site is within and adjacent to the MHPA and could result in potential indirect impacts to the preserve, the Pilot Project would be required to implement the MSCP SAP Section 1.4.3, LUAGs. The Pilot Project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Indirect impacts to MSCP covered species would be precluded by conformance with Section 1.4.3, LUAG's; and implementing Section 1.5, Preserve Management Recommendations of the City's MSCP SAP. Therefore, indirect impacts to sensitive plants during construction activities and operation of the Pilot Project would be less than significant, and no mitigation is required.

Sensitive Wildlife Species

Direct Impacts

The sensitive wildlife species that were observed in the Ocean Beach – Dog Beach survey area during the 2023 Harris surveys and the sensitive wildlife species that were determined to have a moderate or high potential to occur in the Ocean Beach – Dog Beach survey area are summarized in Section 5.3.1.4 above and described in Table 4 and Section 5.4 of the BRTR (Appendix C) (Figures 5.3-11, 5.3-11a, and 5.3-12). The two sensitive wildlife species observed in the Ocean Beach – Dog Beach survey area include the following: Belding's savannah sparrow and monarch butterfly (Section 5.4.4 of the BRTR [Appendix C]). In addition, 17 sensitive wildlife species that were not observed in the Ocean Beach – Dog Beach survey area include the following: American peregrine falcon, Belding's orange-throated whiptail, black tern, California brown pelican, California least tern, Cooper's hawk, Costa's hummingbird, double-crested cormorant, elegant tern, light-footed Ridgway's rail, Mexican long-tongued bat, northern harrier, northwestern San Diego pocket mouse, osprey, reddish egret, San Diegan legless lizard, and wandering skipper (Table 4 and

Section 5.4.5 of the BRTR [Appendix C]). Two additional species, Caspian tern and long-billed curlew, were observed foraging in the Sunset Cliffs survey area; however, these species also have a high potential to forage in the salt marsh and estuarine habitat in the eastern portion of the Ocean Beach – Dog Beach survey area although they were not observed during the 2023 surveys. The Pilot Project has the potential to directly impact these 21 sensitive wildlife species during construction and operation through displacement of individual wildlife or elimination of portions of their habitat. Implementation of the Pilot Project could result in both permanent and temporary direct loss of habitat, including nesting, roosting, and foraging habitat, for the majority of the sensitive wildlife species observed or with a high potential to occur in the Ocean Beach – Dog Beach survey area.

Of these 21 sensitive wildlife species observed or determined to have a moderate or high potential to occur, 12 are covered by the MSCP SAP (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). These species include American peregrine falcon, Belding's orange-throated whiptail, Belding's savannah sparrow, California brown pelican, California least tern, Cooper's hawk, elegant tern, lightfooted Ridgway's rail, long-billed curlew, northern harrier, reddish egret, and wandering skipper. The MSCP SAP requires ASMDs for eight of the 12 sensitive wildlife species covered under the plan. ASMDs are provided for Belding's orange-throated whiptail, Belding's savannah sparrow, California least tern, Cooper's hawk, elegant tern, light-footed Ridgway's rail, northern harrier, and wandering skipper; however, none are required for American peregrine falcon, California brown pelican, longbilled curlew, and reddish egret (City of San Diego 1997). Implementation of ASMDs for applicable MSCP SAP covered sensitive wildlife species that occur in the survey area would be required as a condition of future project-level approval. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, with conformance with the MSCP SAP and the applicable species-specific ASMDs as described in in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C), direct impacts to these 12 MSCP SAP covered sensitive wildlife species would be less than significant, and no species-specific mitigation is required, although habitat based compensatory mitigation may be required based on subsequent site-specific analysis of future project-level impacts.

Potential direct impacts could occur to the remaining sensitive wildlife species observed, monarch butterfly, and eight sensitive wildlife species determined to have a moderate or high potential to occur in the Ocean Beach – Dog Beach survey area, including black tern, Costa's hummingbird, double-crested cormorant, Mexican long-tongued bat, northwestern San Diego pocket mouse, osprey, San Diegan legless lizard, and Caspian tern, which are not covered by the MSCP SAP. In the event any of the nine sensitive wildlife species observed and with moderate or high potentials to occur are identified within the Ocean Beach – Dog Beach project site potential impact area during future project-specific surveys, direct impacts are considered potentially significant without mitigation.

An analysis of the exact acreage of impacts that would occur to these sensitive wildlife species in the form of habitat removal in the survey area as a result of the Pilot Project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pilot Project and any impacts to these sensitive wildlife species would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pilot Project. The programmatic-level analysis of impacts to the nine non-MSCP SAP covered species observed and with moderate or high potential to occur is provided in the paragraphs below.

Aquatic and wetland vegetation communities and land cover types, including subtidal ocean (0.24 acres), estuarine (1.25 acres), southern coastal salt marsh (0.88 acres), and beach (8.90 acres), occur in the Ocean Beach – Dog Beach survey area (Figures 5.3-1 and 5.3-1a). These aquatic communities provide suitable nesting and foraging habitat for sensitive bird species (including those not covered by the MSCP SAP) observed or with a high potential to occur in these habitats in the survey area. These sensitive species include black tern, Caspian tern, double-crested cormorant, and osprey. Direct impacts to estuarine, southern coastal salt marsh, and beach communities that occur in the Ocean Beach – Dog Beach survey area could result in direct impacts to these sensitive birds in the form of permanent and temporary habitat loss. Potential future site-specific impacts to these sensitive wildlife species would be potentially significant without mitigation.

Although the vegetated upland habitats, including southern foredunes and disturbed Diegan coastal sage scrub in the Ocean Beach – Dog Beach survey area, may be limited or low quality, these communities provide suitable foraging and nesting habitat for sensitive Costa's hummingbird, which was determined to have a high potential to occur in the survey area. The disturbed Diegan coastal sage scrub in the Ocean Beach – Dog Beach survey area also provides suitable habitat for northwestern San Diego pocket mouse and San Diegan legless lizard, which were determined to have moderate potential to occur in the survey area. Further, these habitats are connected to larger areas of contiguous habitat to the northeast into Smiley Lagoon. Direct impacts to disturbed southern foredunes and disturbed Diegan coastal sage scrub could result in direct impacts to the sensitive Costa's hummingbird, northwestern San Diego pocket mouse, and San Diegan legless lizard in the form of permanent and temporary habitat loss. Potential impacts to this sensitive wildlife species would be potentially significant without mitigation.

The developed land in the southern portion of the Ocean Beach – Dog Beach survey area provides little to no suitable foraging or nesting habitat value for most of the sensitive species observed or with a high potential to occur in the survey area. However, a large number of flowering ornamental trees and shrubs, as well as mature eucalyptus and pine trees, are present within and along the edges of the developed land that could provide suitable foraging habitat for Costa's hummingbird and both foraging and overwintering habitat for the monarch butterfly. Direct impacts to the ornamental trees

and shrubs in the developed land of the survey area could result in direct impacts to Costa's hummingbird and monarch butterfly in the form of permanent and temporary foraging and overwintering habitat loss, respectively. In addition, the buildings and other structures present in the developed land throughout the Ocean Beach – Dog Beach survey area could provide suitable bat roosting habitat, specifically for Mexican long-tongued bat, which was determined to have a high potential to occur in the survey area. The developed land uses currently in the survey area, primarily residential and commercial, would remain in place, and no impacts to Mexican long-tongued bats would result to the potential foraging, roosting, and overwintering habitat provided within those areas. As discussed in the Section 4.3, Biological Resources, the Pilot Project is required to comply with all federal, state, and local regulations applicable to biological resources as a condition of future project-level approval. Compliance is ensured through conditions of subsequent project-level approval. Therefore, potential impacts to these sensitive wildlife species described above and in Table 4 of the BRTR would be less than significant, and no mitigation is required.

Significant direct impacts to sensitive wildlife species, specifically black tern, Caspian tern, Costa's hummingbird, double-crested cormorant, northwestern San Diego pocket mouse, osprey, and San Diegan legless lizard, could result during construction of the subsequent Pilot Project from temporary displacement and permanent removal of these species' suitable habitats. Implementation of MM BIO-2 would reduce potential direct impacts to sensitive wildlife species through monitoring by a qualified biologist prior to and during construction of the Pilot Project. Per the Biology Guidelines, direct impacts to vegetation communities used by sensitive wildlife species would be conserved or restored through the implementation of MM BIO-3 through MM BIO-6. These mitigation measures would reduce potential direct impacts to sensitive wildlife species through conducting sensitive avian and wildlife species focused surveys prior to construction and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the Ocean Beach – Dog Beach project site.

It should be noted that the Pilot Project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Dog Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Dog Beach project site increases the potential for impacts to sensitive wildlife. Further, the installation of native vegetation along the proposed sand dunes and dune restoration north of the parking lot in proximity to Smiley Lagoon proposed as part of the Pilot Project would improve habitat for sensitive plant and wildlife species. Therefore, implementation of the permanent sand dunes as part of the Pilot Project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Temporary construction-related and long-term operational indirect impacts to wildlife generally include lighting, increased human activity, hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash, which can attract both introduced terrestrial and native terrestrial and avian predators (such as American crows, common ravens [Corvus corax], coyotes [Canis latrans], domestic dogs [Canis familiaris], raccoons [Procyon lotor], and striped skunks [Mephitis mephitis]). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species observed or determined to have a high potential to occur in the Ocean Beach – Dog Beach survey area. The Pilot Project and subsequent project-level approvals would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.2.1) of the BRTR (Appendix C). In addition, because the Ocean Beach - Dog Beach project site is within and adjacent to the MHPA and could result in potential indirect impacts to the preserve, the Pilot Project would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Pilot Project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Indirect impacts to MSCP covered species would be precluded by conformance to MSCP Section 1.4.3, Land Use Adjacency Guidelines; and implementing Section 1.5, Preserve Management Recommendations of the City's MSCP Subarea Plan. Therefore, indirect impacts to sensitive wildlife during construction and operation of the Pilot Project would be less than significant, and no mitigation is required.

Nesting Birds

The Ocean Beach – Dog Beach survey area provides suitable nesting habitat for sensitive birds protected under the California Fish and Game Code (CFGC) and Migratory Bird Treaty Act (MBTA). Focused nest surveys were not conducted due to the programmatic nature of the CRMP Phase 1, and no active nests or nesting behavior were observed during the 2023 Harris biological surveys.

The Pilot Project would be required to comply with regulations protecting sensitive nesting birds, including the CFGC and MBTA. Compliance is ensured through conditions of subsequent project-level approval. Due to known presence of federal and state endangered avian species, potential direct impacts to these sensitive wildlife species are considered potentially significant without mitigation.

Implementation of MM BIO-2 through MM BIO-6 would reduce potential direct impacts to sensitive wildlife species, including nesting birds and raptors protected under the CFGC and MBTA, through

biological monitoring, conducting sensitive avian and wildlife species focused surveys prior to construction, and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the Ocean Beach – Dog Beach project site. Therefore, potential impacts to sensitive wildlife species would be less than significant with implementation of MM BIO-2 through MM BIO-6.

Sensitive Roosting Bats

As previously discussed, suitable roosting habitat for sensitive bat species, including Mexican longtongued bat, hoary bat, and western mastiff bat, occurs in the structures and ornamental vegetation within the developed land throughout the eastern portion of the Ocean Beach – Dog Beach survey area. Although roosting bats were not observed during the 2023 Harris biological surveys, the availability of suitable roosting with nearby foraging habitat suggest roosting is likely occurring in the survey area (Table 4 and Section 5.4.5.9 of the BRTR [Appendix C]). No focused nighttime mist-netting or acoustic surveys were conducted. The developed land uses currently in the Ocean Beach – Dog Beach survey area would remain in place, and no impacts would result to the potential roosting habitat provided by the trees or structures in those areas. Therefore, potential impacts to these sensitive roosting bats would be less than significant, and no mitigation is required.

La Jolla Shores, Mission Beach, and Ocean Beach – Pier

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

The Mission Beach project also includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north-

south along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

Sensitive Plant Species

Direct and Indirect Impacts

No sensitive plant species were observed in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas during the 2023 Harris biological reconnaissance surveys, and no additional sensitive plant species were determined to have a moderate or high potential to occur in the survey areas (Table 4 and Sections 5.4.2 and 5.4.3 of the BRTR [Appendix C]). While no focused rare plant surveys were conducted in the survey areas, the La Jolla Shores, Mission Beach, and Ocean Beach – Pier project sites and potential impact areas are comprised of developed land and unvegetated beach that have a low potential to support sensitive plant species. Therefore, direct and indirect impacts to sensitive plant species would be less than significant, and no mitigation is required.

It should be noted that the Mission Beach and Ocean Beach – Pier projects would provide a longterm beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Mission Beach and Ocean Beach – Pier project sites when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices that currently occur at these sites. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Mission Beach and Ocean Beach – Pier project sites increases the potential for impacts to sensitive plant species. Therefore, implementation of the permanent sand dunes as part of the Mission Beach and Ocean Beach – Pier projects would greatly reduce the potential for long-term impacts.

Sensitive Wildlife Species

Direct Impacts

No sensitive wildlife species were observed in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas during the 2023 Harris biological reconnaissance surveys. However, 15 sensitive wildlife species were determined to have a high potential to occur in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). These sensitive wildlife species include American peregrine falcon, black tern, California brown pelican, California least tern, California sea lion, Caspian tern, Cooper's hawk, double-crested cormorant, elegant tern, long-billed curlew, Mexican long-tongued bat, monarch butterfly, northern harrier, osprey, and reddish egret. No sensitive wildlife species were determined to have a moderate potential to occur in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). Implementation of these future projects could result in both permanent and temporary direct loss of habitat, including nesting, roosting, and foraging habitat, for the majority of these sensitive wildlife species with a high potential to occur in the La Jolla Shores, Mission Beach – Pier survey areas.

Of these 15 sensitive wildlife species determined to have a high potential to occur, eight are covered by the MSCP SAP (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). These species are American peregrine falcon, California brown pelican, California least tern, Cooper's hawk, elegant tern, long-billed curlew, northern harrier, and reddish egret. The MSCP SAP requires ASMDs for four of the eight sensitive wildlife species covered under the MSCP SAP. ASMDs are provided for California least tern, Cooper's hawk, elegant tern, and northern harrier, however, none are required for American peregrine falcon, California brown pelican, long-billed curlew, and reddish egret (City of San Diego 1997). Implementation of ASMDs for applicable MSCP SAP covered sensitive wildlife species that occur in the survey area would be required as a condition of future project-level approval. The projects' consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, with conformance with the MSCP SAP and the species-specific ASMDs as applicable, direct impacts to these eight MSCP SAP covered sensitive wildlife species would be less than significant, and no mitigation is required.

Similarly, California sea lion is a Marine Mammal Protection Act (MMPA) fully protected species, and the MMPA does not allow take of any marine mammal species found in U.S. waters. As a condition of future project-level approval, the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects would be required to avoid impacts to this species consistent with MMPA. Therefore, with conformance with MMPA, direct impacts to California sea lion would be less than significant, and no mitigation is required.

Potential direct impacts to the remaining six sensitive wildlife species determined to have a high potential to occur in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas that are not covered by the MSCP SAP or protected under federal regulations are discussed below. An analysis of the exact acreage of impacts that would occur to these sensitive wildlife species from potential removal of habitat in the survey area as a result of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the projects, and any impacts to these sensitive wildlife species would be

avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects.

Aquatic and wetland vegetation communities and land cover types, including subtidal ocean and beach, occur in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas (Figures 5.3-1, 5.3-1b, 5.3-1d, and 5.3-1e; Table 5.3-1). These aquatic communities provide suitable foraging habitat for sensitive bird and raptor species (not covered by the MSCP SAP) determined to have a high potential to occur in these habitats in the survey areas. These sensitive species include black tern, Caspian tern, double-crested cormorant, and osprey. Direct impacts to subtidal ocean are not anticipated during implementation of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects, reducing potential impacts to foraging habitat for double-crested cormorant and osprey to less than significant. However, direct impacts to the beach that occur in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier project sites could result in direct impacts to black tern and Caspian tern, which could use the beach while foraging. Potential impacts to these sensitive wildlife species in the form of foraging habitat loss would be potentially significant without mitigation.

The developed land in the eastern portions of the La Jolla Shores, Mission Beach, and Ocean Beach - Pier survey areas provide little to no suitable habitat value for most of the sensitive species determined to have a high potential to occur in the survey areas. However, a large number of flowering ornamental trees and shrubs, as well as mature eucalyptus and pine trees, are present within and along the edges of the developed land that could provide suitable foraging and overwintering habitat for the monarch butterfly. Direct impacts to the ornamental trees and shrubs in the developed land of the survey areas could result in direct impacts to monarch butterfly in the form of permanent and temporary foraging and overwintering habitat loss. In addition, the ornamental plants, buildings, and other structures present in the developed land of the La Jolla Shores, Mission Beach, and Ocean Beach - Pier survey areas could provide suitable bat foraging and roosting habitat, specifically for Mexican long-tongued bat, which was determined to have a high potential to occur in the survey areas. The developed land uses currently in the survey areas, primarily residential and commercial, would remain in place, and no impacts would result to the potential foraging, roosting, and overwintering habitat provided for Mexican long-tongued bat within those areas. The La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects are required to comply with all federal, state, and local regulations applicable to biological resources as a condition of approval. Compliance is ensured through conditions of subsequent project-level approval. Therefore, potential impacts to these sensitive wildlife species would be less than significant, and no mitigation is required.

It should be noted that the Mission Beach and Ocean Beach – Pier projects would provide a longterm beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Mission Beach and Ocean Beach – Pier project sites when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices that currently occur at these sites. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Mission Beach and Ocean Beach – Pier project sites increases the potential for impacts to sensitive wildlife. Therefore, implementation of the permanent sand dunes as part of the Mission Beach and Ocean Beach – Pier projects would greatly reduce the potential for long-term impacts.

Indirect Impacts

Temporary construction-related and long-term operational indirect impacts to wildlife generally include lighting, increased human activity, hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash, which can attract both introduced terrestrial and native terrestrial and avian predators (such as American crows, common ravens, coyotes, domestic dogs, raccoons, and striped skunks). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species determined to have a high potential to occur in the La Jolla Shores, Mission Beach, and Ocean Beach - Pier survey areas, discussed under Direct Impacts. The La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects and subsequent project-level approvals would be required to be in compliance with the ESL Regulations, Biology Guidelines, MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The La Jolla Shores, Mission Beach, and Ocean Beach - Pier project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Indirect impacts to MSCP covered species would be precluded by conformance to MSCP Section 1.4.3, Land Use Adjacency Guidelines; and implementing Section 1.5, Preserve Management Recommendations of the City's MSCP Subarea Plan. Therefore, indirect impacts to sensitive wildlife during construction activities and operation of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects would be less than significant, and no mitigation is required.

Nesting Birds

The La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas provide suitable nesting habitat for sensitive birds protected under the CFGC and MBTA. Focused nest surveys were not conducted due to the programmatic nature of the projects, and no active nests or nesting behavior were observed during the 2023 Harris biological surveys.

The La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects would be required to implement regulations protecting sensitive nesting birds, including the CFGC and MBTA. Compliance is ensured through conditions of subsequent project-level approval. Due to known presence of federal and state endangered avian species, potential direct and indirect impacts to these sensitive wildlife species are considered potentially significant without mitigation.

Significant direct impacts to sensitive wildlife species, specifically black tern and Caspian tern, as well as nesting birds and raptors protected under the CFGC and MBTA, could result during construction of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects from temporary displacement and permanent removal of these species' suitable habitats. Implementation of MM BIO-2 through MM BIO-6 would reduce potential direct and indirect impacts to sensitive wildlife species through monitoring by a qualified biologist prior to and during construction, conducting sensitive avian and wildlife species focused surveys prior to construction, and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the La Jolla Shores, Mission Beach, and Ocean Beach – Pier project sites. These mitigation measures would reduce potential direct and indirect impacts to sensitive vildlife species, including nesting birds and raptors protected under the CFGC and MBTA.

Sensitive Roosting Bats

As previously discussed, suitable roosting habitat for sensitive bat species, including Mexican long-tongued bat, hoary bat, western mastiff bat, occurs in the structures and ornamental trees within the developed land in the eastern portion of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier survey areas. Although roosting bats were not observed during the 2023 Harris biological surveys, the availability of suitable roosting with nearby foraging habitat suggest roosting is likely occurring in the survey areas. No focused nighttime mist-netting or acoustic surveys were conducted. The developed land uses currently in the survey area would remain in place, and no impacts would result to the potential roosting habitat provided by the trees or structures in those areas. Therefore, potential direct and indirect impacts to these sensitive roosting bats would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native species. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach - Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Sensitive Plant Species

Direct and Indirect Impacts

No sensitive plant species were observed in the Pacific Beach – Tourmaline Surf Park survey area during the 2023 Harris biological reconnaissance surveys, and no additional sensitive plant species were determined to have a high potential to occur in the Pacific Beach – Tourmaline Surf Park survey area (Table 4 and Sections 5.4.2 and 5.4.3 of the BRTR [Appendix C]). While no focused rare plant surveys were conducted in the survey area, most of the Pacific Beach – Tourmaline Surf Park project site and potential impact area are comprised of developed land, sandstone cliffs, and unvegetated beach that have a low potential to support sensitive plant species. Therefore, direct and indirect impacts to sensitive plant species would be less than significant, and no mitigation is required.

Sensitive Wildlife Species

Direct Impacts

No sensitive wildlife species were observed in the Pacific Beach – Tourmaline Surf Park survey area during the 2023 Harris biological reconnaissance surveys (Table 4 and Section 5.4.4 of the BRTR [Appendix C]). However, 15 sensitive wildlife species were determined to have a moderate or high potential to occur in the Pacific Beach – Tourmaline Surf Park survey area (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). These sensitive wildlife species include American peregrine falcon, black tern, California brown pelican, California least tern, California sea lion, Caspian tern, Cooper's hawk, double-crested cormorant, elegant tern, long-billed curlew, Mexican long-tongued bat, monarch butterfly, northern harrier, osprey, and reddish egret. Implementation of the Pacific Beach – Tourmaline Surf Park project could result in both permanent and temporary direct loss of habitat, including nesting, roosting, and foraging habitat, for the majority of these sensitive wildlife species with a high potential to occur in the Pacific Beach – Tourmaline Surf Park survey area.

Of these 15 sensitive wildlife species determined to have a high potential to occur, eight are covered by the MSCP SAP (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). These species are American peregrine falcon, California brown pelican, California least tern, Cooper's hawk, elegant tern, long-billed curlew, northern harrier, and reddish egret. The MSCP SAP requires ASMDs for four of the eight sensitive wildlife species covered under the plan. ASMDs are provided for California least tern, Cooper's hawk, elegant tern, and northern harrier, however, none are required for American peregrine falcon, California brown pelican, long-billed curlew, and reddish egret (City of San Diego 1997). Implementation of ASMDs for applicable MSCP SAP covered sensitive wildlife species that occur in the survey area would be required as a condition of future project-level approval. The Pacific Beach – Tourmaline Surf Park project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, with conformance with the MSCP SAP

and the species-specific ASMDs as applicable, direct impacts to these eight MSCP SAP covered sensitive wildlife species would be less than significant, and no mitigation is required.

Similarly, California sea lion is a MMPA fully protected species, and MMPA does not allow take of any marine mammal species found in U.S. waters. As a condition of future project-level approval, the Pacific Beach – Tourmaline Surf Park project would be required to avoid impacts to this species consistent with MMPA. Therefore, with conformance with MMPA, direct impacts to California sea lion would be less than significant, and no mitigation is required.

Potential direct impacts to the remaining six sensitive wildlife species determined to have a high potential to occur in the Pacific Beach – Tourmaline Surf Park survey area that are not covered by the MSCP SAP or protected under federal regulations are discussed below. An analysis of the exact acreage of impacts that would occur to these sensitive wildlife species from potential removal of habitat in the survey area as a result of the Pacific Beach – Tourmaline Surf Park project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pacific Beach – Tourmaline Surf Park project to these sensitive wildlife species, and any impacts to these sensitive wildlife species would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pacific Beach – Tourmaline Surf Park project.

Aquatic and wetland vegetation communities and land cover types, including subtidal ocean (0.36 acres), concrete-channel (0.40 acres), and beach (3.56 acres), occur in the Pacific Beach – Tourmaline Surf Park survey area (Figures 5.3-1 and 5.3-1c). While concrete-channel provides little habitat value, the subtidal ocean and beach communities provide suitable foraging habitat for sensitive bird and raptor species (not covered by the MSCP SAP) determined to have a high potential to occur in the survey area. These sensitive species include black tern, Caspian tern, double-crested cormorant, and osprey. Direct impacts to subtidal ocean are not anticipated during implementation of the Pacific Beach – Tourmaline Surf Park project, reducing potential impacts to foraging habitat for double-crested cormorant and osprey to less than significant. However, direct impacts to the beach that occurs in the Pacific Beach – Tourmaline Surf Park project site could result in direct impacts to black tern and Caspian tern, which could use the beach while foraging. Potential impacts to these sensitive wildlife species in the form of foraging habitat loss would be potentially significant without mitigation.

The non-native woodland and developed land in the eastern portion of the Pacific Beach – Tourmaline Surf Park survey area provides little to no suitable habitat value for most of the sensitive species determined to have a high potential to occur in the survey area. However, a large number of flowering non-native and ornamental trees and shrubs, as well as mature eucalyptus and pine trees, are present within the non-native woodland and developed land that could provide suitable foraging
and overwintering habitat for the monarch butterfly. Direct impacts to the non-native and ornamental trees and shrubs in the non-native woodland and developed land of the survey area could result in direct impacts to monarch butterfly in the form of permanent and temporary foraging and overwintering habitat loss. In addition, the ornamental plants, buildings, and other structures present in the developed land of the Pacific Beach – Tourmaline Surf Park survey area could provide suitable bat foraging and roosting habitat, specifically for Mexican long-tongued bat, which was determined to have a high potential to occur in the survey area. The developed land uses currently in the survey area, primarily residential and commercial, would remain in place, and no impacts would result to the potential foraging, roosting, and overwintering habitat provided within those areas. As discussed in Section 3, the Pacific Beach – Tourmaline Surf Park project is required to comply with all federal, state, and local regulations applicable to biological resources as a condition of approval. Implementation is ensured through conditions of subsequent project-level approval. Therefore, potential impacts to these sensitive wildlife species would be less than significant, and no mitigation is required.

Significant direct impacts to sensitive wildlife species, specifically black tern and Caspian tern, could result during construction of the Pacific Beach – Tourmaline Surf Park project from temporary displacement and permanent removal of these species' suitable habitats. Implementation of MM BIO-2 through MM BIO-6 would reduce potential direct impacts to sensitive wildlife species through monitoring by a qualified biologist prior to and during construction, conducting sensitive avian and wildlife species focused surveys prior to construction, and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the Pacific Beach – Tourmaline Surf Park project site. These mitigation measures would reduce potential direct impacts to sensitive wildlife species.

Indirect Impacts

Temporary construction-related and long-term operational indirect impacts to wildlife generally include lighting, increased human activity, hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash, which can attract both introduced terrestrial and native terrestrial and avian predators (such as American crows, common ravens, coyotes, domestic dogs, raccoons, and striped skunks). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species determined to have a high potential to occur in the Pacific Beach – Tourmaline Surf Park survey area, discussed under Direct Impacts. The Pacific Beach – Tourmaline Surf Park project and subsequent project-level approvals would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pacific Beach – Tourmaline Surf Park project's consistency with the MSCP SAP General Management

Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.2.1) of the BRTR (Appendix C). Indirect impacts to MSCP covered species would be precluded by conformance to MSCP Section 1.4.3, Land Use Adjacency Guidelines; and implementing Section 1.5, Preserve Management Recommendations of the City's MSCP Subarea Plan. Therefore, indirect impacts to sensitive wildlife during construction activities and operation of the Pacific Beach – Tourmaline Surf Park project would be less than significant, and no mitigation is required.

Nesting Birds

The Pacific Beach – Tourmaline Surf Park survey area provides suitable nesting habitat for sensitive birds protected under the CFGC and MBTA. Focused nest surveys were not conducted due to the programmatic nature of the Pacific Beach – Tourmaline Surf Park project, and no active nests or nesting behavior were observed during the 2023 Harris biological surveys.

The Pacific Beach – Tourmaline Surf Park project would be required to implement regulations protecting sensitive nesting birds, including the CFGC and MBTA. Implementation is ensured through conditions of subsequent project-level approval. Due to known presence of federal and state endangered avian species, potential direct impacts to these sensitive wildlife species are considered potentially significant without mitigation.

Implementation of MM BIO-2 through MM BIO-6 would reduce potential direct impacts to sensitive wildlife species through monitoring by a qualified biologist prior to and during construction, conducting sensitive avian and wildlife species focused surveys prior to construction, and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the Pacific Beach – Tourmaline Surf Park project site. These mitigation measures would reduce potential direct impacts to sensitive wildlife species, including nesting birds and raptors protected under the CFGC and MBTA.

Sensitive Roosting Bats

As previously discussed, suitable roosting habitat for sensitive bat species, including Mexican long-tongued bat, hoary bat, and western mastiff bat, occurs in the structures and ornamental trees within the developed land in the eastern portion of the Pacific Beach – Tourmaline Surf Park survey area. Although roosting bats were not observed during the 2023 Harris biological surveys, the availability of suitable roosting with nearby foraging habitat suggest roosting is likely occurring in the survey area. No focused nighttime mist-netting or acoustic surveys were conducted. The developed land uses currently in the survey area would remain in place, and no impacts would result to the potential bat roosting habitat provided by the trees or structures in those areas. Therefore, potential impacts to these sensitive roosting bats would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would initially trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration configuration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, parking lot realignment, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

Sensitive Plant Species

Direct and Indirect Impacts

One large patch of California box-thorn was observed on the sandstone cliffs along the walking path in the southern portion of the Sunset Cliffs project site during the 2023 Harris biological surveys (Figure 5.3-11). California box-thorn is a CRPR 4.2 species and not designated as narrow endemic or covered under the MSCP SAP. As discussed in Section 5.3.2.1, Direct Impacts, impacts to plant species ranked CRPR 4, not considered "rare" from a statewide perspective, would not be considered significant since any populations identified on site would not represent a significant percentage of the population in terms of the ability for the species to persist. Therefore, potential direct impacts to California box-thorn from implementation of the Sunset Cliffs project would be considered less than significant, and no mitigation is required.

While no focused rare plant surveys were conducted in the Sunset Cliffs survey area, no other sensitive plant species were determined to have a moderate or high potential to occur in the survey area (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). Further, the Sunset Cliffs project site and potential impact area are primarily within the developed land, which has a low potential to support sensitive plant species. In addition, because the Sunset Cliffs project site is adjacent to the MHPA and could result in potential indirect impacts to the preserve, the Sunset Cliffs project would be required to implement the MSCP SAP Section 1.4.3, LUAGs. The Sunset Cliffs projects' consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Therefore, direct and indirect impacts to sensitive plant species would be less than significant, and no mitigation is required.

Sensitive Wildlife Species

Direct Impacts

The sensitive wildlife species that were observed in the Sunset Cliffs survey area during 2023 Harris surveys and the sensitive wildlife species that were determined to have a high potential to occur in the Sunset Cliffs survey area are summarized in Section 5.3.1.4 above and described in Table 4 and Sections 5.4.4 and 5.4.5 of the BRTR (Appendix C) (Figures 5.3-11, 5.3-12, 5.3-12f, and 5.3-12f). The five sensitive wildlife species observed in the Sunset Cliffs survey area include the following: California brown pelican, California sea lion, Caspian tern, double-crested cormorant, and long-billed curlew (Table 4 and Section 5.4.4 of the BRTR [Appendix C]). In addition, nine sensitive wildlife species that were not observed but determined to have a high potential to occur in the survey area include the following: American peregrine falcon, black tern, California least tern, Cooper's hawk, elegant tern, Mexican long-tongued bat, northern harrier, osprey, and reddish egret (Table 4 and Section 5.4.5 of the BRTR [Appendix C]). The Sunset Cliffs project has the potential to directly impact these species during construction and operation of the Sunset Cliffs project through displacement of individual wildlife or elimination of portions of their habitat. No sensitive wildlife species were determined to have a moderate potential to occur in the Sunset Cliffs survey area. Implementation of the Sunset Cliffs project could result in both permanent and temporary direct loss of habitat, including nesting, roosting, and foraging habitat, for the majority of the sensitive wildlife species observed or with a high potential to occur in the Sunset Cliffs survey area.

Of these 14 sensitive wildlife species observed or determined to have a moderate or high potential to occur, eight are covered by the MSCP SAP (Table 4 and Sections 5.4.4 and 5.4.5 of the BRTR [Appendix C]). These species are American peregrine falcon, California brown pelican, California least tern, Cooper's hawk, elegant tern, long-billed curlew, northern harrier, and reddish egret. The MSCP SAP requires ASMDs for four of the eight sensitive wildlife species covered under the plan. ASMDs are provided for California least tern, Cooper's hawk, elegant tern, and northern harrier; however, none are required for American peregrine falcon, California brown pelican, long-billed curlew, and reddish egret (City of San Diego 1997). Implementation of ASMDs for applicable MSCP SAP covered sensitive wildlife species that occur in the survey area would be required as a condition of future project-level approval. The Sunset Cliffs project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, with conformance with the MSCP SAP and the species-specific ASMDs as applicable, direct impacts to these eight MSCP SAP covered sensitive wildlife species to these eight MSCP SAP and the species-specific ASMDs as applicable, direct impacts to these eight MSCP SAP covered sensitive wildlife species would be less than significant, and no mitigation is required.

Similarly, California sea lion is a MMPA fully protected species, and MMPA does not allow take of any marine mammal species found in U.S. waters. As a condition of future project-level approval, the

Sunset Cliffs project would be required to avoid impacts to this species consistent with MMPA. Therefore, with conformance with MMPA, direct impacts to California sea lion would be less than significant, and no mitigation is required.

Potential direct impacts to the remaining six sensitive wildlife species determined to have a high potential to occur in the Sunset Cliffs survey area that are not covered by the MSCP SAP or protected under federal regulations are discussed below. An analysis of the exact acreage of impacts that would occur to these sensitive wildlife species from potential removal of habitat in the survey area as a result of the Sunset Cliffs project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Sunset Cliffs project, and any impacts to these sensitive wildlife species would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Sunset Cliffs project.

Aquatic and wetland vegetation communities and land cover types, including intertidal ocean (0.74), subtidal ocean (2.16 acres), and beach (2.87 acres), occur in the Sunset Cliffs survey area (Figures 5.3-1, 5.3-1f, and 5.3-1g). These aquatic communities provide suitable foraging habitat for sensitive bird and raptor species (not covered by the MSCP SAP) observed or determined to have a high potential to occur in these habitats in the survey area. Further, the sandstone cliffs within the survey area could provide perching and resting habitat for double-crested cormorant. These sensitive species include black tern, Caspian tern, double-crested cormorant, and osprey. Direct impacts outside of the developed land, including to the intertidal ocean, subtidal ocean, sandstone cliffs project, reducing potential impacts to foraging habitat for these four species to less than significant. Therefore, potential impacts to these sensitive wildlife species in the form of foraging habitat loss would be less than significant, and no mitigation is required.

The developed land in the eastern portion of the Sunset Cliffs survey area provides little to no suitable habitat value for most of the sensitive species observed or determined to have a high potential to occur in the survey area. However, a large number of flowering ornamental trees and shrubs, as well as mature eucalyptus and pine trees, are present within and along the edges of the developed land that could provide suitable foraging and overwintering habitat for the monarch butterfly. Direct impacts to the ornamental trees and shrubs in the developed land of the survey area could result in direct impacts to monarch butterfly in the form of permanent and temporary foraging and overwintering habitat loss. In addition, the ornamental plants, buildings, and other structures present in the developed land of the Sunset Cliffs survey area could provide suitable bat foraging and roosting habitat, specifically for Mexican long-tongued bat, which was determined to have a high potential to occur in the survey area. The developed land uses currently in the survey area, primarily residential and commercial, would remain in place, and no impacts would result to

the potential foraging, roosting, and overwintering habitat provided within those areas. The Sunset Cliffs project is required to comply with all federal, state, and local regulations applicable to biological resources as a condition of approval. Implementation is ensured through conditions of subsequent project-level approval. Therefore, potential impacts to these sensitive wildlife species would be less than significant, and no mitigation is required.

Indirect Impacts

Temporary construction-related and long-term operational indirect impacts to wildlife generally include lighting, increased human activity, hydrologic quality (increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), noise, vibration, and trash, which can attract both introduced terrestrial and native terrestrial and avian predators (such as American crows, common ravens, coyotes, domestic dog, raccoons, and striped skunks). These indirect impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species observed or determined to have a high potential to occur in the Sunset Cliffs survey area as discussed under Direct Impacts. The Sunset Cliffs project and subsequent project-level approvals would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Sunset Cliffs project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Sunset Cliffs project site is adjacent to the MHPA and could result in potential indirect impacts to the preserve, the Sunset Cliffs project would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Sunset Cliffs project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Indirect impacts to MSCP covered species would be precluded by conformance to MSCP Section 1.4.3, Land Use Adjacency Guidelines; and implementing Section 1.5, Preserve Management Recommendations of the City's MSCP Subarea Plan. Therefore, indirect impacts to sensitive wildlife during construction activities and operation of the Sunset Cliffs project would be less than significant, and no mitigation is required.

Nesting Birds

The Sunset Cliffs survey area provides suitable nesting habitat for sensitive birds protected under the CFGC and MBTA. Focused nest surveys were not conducted due to the programmatic nature of the Sunset Cliffs project, and no active nests or nesting behavior were observed during the 2023 Harris biological surveys.

The Sunset Cliffs project would be required to implement regulations protecting sensitive nesting birds, including the CFGC and MBTA. Implementation is ensured through conditions of

subsequent project-level approval. Due to known presence of federal and state endangered avian species, potential direct impacts to these sensitive wildlife species are considered potentially significant without mitigation.

Implementation of MM BIO-2 through MM BIO-6 would reduce potential direct impacts to sensitive wildlife species through monitoring by a qualified biologist prior to and during construction, conducting sensitive avian and wildlife species focused surveys prior to construction, and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the Sunset Cliffs project sites. These mitigation measures would reduce potential direct impacts to sensitive wildlife species, including nesting birds and raptors protected under the CFGC and MBTA.

Sensitive Roosting Bats

As previously discussed, suitable roosting habitat for sensitive bat species, including Mexican longtongued bat, hoary bat, western mastiff bat, occurs in the structures and ornamental trees within the developed land throughout the eastern portion of the Sunset Cliffs survey area. Although roosting bats were not observed during the 2023 Harris biological surveys, the availability of suitable roosting with nearby foraging habitat suggest roosting is likely occurring in the survey area. No focused nighttime mist-netting or acoustic surveys were conducted. The developed land uses currently in the Sunset Cliffs survey area would remain in place, and no impacts would result to the potential roosting habitat provided by the trees or structures in those areas. Therefore, potential impacts to these sensitive roosting bats would be less than significant, and no mitigation is required.

5.3.3.2 Issue 2: Sensitive Vegetation Communities

Would the proposed CRMP Phase 1 result in a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS?

Pilot Project: Ocean Beach – Dog Beach

Direct Impacts

A total of 7 vegetation communities and/or land cover types occur in the Ocean Beach – Dog Beach survey area (Tables 5.3-3 and 5.3-4) that cover a total of 26.4 acres. Construction activities on the Ocean Beach – Dog Beach project site could result in potential impacts to five sensitive vegetation communities, including up to approximately 0.26 acre of estuarine, 0.06 acre of southern coastal salt marsh, 4.93 acre of beach, 0.59 acre of disturbed southern foredunes, and 0.86 acre of disturbed Diegan coastal sage scrub (Tier II). Impacts to subtidal ocean that occurs in the Ocean Beach – Dog Beach survey buffer, outside of the Ocean Beach – Dog Beach project site, are not anticipated. The entire survey area is within the COZ.

Approximately 2.12 acres of the Ocean Beach – Dog Beach survey area are located within the MHPA boundary. Therefore, direct impacts could occur within and adjacent to the MHPA boundary on the Ocean Beach – Dog Beach project site. Additional short-term direct impacts within the MHPA may also occur from enhancement activities (e.g., hand removal of invasive species) in this site.

An analysis of the exact acreage of impacts that would occur to the sensitive vegetation communities on the Ocean Beach – Dog Beach project site as a result of the Pilot Project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific biological analysis would be conducted upon submittal of the Pilot Project, and any impacts to sensitive vegetation communities would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pilot Project. Potential direct impacts to sensitive vegetation communities, including estuarine, southern coastal salt marsh, beach, disturbed southern foredunes, and disturbed Diegan coastal sage scrub, that occur in the Ocean Beach – Dog Beach project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to sensitive vegetation communities through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones.

As described in Section 5.3.2.1, Direct Impacts, lands designated as Tier IV (e.g., developed land) are not considered to have significant habitat value, and any proposed impacts to these communities would not be considered significant. Therefore, impacts to Tier IV developed land on the Ocean Beach – Dog Beach project site would not require mitigation, in accordance with the Biology Guidelines (City of San Diego 2018).

It should be noted that the Pilot Project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Dog Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Dog Beach project site increases the potential for impacts to sensitive vegetation communities. Therefore, implementation of the permanent sand dunes as part of the Pilot Project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 5.3.3.1, Issue 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive vegetation communities. The Pilot Project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Pilot Project would be within and adjacent to the MHPA and could result in potential indirect impacts to the preserve, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Pilot Project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Consistency with the LUAGs ensures minimization of adverse edge effects from implementation of the Pilot Project. Therefore, indirect impacts to sensitive vegetation communities during construction activities and operation of the Pilot Project would be less than significant, and no mitigation is required.

La Jolla Shores

Direct Impacts

A total of three vegetation communities and/or land cover types occur in the La Jolla Shores survey area (Tables 2a and 2b of the BRTR [Appendix C]) that cover a total of 35.62 acres. Construction activities on the La Jolla Shores project site could result in potential impacts to one sensitive vegetation community, approximately 11.18 acres of beach. Impacts to subtidal ocean that occurs in the La Jolla Shores survey buffer, outside of the La Jolla Shores project site, are not anticipated. The entire survey area is within the COZ.

An analysis of the exact acreage of impacts that would occur to the one sensitive vegetation community, beach, on the La Jolla Shores project site as a result of the La Jolla Shores project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. However, it should be noted that neither design option under the La Jolla Shores project would develop on the sandy beach, and both would be limited to the developed areas of La Jolla Shores Park, the existing parking lot, and Kellogg Park. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the La Jolla Shores project, and any impacts to sensitive vegetation communities would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the La Jolla Shores project. Potential direct impacts to the sensitive vegetation community, beach, that occurs in the La Jolla Shores project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-

6 would reduce direct impacts to this sensitive vegetation community through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones.

Impacts to Tier IV developed land on the La Jolla Shores project site would not require mitigation, in accordance with the Biology Guidelines (City of San Diego 2018).

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 5.3.3.1, Issue 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive vegetation communities. The La Jolla Shores project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations through implementation of site design, source control, and incorporation of construction and permanent BMPs. The La Jolla Shores project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to sensitive vegetation communities during construction activities and operation of the La Jolla Shores project would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Direct Impacts

A total of six vegetation communities and/or land cover types occur in the Pacific Beach – Tourmaline Surf Park survey area (Tables 2a and 2b of the BRTR [Appendix C]) that cover a total of 11.97 acres. Construction activities on the Pacific Beach – Tourmaline Surf Park project site could result in potential impacts to three sensitive vegetation communities, including approximately 1.48 acre of beach, 0.05 acre of concrete-lined channel, and 0.09 acres of sandstone cliff. Impacts to subtidal ocean that occurs in the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park project site, are not anticipated. The entire survey area is within the COZ.

An analysis of the exact acreage of impacts that would occur to the sensitive vegetation communities, beach, concrete-lined channel, and sandstone cliff, on the Pacific Beach – Tourmaline Surf Park project site as a result of the Pacific Beach – Tourmaline Surf Park project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pacific Beach – Tourmaline Surf Park project, and any impacts to sensitive vegetation communities would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the

Pacific Beach – Tourmaline Surf Park project. Potential direct impacts to the sensitive vegetation communities, beach, concrete-lined channel, and sandstone cliff, that occurs in the Pacific Beach – Tourmaline Surf Park project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to this sensitive vegetation community through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones.

While impacts to the non-native woodland are not anticipated, impacts to Tier IV non-native woodland and developed land on the Pacific Beach – Tourmaline Surf Park project site would not require mitigation, in accordance with the Biology Guidelines (City of San Diego 2018).

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 5.3.3.1, Issue 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive vegetation communities. The Pacific Beach – Tourmaline Surf Park project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pacific Beach – Tourmaline Surf Park project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to sensitive vegetation communities during construction activities and operation of the Pacific Beach – Tourmaline Surf Park project would be less than significant, and no mitigation is required.

Mission Beach

Direct Impacts

A total of three vegetation communities and/or land cover types occur in the Mission Beach survey area (Tables 2a and 2b of the BRTR [Appendix C]) that cover a total of 17.09 acres. Construction activities on the Mission Beach project site could result in potential impacts to one sensitive vegetation community, approximately 8.13 acres of beach. Impacts to subtidal ocean that occurs in the Mission Beach survey buffer, outside of the Mission Beach project site, are not anticipated. The entire survey area is within the COZ.

An analysis of the exact acreage of impacts that would occur to the one sensitive vegetation community, beach, on the Mission Beach project site as a result of the Mission Beach project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Mission Beach project, and any impacts to sensitive vegetation communities would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Mission Beach project. Potential direct impacts to the sensitive vegetation community, beach, that occurs in the Mission Beach project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to this sensitive vegetation community through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones.

While impacts to the Tier IV developed land that occurs in the Mission Beach survey buffer outside of the Mission Beach project site are not anticipated, potential impacts would not require mitigation, in accordance with the Biology Guidelines (City of San Diego 2018).

It should be noted that both design options of the Mission Beach project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Mission Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Mission Beach project site increases the potential for impacts to sensitive vegetation communities. Therefore, implementation of the permanent sand dunes under both design options of the Mission Beach project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 5.3.3.1, Issue 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive vegetation communities. The Mission Beach project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Mission Beach project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to sensitive vegetation communities during construction activities and operation of the Mission Beach project would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Direct Impacts

A total of three vegetation communities and/or land cover types occur in the Ocean Beach – Pier survey area (Tables 2a and 2b of the BRTR [Appendix C]) that cover a total of 21.37 acres. Construction activities on the Ocean Beach – Pier project site could result in potential impacts to one sensitive vegetation community, approximately 8.02 acres of beach. Impacts to subtidal ocean that occurs in the Ocean Beach – Pier survey buffer, outside of the Ocean Beach – Pier project site, are not anticipated. The entire survey area is within the COZ.

An analysis of the exact acreage of impacts that would occur to the one sensitive vegetation community, beach, on the Ocean Beach – Pier project site as a result of the Ocean Beach – Pier project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Ocean Beach – Pier project, and any impacts to sensitive vegetation communities would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Ocean Beach – Pier project. Potential direct impacts to the sensitive vegetation community, beach, that occurs in the Ocean Beach – Pier project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to this sensitive vegetation communities and restoring impacted ones.

Impacts to Tier IV developed land on Ocean Beach – Pier project site would not require mitigation, in accordance with the Biology Guidelines (City of San Diego 2018).

It should be noted that the Ocean Beach – Pier project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Pier project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Pier project site increases the potential for impacts to sensitive vegetation communities. Therefore, implementation of the permanent sand dunes as part of the Ocean Beach – Pier project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 5.3.3.1, Issue 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive

vegetation communities. The Ocean Beach – Pier project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Ocean Beach – Pier project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to sensitive vegetation communities during construction activities and operation of the Ocean Beach – Pier project would be less than significant, and no mitigation is required.

Sunset Cliffs

Direct Impacts

A total of five vegetation communities and/or land cover types occur in the Sunset Cliffs survey area (Tables 2a and 2b of the BRTR [Appendix C]) that cover a total of 29.78 acres. Construction activities on the Sunset Cliffs project site are anticipated to occur within developed land and one sensitive vegetation community, up to approximately 0.02 acre of sandstone cliff. Impacts to subtidal ocean, intertidal ocean, and beach that occur in the Sunset Cliffs survey buffer, outside of the Sunset Cliffs project site, are not anticipated. The entire survey area is within the COZ.

The MHPA occurs only within the survey buffer of the Sunset Cliffs project site, not within the site itself. Therefore, direct impacts could occur adjacent to the MHPA boundary on the Sunset Cliffs project site.

An analysis of the exact acreage of impacts that would occur to the sensitive vegetation community, sandstone cliff, on the Sunset Cliffs project site as a result of the Sunset Cliffs project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Sunset Cliffs project, and any impacts to sensitive vegetation communities would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Sunset Cliffs project. Potential direct impacts to the sensitive vegetation community, sandstone cliff, that occurs in the Sunset Cliffs project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to this sensitive vegetation communities and restoring impacted ones.

Impacts to Tier IV developed land on the Sunset Cliffs project site would not require mitigation, in accordance with the Biology Guidelines (City of San Diego 2018).

Indirect Impacts

Most of the indirect impacts to sensitive plant species described in Section 5.3.3.1, Issue 1: Sensitive Plant and Wildlife Species, also result in potentially significant indirect impacts to sensitive vegetation communities. The Sunset Cliffs project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Sunset Cliffs project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Sunset Cliffs project would be adjacent to the MHPA and could result in potential indirect impacts to the preserve, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Sunset Cliffs project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Consistency with the LUAGs ensures minimization of adverse edge effects from implementation of the Sunset Cliffs project. Therefore, indirect impacts to sensitive vegetation communities during construction activities and operation of the Sunset Cliffs project would be less than significant, and no mitigation is required.

5.3.3.3 Issue 3: Jurisdictional Aquatic Resources

Would the proposed CRMP Phase 1 result in a substantial adverse impact on federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Pilot Project: Ocean Beach – Dog Beach

Direct Impacts

A total of approximately 11.37 acres of wetlands and non-wetland waters potentially under the jurisdiction of the USACE and RWQCB, CDFW and/or wetlands regulated by the City of San Diego occur in the Ocean Beach – Dog Beach survey area (Tables 5.3-2 and 5.3-4). These potentially jurisdictional aquatic resources in the Ocean Beach – Dog Beach survey area include approximately 0.88 acre of marine wetland waters (southern coastal salt marsh), and 10.49 acres of marine non-wetland waters (0.24 acre of subtidal ocean, 1.25 acres of estuarine, and 8.9 acres of beach). Construction activities on the Ocean Beach – Dog Beach project site could result in potential impacts to jurisdictional aquatic resources, including estuarine, southern coastal salt marsh, and beach. Specifically, construction of the proposed sand dune would require excavation of sand from the beach intertidal zone, similar to the City's existing annual winter berm program. Impacts to subtidal ocean that occurs in the Ocean Beach – Dog Beach survey buffer, outside of the Ocean Beach – Dog Beach project site, are not anticipated.

As discussed in Section 5.3.3.2, Issue 2: Sensitive Vegetation Communities, the Pilot Project could result in direct impacts to the aquatic and wetland vegetation communities also potentially under the jurisdiction of the USACE, RWQCB, and CDFW and regulated by the City of San Diego. An analysis of the exact acreage of impacts that would occur to jurisdictional aquatic resources in the Ocean Beach - Dog Beach project site as a result of the Pilot Project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pilot Project, and any impacts to jurisdictional aquatic resources would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pilot Project. Potential direct impacts to jurisdictional aquatic resources, including estuarine, southern coastal salt marsh, and beach, that occur in the Ocean Beach – Dog Beach project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources through obtaining resource agency permits.

For development in the COZ, the City's Land Development Code, ESL Regulations and Biology Guidelines require a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained. Since a large portion of the Pilot Project necessarily occurs within or directly adjacent to wetlands and the Pilot Project is confined by existing development in the surrounding area, impacts to the wetland buffers in these areas would be unavoidable and necessary reductions to the width of the wetland buffers would be determined in coordination with the USACE, RWQCB, CDFW, and USFWS as part of the subsequent project-specific environmental review pursuant to CEQA, in accordance with the requirements in the ESL Regulations, and Biology Guidelines (City of San Diego 2018). Although wetland buffers may be reduced in some areas, the Pilot Project would result in the protection and restoration of natural coastline functions such that the Pilot Project would result in a net benefit to these habitats and associated wildlife species by providing an overall increase in wetland area following project implementation. In these locations, the Pilot Project activities would be considered a compatible use within COZ wetland buffers (i.e., restoration), in accordance with the allowed uses listed in Section 143.0130 of City's LDC ESL regulations. In addition, to the extent feasible, the Pilot Project would be designed to minimize the extent of construction activities within and adjacent to wetlands, including the number of temporary access routes and the size of staging areas. As a result, impacts to wetland buffers would be minimized to the maximum extent practicable and would be less than significant, and no mitigation is required.

The Pilot Project would be required to be in compliance with all federal, state, and local regulations protecting biological resources as a condition of subsequent project-level approvals. This includes

complying with applicable federal and state regulations that ensure no net loss of aquatic resources, such as Section 404 of the federal CWA, Sections 9 and 10 of the Rivers and Harbors Act, Section 1600 of the CFGC, and Porter-Cologne. The Pilot Project would be required to obtain regulatory permits from the USACE, RWQCB, and CDFW and provide compensatory mitigation for impacts prior to the start of construction that would ensure that no net loss of resources would result from implementation of the Pilot Project. Therefore, direct impacts to jurisdictional aquatic resources would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources through obtaining resource agency approvals and permits.

It should be noted that the Pilot Project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Dog Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Dog Beach project site and these littoral sources of sediment increases the potential for impacts to jurisdictional aquatic resources. Therefore, implementation of the permanent sand dunes as part of the Pilot Project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Most of the indirect impacts to sensitive vegetation communities described in Section 5.3.3.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. As previously discussed in Section 5.3.3.1, Impact Analysis, the Pilot Project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Pilot Project is within and adjacent to the MHPA and could result in potential indirect impacts to the preserve, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Pilot Project's consistency with the LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Consistency with the LUAGs ensures minimization of adverse edge effects from implementation of the Pilot Project. Therefore, indirect impacts to jurisdictional aquatic resources during construction activities and operation of the Pilot Project would be less than significant, and no mitigation is required.

La Jolla Shores

Direct Impacts

A total of approximately 18.34 acres of non-wetland waters potentially under the jurisdiction of the USACE and RWQCB, CDFW and/or wetlands regulated by the City of San Diego occur in the La Jolla Shores survey area (refer to Tables 5.3-2 and 5.3-4). These potentially jurisdictional aquatic resources in the La Jolla Shores survey area include marine non-wetland waters (approximately 3.05 acres of subtidal ocean and 15.29 acres of beach). Construction activities on the La Jolla Shores project site could result in potential impacts to jurisdictional aquatic resources. Impacts to subtidal ocean that occurs in the La Jolla Shores survey buffer, outside of the La Jolla Shores project site, are not anticipated.

As discussed in Section 5.3.3.2, Issue 2: Sensitive Vegetation Communities, the La Jolla Shores project could result in direct impacts to the aquatic vegetation community, beach, which is also potentially under the jurisdiction of the USACE, RWQCB, and CDFW and regulated by the City of San Diego. An analysis of the exact acreage of impacts that would occur to jurisdictional aquatic resources in the La Jolla Shores project site as a result of the La Jolla Shores project is not provided at the programmatic level because such analysis would be speculative in nature since future sitespecific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the La Jolla Shores project, and any impacts to jurisdictional aquatic resources would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the La Jolla Shores project. Potential direct impacts to the jurisdictional aquatic resource, beach, that occurs in the La Jolla Shores project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

For development in the COZ, the City requires a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained. Since a large portion of the La Jolla Shores project necessarily occurs within or directly adjacent to wetlands and the La Jolla Shores project is confined by existing development in the surrounding area, impacts to the wetland buffers in these areas would be unavoidable and necessary reductions to the width of the wetland buffers would be determined in coordination with the USACE, RWQCB, CDFW, and USFWS prior to project implementation, in accordance with the requirements in Biology Guidelines (City of San Diego 2018). Although wetland buffers may be reduced in some areas, the La Jolla Shores project would result in the protection and restoration of natural coastline functions under both design options such that the La Jolla Shores project would result in a net benefit to these habitats and associated wildlife species by providing an overall increase in wetland area

following project implementation. In these locations, the La Jolla Shores project activities would be considered a compatible use within COZ wetland buffers (i.e., restoration), in accordance with the allowed uses listed in Section 143.0130 of City's LDC ESL regulations. In addition, to the extent feasible, the La Jolla Shores project would be designed to minimize the extent of construction activities within and adjacent to wetlands, including the number of temporary access routes and the size of staging areas. As a result, impacts to wetland buffers would be minimized to the maximum extent practicable and would be less than significant, and no mitigation is required.

The La Jolla Shores project would demonstrate compliance with all federal, state, and local regulations protecting biological resources as a condition of subsequent project-level approvals. This includes complying with applicable federal and state regulations that ensure no net loss of aquatic resources, such as Section 404 of the federal CWA, Sections 9 and 10 of the Rivers and Harbors Act, Section 1600 of the CFGC, and Porter-Cologne. The La Jolla Shores project would be required to obtain regulatory permits from the USACE, RWQCB, and CDFW and provide compensatory mitigation for impacts prior to the start of construction that would ensure that no net loss of resources would result from implementation of the La Jolla Shores project. Therefore, direct impacts to jurisdictional aquatic resources would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

Indirect Impacts

Most of the indirect impacts to sensitive vegetation communities described in Section 5.3.3.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. As previously discussed in Section 5.3.3.2, Impact Analysis, the La Jolla Shores project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The La Jolla Shores project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to jurisdictional aquatic resources during construction activities and operation of the La Jolla Shores project would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Direct Impacts

A total of approximately 4.32 acres of non-wetland waters potentially under the jurisdiction of the USACE and RWQCB, CDFW and/or wetlands regulated by the City of San Diego occur in the

Pacific Beach – Tourmaline Surf Park survey area (refer to Tables 5.3-2 and 5.3-4). These potentially jurisdictional aquatic resources in the Pacific Beach – Tourmaline Surf Park survey area include marine non-wetland waters (approximately 0.36 acre of subtidal ocean and 3.56 acres of beach) and 0.40 acre of non-wetland waters (concrete channel). Construction activities on the Pacific Beach – Tourmaline Surf Park project site could result in potential impacts to jurisdictional aquatic resources, including beach and concrete channel. Specifically, construction of the proposed sand and cobble dune would require excavation of sand from the beach intertidal zone, similar to the City's existing annual winter berm program. Impacts to subtidal ocean that occurs in the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park survey buffer, outside of the Pacific Beach – Tourmaline Surf Park

As discussed in Section 5.3.3.2, Issue 2: Sensitive Vegetation Communities, the Pacific Beach – Tournaline Surf Park project could result in direct impacts to the aquatic and wetland vegetation communities also potentially under the jurisdiction of the USACE, RWQCB, and CDFW and regulated by the City of San Diego. An analysis of the exact acreage of impacts that would occur to jurisdictional aquatic resources in the Pacific Beach - Tourmaline Surf Park project site as a result of the Pacific Beach - Tourmaline Surf Park project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pacific Beach - Tourmaline Surf Park project, and any impacts to jurisdictional aquatic resources would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pacific Beach - Tourmaline Surf Park project. Potential direct impacts to jurisdictional aquatic resources, including beach and concrete channel, that occur in the Pacific Beach – Tourmaline Surf Park project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

For development in the COZ, the City requires a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained. Since a large portion of the Pacific Beach – Tourmaline Surf Park project necessarily occurs within or directly adjacent to wetlands and the Pacific Beach – Tourmaline Surf Park project is confined by existing development in the surrounding area, impacts to the wetland buffers in these areas would be unavoidable and necessary reductions to the width of the wetland buffers would be determined in coordination with the USACE, RWQCB, CDFW, and USFWS prior to project implementation, in accordance with the requirements in the ESL Regulations and Biology Guidelines (City of San Diego 2018). Although wetland buffers may be reduced in some areas, the Pacific Beach – Tourmaline Surf Park project would result in the protection and restoration of

natural coastline functions such that the Pacific Beach – Tourmaline Surf Park project would result in a net benefit to these habitats and associated wildlife species by providing an overall increase in wetland area following project implementation. In these locations, the Pacific Beach – Tourmaline Surf Park project activities would be considered a compatible use within COZ wetland buffers (i.e., restoration), in accordance with the allowed uses listed in Section 143.0130 of City's LDC ESL regulations. In addition, to the extent feasible, the Pacific Beach – Tourmaline Surf Park project would be designed to minimize the extent of construction activities within and adjacent to wetlands, including the number of temporary access routes and the size of staging areas. As a result, impacts to wetland buffers would be minimized to the maximum extent practicable and would be less than significant, and no mitigation is required.

The Pacific Beach – Tourmaline Surf Park project would be required to be in compliance with all federal, state, and local regulations protecting biological resources as a condition of subsequent project-level approvals. This includes complying with applicable federal and state regulations that ensure no net loss of aquatic resources, such as Section 404 of the federal CWA, Sections 9 and 10 of the Rivers and Harbors Act, Section 1600 of the CFGC, and Porter-Cologne. The Pacific Beach – Tourmaline Surf Park project would be required to obtain regulatory permits from the USACE, RWQCB, and CDFW and provide compensatory mitigation for impacts prior to the start of construction that would ensure that no net loss of resources would result from implementation of the Pacific Beach – Tourmaline Surf Park project. Therefore, direct impacts to jurisdictional aquatic resources would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

Indirect Impacts

Most of the indirect impacts to sensitive vegetation communities described in Section 5.3.3.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. As previously discussed in Section 5.3.3.2, Impact Analysis, the Pacific Beach – Tourmaline Surf Park project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pacific Beach – Tourmaline Surf Park project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to jurisdictional aquatic resources during construction activities and operation of Pacific Beach – Tourmaline Surf Park project would be less than significant, and no mitigation is required.

Mission Beach

Direct Impacts

A total of approximately 13.16 acres of non-wetland waters potentially under the jurisdiction of the USACE and RWQCB, CDFW and/or wetlands regulated by the City of San Diego occur in the Mission Beach survey area (refer to Tables 5.3-2 and 5.3-4). These potentially jurisdictional aquatic resources in the Mission Beach survey area include marine non-wetland waters (approximately 3.67 acres of subtidal ocean and 9.49 acres of beach). Construction activities on the Mission Beach project site could result in potential impacts to jurisdictional aquatic resources. Specifically, construction of the proposed sand dune would require excavation of sand from the beach intertidal zone, similar to the City's existing annual winter berm program. Impacts to subtidal ocean that occurs in the Mission Beach survey buffer, outside of the project site, are not anticipated.

As discussed in Section 5.3.3.2, Issue 2: Sensitive Vegetation Communities, the Mission Beach project could result in direct impacts to the aquatic vegetation community, beach, which is also potentially under the jurisdiction of the USACE, RWQCB, and CDFW and regulated by the City of San Diego. An analysis of the exact acreage of impacts that would occur to jurisdictional aquatic resources in the Mission Beach project site as a result of the Mission Beach project is not provided at the programmatic level because such analysis would be speculative in nature since future sitespecific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Mission Beach project, and any impacts to jurisdictional aquatic resources would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Mission Beach project. Potential direct impacts to the jurisdictional aquatic resource, beach, that occurs in the Mission Beach project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

For development in the COZ, the City requires a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained. Since a large portion of the Mission Beach project necessarily occurs within or directly adjacent to wetlands and the Mission Beach project is confined by existing development in the surrounding area, impacts to the wetland buffers in these areas would be unavoidable and necessary reductions to the width of the wetland buffers would be determined in coordination with the USACE, RWQCB, CDFW, and USFWS prior to project implementation, in accordance with the requirements in Biology Guidelines (City of San Diego 2018). Although wetland buffers may be reduced in some

areas, the Mission Beach project would result in the protection and restoration of natural coastline functions such that the Mission Beach project would result in a net benefit to these habitats and associated wildlife species by providing an overall increase in wetland area following project implementation. In these locations, the Mission Beach project activities would be considered a compatible use within COZ wetland buffers (i.e., restoration), in accordance with the allowed uses listed in Section 143.0130 of City's LDC ESL regulations. In addition, to the extent feasible, the Mission Beach project would be designed to minimize the extent of construction activities within and adjacent to wetlands, including the number of temporary access routes and the size of staging areas. As a result, impacts to wetland buffers would be minimized to the maximum extent practicable and would be less than significant, and no mitigation is required.

The Mission Beach project would be required to be in compliance with all federal, state, and local regulations protecting biological resources as a condition of subsequent project-level approvals. This includes complying with applicable federal and state regulations that ensure no net loss of aquatic resources, such as Section 404 of the federal CWA, Sections 9 and 10 of the Rivers and Harbors Act, Section 1600 of the CFGC, and Porter-Cologne. The Mission Beach project would be required to obtain regulatory permits from the USACE, RWQCB, and CDFW and provide compensatory mitigation for impacts prior to the start of construction that would ensure that no net loss of resources would result from implementation of the Mission Beach project. Therefore, direct impacts to jurisdictional aquatic resources would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

It should be noted that both design options of the Mission Beach project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Mission Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Mission Beach project site and these littoral sources of sediment increases the potential for impacts to jurisdictional aquatic resources. Therefore, implementation of the permanent sand dunes under both design options of the Mission Beach project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Most of the indirect impacts to sensitive vegetation communities described in Section 5.3.3.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. As previously discussed in Section 5.3.3.2, Impact Analysis, the Mission Beach project would be required to be in

compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Mission Beach project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to jurisdictional aquatic resources during construction activities and operation of the Mission Beach project would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Direct Impacts

A total of approximately 11.91 acres of non-wetland waters potentially under the jurisdiction of the USACE and RWQCB, CDFW and/or wetlands regulated by the City of San Diego occur in the Ocean Beach – Pier survey area (refer to Tables 5.3-2 and 5.3-4). These potentially jurisdictional aquatic resources in the Ocean Beach – Pier survey area include marine non-wetland waters (approximately 2.64 acres of subtidal ocean and 9.27 acres of beach). Construction activities on the Ocean Beach – Pier project site could result in potential impacts to jurisdictional aquatic resources. Specifically, construction of the proposed sand dune would require excavation of sand from the beach intertidal zone, similar to the City's existing annual winter berm program. Impacts to subtidal ocean that occurs in the Ocean Beach – Pier survey buffer, outside of the Ocean Beach – Pier project site, are not anticipated.

As discussed in Section 5.3.3.2, Issue 2: Sensitive Vegetation Communities, the Ocean Beach – Pier project could result in direct impacts to the aquatic vegetation community, beach, which is also potentially under the jurisdiction of the USACE, RWQCB, and CDFW and regulated by the City of San Diego. An analysis of the exact acreage of impacts that would occur to jurisdictional aquatic resources in the Ocean Beach – Pier project site as a result of the Pilot Project is not provided at the programmatic level because such analysis would be speculative in nature since future site-specific project designs are not known at this time. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Ocean Beach - Pier project, and any impacts to jurisdictional aquatic resources would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Ocean Beach - Pier project. Potential direct impacts to the jurisdictional aquatic resource, beach, that occurs in the Ocean Beach - Pier project site would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources to less than significant through obtaining resource agency permits.

For development in the COZ, the City requires a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained. Since a large portion of the Ocean Beach – Pier project necessarily occurs within or directly adjacent to wetlands and the Ocean Beach – Pier project is confined by existing development in the surrounding area, impacts to the wetland buffers in these areas would be unavoidable and necessary reductions to the width of the wetland buffers would be determined in coordination with the USACE, RWQCB, CDFW, and USFWS prior to project implementation, in accordance with the requirements in the ESL Regulations and Biology Guidelines (City of San Diego 2018). Although wetland buffers may be reduced in some areas, the Ocean Beach - Pier project would result in the protection and restoration of natural coastline functions such that the Ocean Beach - Pier project would result in a net benefit to these habitats and associated wildlife species by providing an overall increase in wetland area following project implementation. In these locations, the Ocean Beach -Pier project activities would be considered a compatible use within COZ wetland buffers (i.e., restoration), in accordance with the allowed uses listed in Section 143.0130 of City's LDC ESL regulations. In addition, to the extent feasible, the Ocean Beach - Pier project would be designed to minimize the extent of construction activities within and adjacent to wetlands, including the number of temporary access routes and the size of staging areas. As a result, impacts to wetland buffers would be minimized to the maximum extent practicable and would be less than significant, and no mitigation is required.

The Ocean Beach – Pier project would be required to be in compliance with all federal, state, and local regulations protecting biological resources and any mitigation measures identified at the time of subsequent project review would be incorporated as a condition of subsequent project-level approvals. This includes complying with applicable federal and state regulations that ensure no net loss of aquatic resources, such as Section 404 of the federal CWA, Sections 9 and 10 of the Rivers and Harbors Act, Section 1600 of the CFGC, and Porter-Cologne. The Ocean Beach – Pier project would be required to obtain regulatory permits from the USACE, RWQCB, and CDFW and provide compensatory mitigation for impacts prior to the start of construction that would ensure that no net loss of resources would result from implementation of the Ocean Beach – Pier project. Therefore, direct impacts to jurisdictional aquatic resources would be potentially significant without mitigation. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources through obtaining resource agency permits.

It should be noted that the Ocean Beach – Pier project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Pier project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Pier project site and these littoral sources of sediment increases the potential for impacts to jurisdictional aquatic resources. Therefore, implementation of the permanent sand dunes as part of the Ocean Beach – Pier project would greatly reduce the potential for long-term impacts.

Indirect Impacts

Most of the indirect impacts to sensitive vegetation communities described in Section 5.3.3.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. As previously discussed in Section 5.3.3.2, Impact Analysis, the Ocean Beach – Pier project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Ocean Beach – Pier project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to jurisdictional aquatic resources during construction activities and operation of the Ocean Beach – Pier project would be less than significant, and no mitigation is required.

Sunset Cliffs

Direct Impacts

A total of approximately 5.77 acres of non-wetland waters potentially under the jurisdiction of the USACE and RWQCB, CDFW and/or wetlands regulated by the City of San Diego occur in the Sunset Cliffs survey area (refer to Tables 5.3-2 and 5.3-4). These potentially jurisdictional aquatic resources occur in the Sunset Cliffs survey buffer, outside of the Sunset Cliffs project site, and include marine non-wetland waters (approximately 2.16 acres of subtidal ocean, 0.74 acre of intertidal ocean, and 2.87 acres of beach). Thus, construction activities on the Sunset Cliffs project site are not anticipated to result in impacts to these jurisdictional aquatic resources. Therefore, direct impacts to jurisdictional aquatic resources would be less than significant, and no mitigation is required.

For development in the COZ, the City requires a 100-foot-wide avoidance buffer surrounding wetland resources to reduce indirect impacts and ensure the value and function of the wetland is maintained. Since the Sunset Cliffs project necessarily occurs directly adjacent to wetlands and the Sunset Cliffs project is confined by existing development in the surrounding area, impacts to the wetland buffers in these areas would be unavoidable and necessary reductions to the width of the wetland buffers would be determined in coordination with the USACE, RWQCB, CDFW, and USFWS prior to project implementation, in accordance with the requirements in the City's Biology Guidelines (City of San Diego 2018). Although wetland buffers may be reduced in some areas, the

Sunset Cliffs project would result in the protection and restoration of natural coastline functions such that the Sunset Cliffs project would result in a net benefit to these habitats and associated wildlife species by providing an overall increase in wetland area following project implementation. In these locations, the Sunset Cliffs project activities would be considered a compatible use within COZ wetland buffers (i.e., restoration), in accordance with the allowed uses listed in Section 143.0130 of City's LDC ESL regulations. In addition, to the extent feasible, the Sunset Cliffs project would be designed to minimize the extent of construction activities within and adjacent to wetlands, including the number of temporary access routes and the size of staging areas. As a result, impacts to wetland buffers would be minimized to the maximum extent practicable and would be less than significant, and no mitigation is required.

Indirect Impacts

Most of the indirect impacts to sensitive vegetation communities described in Section 5.3.3.2 also result in potentially significant indirect impacts to jurisdictional aquatic resources. As previously discussed in Section 5.3.3.2, Impact Analysis, the Sunset Cliffs project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Sunset Cliffs project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Sunset Cliffs project is adjacent to the MHPA and could result in potential indirect impacts to the preserve, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Sunset Cliffs project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Consistency with the LUAGs ensures minimization of adverse edge effects from implementation of the Sunset Cliffs project. Therefore, indirect impacts to jurisdictional aquatic resources during construction activities and operation of the Sunset Cliffs project would be less than significant, and no mitigation is required.

5.3.3.4 Issue 4: Wildlife Corridors and Habitat Linkages

Would the proposed CRMP Phase 1 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?

Pilot Project: Ocean Beach – Dog Beach

Direct Impacts

The Ocean Beach – Dog Beach survey area is likely to be used as a wildlife movement corridor because it provides suitable nesting, foraging, and dispersal areas for both sensitive and common

wildlife species because of the presence of native vegetation communities (among the last remaining dunes in this part of the City) and its connection and proximity to the Pacific coast and open waters to the west as well as Smiley Lagoon to the east. The Ocean Beach – Dog Beach survey area is not identified in the MSCP SAP as a biological core or linkage area. However, the Ocean Beach – Dog Beach survey area includes the Pacific coast, which functions as a wildlife movement corridor for resident and migratory birds, marine mammals, and fish species both locally and regionally. The dense residential and commercial development immediately to the south of the survey area has the potential to limit north–south wildlife movement through the survey area. However, the aquatic communities in the survey area are high-quality, contiguous sections of these habitats that support east-west movement and linkages to other habitats along the San Diego River and Pacific coast for both local and migratory species.

Pilot Project impacts are anticipated primarily in areas in and adjacent to existing development and would only be short-term impacts that occur during construction activities on the Ocean Beach – Dog Beach project site. All existing wildlife corridors would remain in place after implementation of the Pilot Project. Therefore, significant direct long-term impacts to wildlife corridors and habitat connectivity provided by the survey area are not expected to occur.

The northern portion of the Ocean Beach – Dog Beach project site is within and adjacent to the MHPA and contains sensitive habitat suitable for wildlife movement and foraging (Figure 5.3-14, Multi-Habitat Planning Area). However, the activities proposed in the Ocean Beach – Dog Beach project site would provide a long-term benefit for wildlife movement through the survey area by protecting critical coastal habitats with nature-based resilience solutions. While project activities may temporarily disrupt wildlife movement through the survey area, the Pilot Project is not expected to have a significant impact on habitat linkage over the long-term because the overall habitat quality of the existing corridors would be maintained following project implementation. Therefore, impacts to wildlife corridors and habitat connectivity would be less than significant, and no mitigation is required.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 5.3.3.1 for impacts to sensitive wildlife species. As previously discussed in that section, the Pilot Project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pilot Project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines, is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Pilot Project is located within and adjacent to the MHPA and could result in potential indirect impacts to the preserve, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Pilot

Project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Consistency with the LUAGs ensures minimization of adverse edge effects from implementation of the Pilot Project. Therefore, indirect impacts to wildlife movement corridors and habitat connectivity during construction activities and operation of the Pilot Project would be less than significant, and no mitigation is required.

La Jolla Shores

Direct Impacts

The La Jolla Shores survey area is likely to be used as wildlife movement corridors because the area provides suitable nesting, foraging, and dispersal areas for both sensitive and common wildlife species because of its connection and proximity to the Pacific coast and open waters to the west. The La Jolla Shores survey area is not identified in the MSCP SAP as biological core or linkage areas. However, the La Jolla Shores survey area includes the Pacific coast, which functions as a wildlife movement corridor for resident and migratory birds, marine mammals, and fish species both locally and regionally. The dense residential and commercial development immediately to the east of the La Jolla Shores survey area has the potential to limit east-west wildlife movement through the survey area. However, the survey area includes high-quality, contiguous habitat that supports north–south movement and linkages to other habitats along the Pacific coast for both local and migratory species.

The La Jolla Shores project would occur primarily in and adjacent to existing development and would only have short-term impacts that occur during construction activities on the project site. All existing wildlife corridors would remain in place after implementation of the La Jolla Shores project. Therefore, significant direct long-term impacts to wildlife corridors and habitat connectivity provided by the survey area are not expected to occur.

The La Jolla Shores project would provide a long-term benefit for wildlife movement through the survey area by protecting critical coastal habitats with nature-based resilience solutions under both design options. While construction activities may temporarily disrupt wildlife movement through the survey area, the La Jolla Shores project is not expected to have a significant impact on habitat linkage over the long-term because the overall habitat quality of the existing corridors would be maintained following implementation of the La Jolla Shores project. Therefore, impacts to wildlife corridors and habitat connectivity would be less than significant, and no mitigation is required.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 5.3.3.1 for impacts to sensitive wildlife species. As previously discussed in that section, the La Jolla Shores project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual

(City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The La Jolla Shores project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines, is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to wildlife movement corridors and habitat connectivity during construction and operation of the La Jolla Shores project would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Direct Impacts

The Pacific Beach – Tourmaline Surf Park survey area is likely to be used as wildlife movement corridors because the area provides suitable nesting, foraging, and dispersal areas for both sensitive and common wildlife species because of its connection and proximity to the Pacific coast and open waters to the west. The Pacific Beach – Tourmaline Surf Park survey area is not identified in the MSCP SAP as biological core or linkage areas. However, the Pacific Beach – Tourmaline Surf Park survey area includes the Pacific coast, which functions as a wildlife movement corridor for resident and migratory birds, marine mammals, and fish species both locally and regionally. The dense residential and commercial development immediately to the east of the Pacific Beach – Tourmaline Surf Park survey area has the potential to limit east-west wildlife movement through the survey area. However, the survey area includes high-quality, contiguous habitat that supports north–south movement and linkages to other habitats along the Pacific coast for both local and migratory species.

The Pacific Beach – Tourmaline Surf Park project would occur primarily in and adjacent to existing development and would only have short-term impacts that occur during construction activities on the project site. All existing wildlife corridors would remain in place after implementation of the Pacific Beach – Tourmaline Surf Park project. Therefore, significant direct long-term impacts to wildlife corridors and habitat connectivity provided by the survey area are not expected to occur.

The Pacific Beach – Tourmaline Surf Park project would provide a long-term benefit for wildlife movement through the survey area by protecting critical coastal habitats with nature-based resilience solutions. While construction activities may temporarily disrupt wildlife movement through the survey area, the Pacific Beach – Tourmaline Surf Park project is not expected to have a significant impact on habitat linkage over the long-term because the overall habitat quality of the existing corridors would be maintained following implementation of the Pacific Beach – Tourmaline Surf Park project. Therefore, impacts to wildlife corridors and habitat connectivity would be less than significant, and no mitigation is required.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 5.3.3.1 for impacts to sensitive wildlife species. As previously discussed in that section, the Pacific Beach – Tourmaline Surf Park project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Pacific Beach – Tourmaline Surf Park project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines, is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to wildlife movement corridors and habitat connectivity during construction and operation of the Pacific Beach – Tourmaline Surf Park project would be less than significant, and no mitigation is required.

Mission Beach

Direct Impacts

The Mission Beach survey area is likely to be used as wildlife movement corridors because the area provides suitable nesting, foraging, and dispersal areas for both sensitive and common wildlife species because of its connection and proximity to the Pacific coast and open waters to the west. The Mission Beach survey area is not identified in the MSCP SAP as biological core or linkage areas. However, the Mission Beach survey area includes the Pacific coast, which functions as a wildlife movement corridor for resident and migratory birds, marine mammals, and fish species both locally and regionally. The dense residential and commercial development immediately to the east of the Mission Beach survey area has the potential to limit east-west wildlife movement through the survey area. However, the survey area includes high-quality, contiguous habitat that supports north–south movement and linkages to other habitats along the Pacific coast for both local and migratory species.

The Mission Beach project would occur primarily in and adjacent to existing development and would only have short-term impacts that occur during construction activities on the project site. All existing wildlife corridors would remain in place after implementation of the Mission Beach project. Therefore, significant direct long-term impacts to wildlife corridors and habitat connectivity provided by the survey area are not expected to occur.

The Mission Beach project would provide a long-term benefit for wildlife movement through the survey area by protecting critical coastal habitats with nature-based resilience solutions under both design options. While construction activities may temporarily disrupt wildlife movement through the survey area, the Mission Beach project is not expected to have a significant impact on habitat linkage over the long-term because the overall habitat quality of the existing corridors would be

maintained following implementation of the Mission Beach project. Therefore, impacts to wildlife corridors and habitat connectivity would be less than significant, and no mitigation is required.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 5.3.3.1 for impacts to sensitive wildlife species. As previously discussed in that section, the Mission Beach project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Mission Beach project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines, is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to wildlife movement corridors and habitat connectivity during construction and operation of the Mission Beach project would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Direct Impacts

The Ocean Beach – Pier survey area is likely to be used as wildlife movement corridors because the area provides suitable nesting, foraging, and dispersal areas for both sensitive and common wildlife species because of its connection and proximity to the Pacific coast and open waters to the west. The Ocean Beach – Pier survey area is not identified in the MSCP SAP as biological core or linkage areas. However, the Ocean Beach – Pier survey area includes the Pacific coast, which functions as a wildlife movement corridor for resident and migratory birds, marine mammals, and fish species both locally and regionally. The dense residential and commercial development immediately to the east of the Ocean Beach – Pier survey area has the potential to limit east-west wildlife movement through the survey area. However, the survey area includes highquality, contiguous habitat that supports north–south movement and linkages to other habitats along the Pacific coast for both local and migratory species.

The Ocean Beach – Pier project would occur primarily in and adjacent to existing development and would only have short-term impacts that occur during construction activities on the project site. All existing wildlife corridors would remain in place after implementation of the Ocean Beach – Pier project. Therefore, significant direct long-term impacts to wildlife corridors and habitat connectivity provided by the survey area are not expected to occur.

The Ocean Beach – Pier project would provide a long-term benefit for wildlife movement through the survey area by protecting critical coastal habitats with nature-based resilience solutions. While construction activities may temporarily disrupt wildlife movement through the survey area, the Ocean Beach – Pier project is not expected to have a significant impact on habitat linkage over the long-term because the overall habitat quality of the existing corridors would be maintained following implementation of the Ocean Beach – Pier project. Therefore, impacts to wildlife corridors and habitat connectivity would be less than significant, and no mitigation is required.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 5.3.3.1 for impacts to sensitive wildlife species. As previously discussed in that section, the Ocean Beach – Pier project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Ocean Beach – Pier project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines, is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). Therefore, indirect impacts to wildlife movement corridors and habitat connectivity during construction and operation of the Ocean Beach – Pier project would be less than significant, and no mitigation is required.

Sunset Cliffs

Direct Impacts

The Sunset Cliffs survey area is likely to be used as a wildlife movement corridor because it provides suitable nesting, foraging, and dispersal areas for both sensitive and common wildlife species because of its connection and proximity to the Pacific coast and open waters to the west. The Sunset Cliffs survey area is not identified in the MSCP SAP as a biological core or linkage area. However, the Sunset Cliffs survey area includes the Pacific coast, which functions as a wildlife movement corridor for resident and migratory birds, marine mammals, and fish species both locally and regionally. The dense residential and commercial development immediately to the east of the survey area has the potential to limit east-west wildlife movement through the survey area. However, the aquatic communities in the survey area are high-quality, contiguous sections of these habitats that support north–south movement and linkages to other habitats along the Pacific coast for both local and migratory species.

Sunset Cliffs project impacts are anticipated primarily in areas in and adjacent to existing development and would only be short-term impacts that occur during construction activities on the Sunset Cliffs project site. All existing wildlife corridors would remain in place after implementation of the Sunset Cliffs project. Therefore, significant direct long-term impacts to wildlife corridors and habitat connectivity provided by the survey area are not expected to occur.

The southern end of the survey buffer of the Sunset Cliffs project site is within and adjacent to the MHPA and contains sensitive habitat suitable for wildlife movement and foraging (Figure 5.3-14). However, the impacts proposed in the Sunset Cliffs project site would provide a long-term benefit for wildlife movement through the survey area by protecting critical coastal habitats with nature-based resilience solutions. While project activities may temporarily disrupt wildlife movement through the survey area, the Sunset Cliffs project is not expected to have a significant impact on habitat linkage over the long-term because the overall habitat quality of the existing corridors would be maintained following project implementation. Therefore, impacts to wildlife corridors and habitat connectivity would be less than significant, and no mitigation is required.

Indirect Impacts

Wildlife movement corridors and habitat connectivity would be impacted by many of the other indirect effects discussed in Section 5.3.3.1 for impacts to sensitive wildlife species. As previously discussed in that section, the Sunset Cliffs project would be required to be in compliance with the MSCP SAP, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, through implementation of site design, source control, and incorporation of construction and permanent BMPs. The Sunset Cliffs project's consistency with the MSCP SAP General Management Directives, species-specific ASMDs, and General Planning Policies and Design Guidelines, is demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C). In addition, because the Sunset Cliffs project is located adjacent to the MHPA and could result in potential indirect impacts to the preserve, it would be required to demonstrate consistency with the MSCP SAP Section 1.4.3, LUAGs. The Sunset Cliffs project's consistency with the MHPA LUAGs is demonstrated in Table 7 (Section 6.1.3) of the BRTR (Appendix C). Consistency with the LUAGs ensures minimization of adverse edge effects from implementation of the Sunset Cliffs project. Therefore, indirect impacts to wildlife movement corridors and habitat connectivity during construction activities and operation of the Sunset Cliffs project would be less than significant, and no mitigation is required.

5.3.3.5 Issue 5: Habitat Conservation Plans

Would the proposed CRMP Phase 1 conflict with the provisions of the MSCP, VPHCP, other adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plan, such as introducing a land use within an area adjacent to the MHPA [Multi-Habitat Planning Area] that would result in adverse edge effects or introduce invasive species of plants into a natural open space area?

Pilot Project: Ocean Beach – Dog Beach

The MHPA occurs in the northern portion of the Ocean Beach – Dog Beach project site (Figure 5.3-14), and potential impacts could occur within and adjacent to the MHPA as a result of project implementation. Implementation of the Pilot Project would be unlikely to introduce new land uses

adjacent to the MHPA because the project would include construction of nature-based coastal resilience and habitat protection structures that would be similar to the current condition. However, when land is developed adjacent to the MHPA, there is potential for indirect impacts to occur that would result in detrimental effects related to drainage, toxics, lighting, noise, human intrusion, and invasive species. Indirect impacts from the Pilot Project could occur adjacent to the MHPA from project activities. The Pilot Project would be required to document compliance with the General Planning Policies and Design Guidelines provided in Section 1.4.2 of the MSCP SAP, General Management Directives outlined in Section 1.5.2 of the MSCP SAP, and species-specific ASMDs provided in the MSCP SAP Appendix A (City of San Diego 1997). Table 5 in Section 6.1.1 of the BRTR (Appendix C) demonstrates the Pilot Project's compliance with the MSCP SAP General Management Directives and species-specific ASMDs. Table 6 in Section 6.1.2 of the BRTR (Appendix C) demonstrates the Pilot Project's compliance with the MSCP SAP General Planning Policies and Design Guidelines. As demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C), the Pilot Project would have compatible land uses in the MHPA and follow the General Planning Policies and Design Guidelines outlined in Section 1.4.2 of the MSCP SAP. Since a portion of the subsequent Pilot Project occurs within the MHPA, the subsequent project is required to document compliance with the MHPA LUAGs, including mitigation requirements based on the program-level mitigation framework provided in Section 5.3.5, which may include additional project-level mitigation measures determined during subsequent project-level approval once future site-specific project designs are finalized. Table 7 (Section 6.1.3) of the BRTR (Appendix C) documents the Pilot Project's compliance with the MHPA LUAGs. As demonstrated in Table 7 of the BRTR (Appendix C), the Pilot Project would be compliant with the MHPA LUAGs.

As discussed in Sections 5.3.3.1 (Issue 1) and 5.3.3.2 (Issue 2), implementation of the Pilot Project has the potential to introduce non-native invasive plant species into the natural open space areas and the MHPA that occurs on or adjacent to the Ocean Beach – Dog Beach project site. However, as demonstrated in Tables 5 through 7 (Sections 6.1.1 through 6.1.3, respectively) of the BRTR (Appendix C), the Pilot Project would be in compliance with the MSCP SAP, including the General Management Directives, ASMDs, and General Planning Policies and Design Guidelines, the MHPA LUAGs, the City's ESL Regulations, Biological Guidelines, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, and comply with the Landscape Regulations (LDC 142.0400 and per Table 142-04F, Revegetation and Irrigation Requirements) requiring all plant species installed within 100 feet of the MHPA be non-invasive. Further, habitat restoration per mitigation measure MM BIO-6 would establish a native plant community within any temporarily disturbed areas of native habitat and include invasive species removal, thus minimizing the potential for invasive plant species.

The Pilot Project is also subject to the goals and policies in the City's General Plan. The City's General Plan elements applicable to biological resources include the Conservation and Recreation Elements. Table 8 (Section 6.1.4) of the BRTR (Appendix C) documents the Pilot Project's

consistency with the Conservation and Recreation Elements goals and policies applicable to biological resources. As demonstrated in Table 8 of the BRTR (Appendix C), the Pilot Project would be consistent with the City's General Plan goals and policies, including mitigation requirements.

Impacts from adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of the MSCP, habitat conservation plans, or other policies and ordinances would be less than significant with incorporation of MM BIO-6.

La Jolla Shores

The La Jolla Shores project site is not within or adjacent to the MHPA (Figure 5.3-14). However, the La Jolla Shores project is adjacent to natural open space area outside of the MHPA and has the potential to introduce non-native invasive plant species into these areas. In addition, the La Jolla Shores project is bordered to the west by the La Jolla Area of Special Biological Significance (ASBS), which covers approximately 453 acres and includes La Jolla Cove and the biologically-rich kelp forests and rocky reef to the north along the coast, ending south of Scripp's Pier (State Water Resources Control Board 1979). As an ASBS, the State Water Board prohibits all polluted runoff and discharges into the marine waters within the La Jolla ASBS. The La Jolla Shores project also borders a Marine Protected Areas (MPA) to the west, the Matlahuayl State Marine Reserve (SMR) (CDFW 2024c). Within the Matlahuayl SMR, which extends from the shoreline covering approximately 1.04 square miles, it is unlawful to injure, damage, take, or possess any living, geological, or cultural marine resource.

As demonstrated in Tables 5 through 7 (Sections 6.1.1 through 6.1.3, respectively) of the BRTR (Appendix C), the La Jolla Shores project would be in compliance with the MSCP SAP, including the General Management Directives, ASMDs, and General Planning Policies and Design Guidelines, the MHPA LUAGs, the City's ESL Regulations, Biological Guidelines, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations. As a result of compliance with the plans and policies listed previously, the La Jolla Shores project is not anticipated generate polluted runoff and discharges into the La Jolla ASBS or harm any living, geological, or cultural marine resource in the Matlahuayl SMR.

Further, habitat restoration per mitigation measure MM BIO-6 would establish a native plant community within any temporarily disturbed areas of native habitat and include invasive species removal, thus minimizing the potential for invasive plant species.

The La Jolla Shores project is also subject to the goals and policies in the City's General Plan. The City's General Plan elements applicable to biological resources include the Conservation and Recreation Elements. Table 8 (Section 6.1.4) of the BRTR (Appendix C) documents the La Jolla Shores project's consistency with the Conservation and Recreation Elements goals and policies applicable to biological resources. As demonstrated in Table 8 of the BRTR (Appendix
C), the La Jolla Shores project would be consistent with the City's General Plan goals and policies, including mitigation requirements.

Impacts from adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of the MSCP, habitat conservation plans, or other policies and ordinances would be less than significant with incorporation of MM BIO-6.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site is not within or adjacent to the MHPA (Figure 5.3-14). However, the Pacific Beach – Tourmaline Surf Park project is adjacent to natural open space area outside of the MHPA and has the potential to introduce non-native invasive plant species into these areas. As demonstrated in Tables 5 through 7 (Sections 6.1.1 through 6.1.3, respectively) of the BRTR (Appendix C), the Pacific Beach – Tourmaline Surf Park project would be in compliance with the MSCP SAP, including the General Management Directives, ASMDs, and General Planning Policies and Design Guidelines, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations. Further, habitat restoration per mitigation measure MM BIO-6 would establish a native plant community within any temporarily disturbed areas of native habitat and include invasive species removal, thus minimizing the potential for invasive plant species.

The Pacific Beach – Tourmaline Surf Park project is also subject to the goals and policies in the City's General Plan. The City's General Plan elements applicable to biological resources include the Conservation and Recreation Elements. Table 8 (Section 6.1.4) of the BRTR (Appendix C) documents the Pacific Beach – Tourmaline Surf Park project's consistency with the Conservation and Recreation Elements goals and policies applicable to biological resources. As demonstrated in Table 8 of the BRTR (Appendix C), the Pacific Beach – Tourmaline Surf Park project would be consistent with the City's General Plan goals and policies, including mitigation requirements.

Impacts from adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of the MSCP, habitat conservation plans, or other policies and ordinances would be less than significant with incorporation of MM BIO-6.

Mission Beach

The Mission Beach project site is not within or adjacent to the MHPA (Figure 5.3-14). However, the Mission Beach project is adjacent to natural open space area outside of the MHPA and has the potential to introduce non-native invasive plant species into these areas. As demonstrated in Tables 5 through 7 (Sections 6.1.1 through 6.1.3, respectively) of the BRTR (Appendix C), the Mission Beach project would be in compliance with the MSCP SAP, including the General Management Directives, ASMDs, and General Planning Policies and Design Guidelines, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES

regulations. Further, habitat restoration per mitigation measure MM BIO-6 would establish a native plant community within any temporarily disturbed areas of native habitat and include invasive species removal, thus minimizing the potential for invasive plant species.

The Mission Beach project is also subject to the goals and policies in the City's General Plan. The City's General Plan elements applicable to biological resources include the Conservation and Recreation Elements. Table 8 (Section 6.1.4) of the BRTR (Appendix C) documents the Mission Beach project's consistency with the Conservation and Recreation Elements goals and policies applicable to biological resources. As demonstrated in Table 8 of the BRTR (Appendix C), the Mission Beach project would be consistent with the City's General Plan goals and policies, including mitigation requirements.

Impacts from adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of the MSCP, habitat conservation plans, or other policies and ordinances would be less than significant with incorporation of MM BIO-6.

Ocean Beach – Pier

The Ocean Beach – Pier project site is not within or adjacent to the MHPA (Figure 5.3-14). However, the Ocean Beach – Pier project is adjacent to natural open space area outside of the MHPA and has the potential to introduce non-native invasive plant species into these areas. As demonstrated in Tables 5 through 7 (Sections 6.1.1 through 6.1.3, respectively) of the BRTR (Appendix C), the Ocean Beach – Pier project would be in compliance with the MSCP SAP, including the General Management Directives, ASMDs, and General Planning Policies and Design Guidelines, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations. Further, habitat restoration per MM BIO-6 would establish a native plant community within any temporarily disturbed areas of native habitat and include invasive species removal, thus minimizing the potential for invasive plant species.

The Ocean Beach – Pier project is also subject to the goals and policies in the City's General Plan. The City's General Plan elements applicable to biological resources include the Conservation and Recreation Elements. Table 8 (Section 6.1.4) of the BRTR (Appendix C) documents the Ocean Beach – Pier project's consistency with the Conservation and Recreation Elements goals and policies applicable to biological resources. As demonstrated in Table 8 of the BRTR (Appendix C), the Ocean Beach – Pier project would be consistent with the City's General Plan goals and policies, including mitigation requirements.

Impacts from adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of the MSCP, habitat conservation plans, or other policies and ordinances would be less than significant with incorporation of MM BIO-6.

Sunset Cliffs

The survey buffer of the Sunset Cliffs project site is within the MHPA (Figure 5.3-14), and potential impacts would occur within and adjacent to the MHPA as a result of project implementation. Implementation of the Sunset Cliffs project would be unlikely to introduce new land uses adjacent to the MHPA because the project would include construction of nature-based coastal resilience and habitat protection structures that would be similar to the current condition. However, when land is developed adjacent to the MHPA, there is potential for indirect impacts to occur that would result in detrimental effects related to drainage, toxics, lighting, noise, human intrusion, and invasive species. Indirect impacts from the Sunset Cliffs project could occur adjacent to the MHPA from project activities. The Sunset Cliffs project would be required to document compliance with the General Planning Policies and Design Guidelines provided in Section 1.4.2 of the MSCP SAP, General Management Directives outlined in Section 1.5.2 of the MSCP SAP, and species-specific ASMDs provided in the MSCP SAP Appendix A (City of San Diego 1997). Table 5 in Section 6.1.1 of the BRTR (Appendix C) demonstrates the Sunset Cliffs project's compliance with the MSCP SAP General Management Directives and species-specific ASMDs. Table 6 in Section 6.1.2 of the BRTR (Appendix C) demonstrates the Sunset Cliffs project's compliance with the MSCP SAP General Planning Policies and Design Guidelines. As demonstrated in Tables 5 and 6 (Sections 6.1.1 and 6.1.2) of the BRTR (Appendix C), the Sunset Cliffs project would have compatible land uses in the MHPA and follow the General Planning Policies and Design Guidelines outlined in Section 1.4.2 of the MSCP SAP. Because the Sunset Cliffs project is adjacent to the MHPA, the project is required to document compliance with the MHPA LUAGs, including subsequent project-level mitigation requirements determined at the time of future site-specific project implementation. Table 7 (Section 6.1.3) of the BRTR (Appendix C) documents the project's compliance with the MHPA LUAGs. As demonstrated in Table 7 of the BRTR (Appendix C), the Sunset Cliffs project would be compliant with the MHPA LUAGs. Therefore, the Sunset Cliffs project would be consistent with the policies and requirements of the MSCP SAP, including mitigation requirements, and no impacts would result.

As discussed in Sections 5.3.3.1 (Issue 1) and 5.3.3.2 (Issue 2), implementation of the Sunset Cliffs project has the potential to introduce non-native invasive plant species into the natural open space areas and the MHPA that occurs adjacent to the Sunset Cliffs project site. However, as demonstrated in Tables 5 through 7 (Sections 6.1.1 through 6.1.3, respectively) of the BRTR (Appendix C), the Sunset Cliffs project would be in compliance with the MSCP SAP, including the General Management Directives, ASMDs, and General Planning Policies and Design Guidelines, the MHPA LUAGs, the San Diego RWQCB Municipal Permit, the City's Stormwater Standards Manual (City of San Diego 2012b), and NPDES regulations, and comply with the Landscape Regulations (LDC 142.0400 and per Table 142-04F, Revegetation and Irrigation Requirements) requiring all plant species installed within 100 feet of the MHPA be non-invasive. Further, habitat restoration per Mitigation Measure MM BIO-6 would establish a native plant community within any

temporarily disturbed areas of native habitat and include invasive species removal, thus minimizing the potential for invasive plant species.

The Sunset Cliffs project is also subject to the goals and policies in the City's General Plan. The City's General Plan elements applicable to biological resources include the Conservation and Recreation Elements. Table 8 (Section 6.1.4) of the BRTR (Appendix C) documents the Sunset Cliffs project's consistency with the Conservation and Recreation Elements goals and policies applicable to biological resources. As demonstrated in Table 8 of the BRTR (Appendix C), the Sunset Cliffs project would be consistent with the City's General Plan goals and policies, including mitigation requirements.

Impacts from adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of the MSCP, habitat conservation plans, or other policies and ordinances would be less than significant with implementation of MM BIO-6.

5.3.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project at the Ocean Beach – Dog Beach project site would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species, on riparian habitat or other sensitive natural community, and on wetlands. Impacts would be less than significant with implementation of MM BIO-1 through MM BIO-7.

The Pilot Project would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.

With implementation of MM BIO-6, the Pilot Project would not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Implementation of MM BIO-6 would reduce potential impacts to less than significant.

La Jolla Shores

Implementation of the La Jolla Shores project would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species, on riparian habitat or other sensitive natural community, and on wetlands. Impacts would be less than significant with implementation of MM BIO-2 through MM BIO-7.

The La Jolla Shores project would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.

With implementation of MM BIO-6, the La Jolla Shores project would not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Implementation of MM BIO-6 would reduce potential impacts to less than significant.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species, on riparian habitat or other sensitive natural community, and on wetlands. Impacts would be less than significant with implementation of MM BIO-2 through MM BIO-7.

The Pacific Beach – Tourmaline Surf Park project would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.

With implementation of MM BIO-6, the Pacific Beach – Tourmaline Surf Park project would not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Implementation of MM BIO-6 would reduce potential impacts to less than significant.

Mission Beach

Implementation of the Mission Beach project would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species, on riparian habitat or other sensitive natural community, and on wetlands. Impacts would be less than significant with implementation of MM BIO-2 through MM BIO-7.

The Mission Beach project would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.

With implementation of MM BIO-6, the Mission Beach project would not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Implementation of MM BIO-6 would reduce potential impacts to less than significant.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species, on riparian habitat or other sensitive natural community, and on wetlands. Impacts would be less than significant with implementation of MM BIO-2 through MM BIO-7.

The Ocean Beach – Pier project would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.

With implementation of MM BIO-6, the Ocean Beach – Pier project would not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Implementation of MM BIO-6 would reduce potential impacts to less than significant.

Sunset Cliffs

Implementation of the Sunset Cliffs project would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species and on riparian habitat or other sensitive natural community. Impacts would be less than significant with implementation of MM BIO-2 through MM BIO-6.

The Sunset Cliffs project would not result in a substantial adverse impact on wetlands or interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, and no mitigation is required.

With implementation of MM BIO-6, the Sunset Cliffs project would not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Implementation of MM BIO-6 would reduce potential impacts to less than significant.

5.3.5 Mitigation Framework

Mitigation Measures are provided at the program level to serve as the basis for more specific refinement of future mitigation measures to be developed as specific subsequent projects are proposed. The mitigation measures refer to City regulations (i.e., ESL Regulations and Biology Guidelines) and plans that have incorporated detailed performance standards and are fully enforceable through permit conditions or other legally binding instruments, consistent with CEQA Guidelines Section 15126.4(a)(2). The referenced plans, policies, or regulations in the mitigation measures described in this section provides a program-level framework for reducing significant impacts related to biological resources.

5.3.5.1 Issue 1: Sensitive Plant and Wildlife Species

In the event the sensitive plant species observed or with moderate or high potential to occur in the Ocean Beach – Dog Beach survey area, Nuttall's acmispon, coast wallflower, coast woolly-heads, Coulter's goldfields, decumbent goldenbush, estuary seablite, San Diego marsh-elder, and south coast saltbush, or other sensitive plant species are identified within the potential impact area,

including MSCP SAP covered and narrow endemic plant species, non-MSCP SAP covered federally and/or state-listed plant species, or non-MSCP SAP covered CRPR 1B.1, 1B.2, or 2B.2 species, implementation of MM BIO-1 would reduce potential indirect impacts to sensitive plant species through conducting sensitive plant species focused surveys prior to construction of the Pilot Project.

Significant direct impacts to sensitive wildlife species, including but not limited to black tern, Caspian tern, Costa's hummingbird, double-crested cormorant, northwestern San Diego pocket mouse, osprey, and San Diegan legless lizard, as well as nesting birds and raptors protected under the CFGC and MBTA, could result during construction of the Pilot Project from temporary displacement and permanent removal of these species' suitable habitats. Significant direct impacts to sensitive wildlife species, including but not limited to black tern and Caspian tern, as well as nesting birds and raptors protected under the CFGC and MBTA, could result during construction of the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, and Ocean Beach – Pier projects from temporary displacement and permanent removal of these species' suitable habitats. Additionally, significant indirect impacts to nesting birds and raptors protected under the CFGC and MBTA could result during construction of the Sunset Cliffs project from temporary displacement and permanent removal of these species' suitable habitats.

Implementation of MM BIO-2 would reduce potential direct impacts to sensitive wildlife species through monitoring by a qualified biologist prior to and during construction of the CRMP Phase 1 projects. Implementation of MM BIO-3 through MM BIO-6 would reduce potential direct impacts to sensitive wildlife species, including nesting birds and raptors protected under the CFGC and MBTA, through conducting sensitive avian and wildlife species focused surveys prior to construction, and providing mitigation or revegetation for impacts to sensitive vegetation communities and jurisdictional aquatic resources that support sensitive wildlife species in the Ocean Beach – Dog Beach, La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, and Ocean Beach – Pier project sites. Additionally, direct impacts to vegetation communities used by sensitive wildlife species would be conserved or restored through the implementation of MM BIO-3 through MM BIO-6, per the City of San Diego's Biology Guidelines.

MM BIO-1: Focused Sensitive Plant Species Surveys. As part of the subsequent project-specific environmental review pursuant to CEQA, focused surveys for future site-specific development shall be conducted, as applicable, during the subsequent project permitting in accordance with the ESL Regulations and City Biology Guidelines, in suitable habitat, in order to determine presence/absence of sensitive plant species within the proposed project site. Focused sensitive plant surveys shall be conducted during the species' specific blooming periods to determine presence/absence. If sensitive plant species are mapped within any proposed construction, access, or staging areas, these species shall be quantified and flagged prior to the issuance of

Notice to Proceed, and these areas shall be modified to avoid direct impacts to mapped sensitive plant species. If significant impacts to these species are unavoidable, the take of these species shall be reduced to below a level of significance through implementation of one or a combination of the following actions, in accordance with a City of San Diego approved Conceptual Restoration Plan or acquisition of mitigation credits:

- Impacted plants shall be salvaged and relocated to suitable habitat in an on-site restoration area within the Multi-Habitat Planning Area boundary, if possible. If relocation to a restoration area is not practical, the plants shall be relocated off-site to an appropriate (nearby) location determined by a qualified biologist in coordination with City of San Diego.
- Seeds from impacted plants shall be collected for use at a local off-site location, as applicable.
- Off-site habitat that supports the species impacted shall be enhanced and/or supplemented with seed collected on site.
- Comparable habitat at an approved off-site location shall be determined by a qualified biologist in coordination with City of San Diego and preserved for relocation, enhancement, or transplant of the impacted sensitive plants.

Mitigation that involves relocation, enhancement, or transplant of sensitive plants shall include all of the following:

- Conceptual restoration plan prepared in accordance with the City's Biology Guidelines by a qualified biologist including grading and, if appropriate, temporary irrigation plans.
- Planting specifications and fencing and signage to discourage unauthorized access of the planting site.
- Monitoring program including success criteria.
- Long-term maintenance and preservation plan.
- **MM BIO-2: Qualified Monitoring Biologist.** Prior to subsequent project-level approval and prior to the issuance of Notice to Proceed and/or first preconstruction meeting, the City shall submit a letter to the appropriate City Department and/or Environmental Designee at the time of future project implementation, which confirms that a qualified monitoring biologist, pursuant to the City of San Diego's Biology Guidelines, has been retained to implement required monitoring. This letter will also include the names and resumes of all people involved in the biological monitoring of the project, a schedule for the proposed work, and the facility's pre-approved Facility Maintenance Plan.

The qualified monitoring biologist shall be responsible for the following monitoring and reporting tasks:

- I. Prior to Construction
- a. **Documentation**. Prior to the issuance of the Notice to Proceed and/or first preconstruction meeting of a future proposed project site within, or immediately adjacent to, a Multi-Habitat Planning Area, the qualified monitoring biologist shall verify and submit proof to the appropriate City of San Diego Department/Environmental Designee at the time of future project implementation that all Multi-Habitat Planning Area boundaries and limits of work have been delineated on all maintenance documents.
- b. Biological Construction Mitigation/Monitoring Exhibit (BCME). Prior to the issuance of the Notice to Proceed and/or first preconstruction meeting, the qualified monitoring biologist shall submit a Biological Construction Mitigation/Monitoring Exhibit (BCME), which includes limits of work, proposed monitoring schedule, avian, focused sensitive species, or other wildlife surveys/survey schedules (including general avian nesting and U.S. Fish and Wildlife protocol), timing of surveys, avian construction avoidance areas/noise buffers/barriers, other impact avoidance areas, species-specific Multiple Species Conservation Program Subarea Plan Area-Specific Management Directives, and any subsequent requirements determined by the qualified monitoring biologist and the City of San Diego Environmental Designee. The BCME shall include the construction site plan, written and graphic depiction of the project's biological mitigation/monitoring program, and a schedule for construction activities. Where the potential for impacts to biological resources is limited (e.g., construction within a footprint that consists entirely of previously developed or disturbed lands), the BCME may be limited to a pre- and post-maintenance verification inspection. For highly sensitive resource areas, full-time biological monitors may be required. The BCME shall be approved by the City of San Diego Environmental Designee prior to the start of construction.
- c. **Resource Marking/Protection**. Prior to the issuance of the Notice to Proceed and/or first preconstruction meeting, within the future site-specific proposed project site, the qualified monitoring biologist shall supervise the placement of orange construction fencing or similar visible marker, staking, or flagging along the limits of the construction area adjacent to sensitive biological habitats, as shown on the BCME to ensure crews remain within the approved construction

limits. These demarcations shall not be required for areas with existing barriers, such as chain-link fencing, along the limits or facilities that are within and/or adjacent to developed and non-sensitive habitat areas. This task shall include flagging plant specimens and delineating buffers to protect sensitive biological resources (e.g., habitats, sensitive plant and wildlife species, including nesting birds) prior to construction.

- d. **Structure Clearance**. Prior to the issuance of the notice to proceed and/or first preconstruction meeting, the qualified monitoring biologist shall conduct clearance surveys to flush out any wildlife species nesting, roosting, or otherwise occupying the trees or structures. If wildlife species are encountered within any of the trees or structures (outside the general bird nesting season), the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape and allowed the species to disperse. If tree-roosting bats are suspected, slow removal by gently pushing the tree over with heavy equipment is required.
- e. **Pre-Construction Meeting/Education.** Prior to the issuance of the Notice to Proceed, a pre-construction meeting shall be held on site with the following in attendance: City of San Diego's project manager, City of San Diego Environmental Designee, the construction contractor (if applicable), and the qualified monitoring biologist. At this meeting, the qualified monitoring biologist shall identify and discuss the construction protocols that apply to the proposed activities and the sensitive nature of the adjacent habitat with appropriate project personnel.

At the pre-construction meeting, the qualified monitoring biologist shall submit to the City of San Diego representative and construction contractor a copy of the BCME that identifies areas to be protected, fenced, and monitored. This data shall include all buffer limits, if applicable.

Prior to the start of construction activities, the qualified monitoring biologist shall meet with the construction contractor and crew and conduct an on-site educational session regarding the need to avoid impacts outside the approved construction footprint and to protect sensitive plants and wildlife that may occur at the specific facility. This may include but not be limited to explanations of the avian and wetland buffers, the flag system for removal of invasive species or retention of sensitive plants, and clarification of acceptable access routes/methods and staging areas.

II. During Construction

f. **Biological Monitoring and Reporting.** The qualified monitoring biologist shall inspect/monitor the project construction area in accordance with the approved BCME. This may be limited to pre- and post-maintenance inspections, weekly visits, or full-time monitoring, as determined by the qualified monitoring biologist and City of San Diego representative.

The qualified monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the project manager each month, and the project manager shall forward copies to the City of San Diego representative. However, if weekly reports are submitted as part of a separate agency permit requirement, these reports may be forwarded to the City of San Diego representative in place of Consultant Site Visit Record submittals.

g. Cover Trenches. The qualified monitoring biologist shall oversee the construction site so that cover and/or escape routes for wildlife from excavated areas shall be provided daily. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and if plastic sheeting is used, the edges must be covered with soils such that small wildlife cannot access the excavated hole. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and before sealing the exposed area) by the qualified monitoring biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route. The qualified monitoring biologist shall verify that the contractor has covered all steep-walled trenches or excavations prior to the end of construction daily. If wildlife species are encountered within any trenches or excavated areas, the qualified monitoring biologist shall remove them, if possible, or provide them with a means of escape (e.g., a ramp or sloped surface at no greater than a 30-degree angle) and allowed to disperse. In addition, the qualified monitoring biologist shall provide training to construction personnel to increase awareness of the possible presence of wildlife beneath vehicles and equipment and to use best judgment to avoid killing or injuring wildlife.

III. Post Construction

h. In the event that impacts exceed previously allowed amounts, additional impacts shall be mitigated in accordance with the City Biology Guidelines, ESL and MSCP, State CEQA, and other applicable local, state and federal law.

- i. The qualified monitoring biologist shall submit a final BCME/report to the satisfaction of the City of San Diego Environmental Designee within 30 days of construction completion.
- **MM BIO-3:** Focused Avian Species Surveys. Prior to subsequent project-level approval and prior to the issuance of the Notice to Proceed and/or first preconstruction meeting, as part of the project-specific environmental review pursuant to CEQA, focused surveys for future site-specific development shall be conducted, as applicable, in suitable habitat, in order to determine presence/absence of sensitive avian species within the proposed survey area. Focused sensitive avian surveys shall be conducted during the species' specific breeding seasons to determine presence/absence within the development footprint plus a buffer, if recommended by the qualified monitoring biologist (refer to MM BIO-2). The survey report shall map and describe the location and extent of observed sensitive avian species that would be impacted within the areas of potential effect for each project site. If significant impacts to these species are unavoidable, the take of these species shall be reduced to a less than significant level through implementation of the Avian Protection measures identified in MM BIO-2 (under subheading c. Resource Marking/Protection).
- **MM BIO-4:** Focused Sensitive Wildlife Species Surveys. Prior to subsequent project-level approval and as part of the project-specific environmental review pursuant to CEQA, focused surveys for future site-specific development shall be conducted, as applicable, in suitable habitat, in order to determine presence/absence of sensitive wildlife species within the proposed survey area. The survey report shall map and describe the location and extent of observed special-status animal species that would be impacted within the areas of potential effect for each project site. If special-status animal species are present or potentially present based on the survey, the survey report shall include avoidance and minimization measures to avoid or relocate these species through Structure Clearance measures as described in MM BIO-2 (under subheading e. Pre-Construction Meeting/Education).
- MM BIO-5: Sensitive Vegetation Communities and Jurisdictional Aquatic Resources Impacts Mitigation. Prior to subsequent project level approval, as part of subsequent projectspecific environmental review pursuant to CEQA, any direct impacts to sensitive vegetation communities or jurisdictional aquatic resources would require mitigation to comply with City of San Diego, state and/or federal authorizations, in accordance with the City of San Diego's Biology Guidelines Table 2a and Table 3 ratios described in the following tables (Mitigation Ratios for Potential Impacts to Sensitive Vegetation Communities and Jurisdictional Aquatic Resources within the

Survey Area), as well as the ratios defined in any state and/or federal permit(s) issued for the project.

Area								
General Vegetation Type (Holland/ Oberbauer Code)	Biology Guidelines Vegetation Community/ Tier/Wetland	Jurisdiction	Biology Guidelines Required Mitigation Ratio (in COZ)					
Subtidal Ocean (64111)	Marine Habitat/- /Wetland	U/R/C/CC	2:1					
Intertidal Ocean (64112)	Marine Habitat/- /Wetland	U/R/C/CC	2:1					
Estuarine (64130)	Marine Habitat/- /Wetland	U/R/C/CC	2:1					
Southern Coastal Salt Marsh (52120)	Marine Habitat/- /Wetland	U/R/C/CC	2:1					
Beach (64400)	Marine Habitat	C/CC	2:1					
Sandstone Cliff	None	C/CC	1 : 1 ¹					
Concrete channel	Disturbed Land/IV	U/R/C/CC	0:1 ²					

Mitigation Ratios for Potential Impacts to Wetlands and Jurisdictional Aquatic Resources within the Survey

Notes: C = CDFW Jurisdictional; CC = California Coastal Commission Jurisdictional; COZ = Coastal Overlay Zone; R = RWQCB Jurisdictional; Biology Guidelines = San Diego Biology Guidelines; U = USACE Jurisdictional

Any impacts to wetlands must be mitigated "in-kind" and achieve a "no-net loss" of wetland functions and values.

¹ No mitigation ratio is required per the Biology Guidelines; however, any impacts to sandstone cliffs shall be mitigated at a ratio consistent with mitigation ratios for Tier II (Uncommon Uplands), which sandstone cliffs is most similar to (see table below).

² No mitigation ratio is required per the Biology Guidelines; however, a minimum of a 2:1 ratio would be required by the regulatory agencies during the permitting process.

Mitigation Ratios for Potential Impacts to Upland Habitats

Tier	Habitat Type	Mitigation Ratios				
Tier I (Rare Uplands)	Southern Foredunes				Location of Preservation	
	Torrey Pines Forest		Tier I Mitigation Ratios			
	Coastal Bluff Scrub			Inside MHPA	2.1	3.1
	Maritime Succulent Scrub		Location of Impact		2.1	5.1
	Maritime Chaparral			Outside MHPA	1:1	2:1
	Scrub Oak Chaparral					
	Native Grassland					
	Oak Woodlands					
	Coastal Sage Scrub					
Tier II (Uncommon Uplands)			Tier II Mitigation Dation		Location of Preservation	
	CSS/Chaparral	Tier II Mitigation Ratios		Inside MHPA	Outside MHPA	
			Location of Impact	Inside MHPA	1:1	2:1
				Outside MHPA	1:1	1.5:1
				<u> </u>		<u>.</u>

Tier	Habitat Type	Mitigation Ratios				
	Mixed Chaparral					
Tier IIIA (Common Uplands)	Chamise Chaparral	Tier IIIA Mitigation Ratios		Location of Preservation		
				Inside MHPA	Outside MHPA	
		Location of Impact	Inside MHPA	1:1	1.5:1	
			Outside MHPA	0.5:1	1:1	
Tier IIIB (Common Uplands)	Non-Native Grasslands	T UD 1			Location of Preservation	
		Lier IIIB Mitigation Ratios		Inside MHPA	Outside MHPA	
		Location of	Inside MHPA	1:1	1.5:1	
		Impact	Outside MHPA	0.5:1	1:1	
	Disturbed Land					
Tier IV (Other Uplands)	Agriculture	Tior IV/ Mitig	Tier IV Mitigation Ratios		Location of Preservation	
	Eucalyptus Woodland				Outside MHPA	
	Ornamental Plantings	Location of	Inside MHPA	0:1	0:1	
		Impact	Outside MHPA	0:1	0:1	

Mitigation Ratios for Potential Impacts to Upland Habitats

Notes:

For all Tier I impacts, the mitigation could (1) occur within the MHPA portion of Tier I (in Tier) or (2) occur outside of the MHPA within the affected habitat type (in-kind).

For impacts to Tier II, IIIA and IIIB habitats, the mitigation could (1) occur within the MHPA portion of Tiers I through III (out-of-kind) or (2) occur outside of the MHPA within the affected habitat type (in-kind).

- 1. Potential direct impacts to sensitive vegetation communities, including jurisdictional aquatic resources, resulting from project implementation shall be mitigated consistent with the City's Biology Guidelines through one of the following three options:
 - a. Project compensatory mitigation for proposed impacts to sensitive vegetation communities, including but not limited to jurisdictional aquatic resources, shall be provided through in-kind and on-site creation, enhancement, and/or restoration.
 - b. If during subsequent environmental review it is determined that compensatory mitigation requirements cannot be satisfied through on-site creation, restoration, and/or enhancement, they shall be satisfied through the acquisition of mitigation bank credits via a resource agency-approved mitigation site within the appropriate watershed located within the City of San Diego jurisdictional boundaries unless approved by the Wildlife Agencies. Prior to implementation of project construction impacts that would require compensatory mitigation, documentation demonstrating the availability of mitigation credits (i.e., credit ledger) at the approved mitigation site must be submitted to the City of San Diego Environmental Designee for confirmation.

c. If credits are not available at a resource agency-approved mitigation site within the City's jurisdiction or through other approved off-site mitigation credits, implementation of habitat creation, restoration, enhancement, and/or preservation would occur through a City-approved Habitat Mitigation and Monitoring Plan. Under this option, as well as under option a., referenced above, a Habitat Mitigation and Monitoring Plan shall be provided and prepared in accordance with the City's Biology Guidelines, which shall include definitions for creation, restoration, enhancement, and acquisition identified under the City's Biology Guidelines satisfaction of no net loss pursuant to the City's Environmentally Sensitive Lands regulations; timing in relation to project impacts; and generally, with federal and state mitigation requirements.

When proposed mitigation involves habitat enhancement, restoration or creation, the Habitat Mitigation and Monitoring Plan shall include all of the following information:

- Conceptual restoration, enhancement, and/or creation plan including planting zones, grading, and irrigation
- Seed mix/planting palette
- Planting specifications
- Monitoring program including success criteria
- Long-term maintenance and preservation plan

For mitigation that involves habitat acquisition, the Habitat Mitigation and Monitoring Plan shall include all of the following:

- Location of proposed acquisition
- Description of the biological resources to be acquired, including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact
- Documentation that the mitigation area would be adequately preserved and managed in perpetuity

The identification of mitigation site credits shall be provided to the Environmental Designee and shall include the following:

- Location of approved mitigation site
- Description of the mitigation credits to be acquired, including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact
- Documentation of the credits that are associated with a mitigation bank, which has been approved by the appropriate resource agencies
- Documentation in the form of a current mitigation credit ledger

MM BIO-6: Habitat Restoration for Temporary Impacts in Upland Areas. Prior to subsequent project approval, as part of subsequent project-specific environmental review pursuant to CEQA, it shall be determined if temporary impacts to habitat would result with site-specific project implementation. Temporary direct impact areas shall be restored to pre-construction topographic contours and conditions, including the revegetation of native plant communities, where appropriate. Habitat restoration and erosion control treatments shall be installed within these short-term impact areas, in accordance with the City's Biology Guidelines, Multiple Species Conservation Program Subarea Plan, and the City of San Diego's Municipal Code, Land Development Manual-Landscape Standards. Habitat revegetation shall feature native species that are typical of the area, and associated erosion control best management practices shall include silt fence and microplastic- and weed-free straw fiber rolls, where appropriate. The revegetation areas shall be monitored and maintained for 25 months after the subsequent 120-day plant establishment period has been approved by City of San Diego Environmental Designee to ensure adequate establishment and sustainability of the plantings/seedings.

> Where a project activity involves potential disturbance of non-native invasive plant species (as identified by the California Invasive Plant Council), these plants shall be entirely removed where feasible, and the removal shall be monitored by the qualified monitoring biologist to ensure that dispersal of propagules (e.g., seeds, stems, etc.) are avoided or minimized. Where removal of plant roots is not feasible (e.g., where erosive flows are predicted), aboveground plant material shall be fully removed and monitored by the qualified monitoring biologist to ensure the invasives species does not persist or regrow. Where aboveground plant material cannot be removed (e.g., due to limited access), herbicides shall be applied by a licensed pest control advisor, using chemicals permitted as safe within aquatic environments.

5.3.5.2 Issue 2: Sensitive Vegetation Communities

Development of the Pilot Project could result in potentially significant direct impacts to sensitive vegetation communities, including estuarine, southern coastal salt marsh, beach, disturbed southern foredunes, and disturbed Diegan coastal sage scrub, which are located within and adjacent to the MHPA boundary. Development of the La Jolla Shores, Mission Beach, and Ocean Beach – Pier projects could result in potentially significant direct impacts to one sensitive vegetation community, beach. Development of the Pacific Beach – Tourmaline Surf Park project could result in potentially significant direct impacts to communities, including beach, concrete-lined channel, and sandstone cliff. Development of the Sunset Cliffs project could result in potentially significant direct impacts to one sensitive vegetation community, sandstone cliff, which is located adjacent to the MHPA boundary. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to sensitive

vegetation communities through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, creating new vegetation communities and restoring impacted ones.

Refer to MM BIO-2, MM BIO-5, and MM BIO-6.

5.3.5.3 Issue 3: Jurisdictional Aquatic Resources

Pilot Project: Ocean Beach – Dog Beach

Development of the Pilot Project and the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, and Ocean Beach – Pier projects could result in potentially significant direct impacts to jurisdictional aquatic resources. Implementation of MM BIO-2, MM BIO-5, and MM BIO-6 would reduce direct impacts to jurisdictional aquatic resources through monitoring by a qualified biologist, providing mitigation ratios for acreage impacts, and restoring temporary impact areas.

Prior to implementation of the Pilot Project and the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, and Ocean Beach – Pier projects as well as MM BIO-2, MM BIO-5, and MM BIO-6, resource agency (USACE, CDFW, and RWQCB) approval of the mitigation strategy to compensate for unavoidable impacts to jurisdictional aquatic resources through the permitting process would be required. Implementation of MM BIO-7 would reduce direct impacts to jurisdictional aquatic resources through obtaining resource agency permits.

MM BIO-7: Potentially Jurisdictional Aquatic Resources Permitting. Temporary and permanent impacts to the wetland and non-wetland waters potentially under the jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife, shall be authorized by the U.S. Army Corps of Engineers through the Section 404 Permit Program, by the Regional Water Quality Control Board through a 401 State Water Quality Certification, and by the California Department of Fish and Wildlife through a 1602 Streambed Alteration Agreement. Approved temporary and permanent impacts to the potentially federal and state jurisdictional aquatic resources in the project site require compensatory mitigation through proposed on-site habitat restoration, creation, or enhancement to the satisfaction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife to achieve a no-net loss of federal and state jurisdictional wetland and non-wetland waters.

5.3.5.4 Issue 4: Wildlife Corridors and Habitat Linkages

No mitigation is required.

5.3.5.5 Issue 5: Habitat Conservation Plans

Implementation of MM BIO-6 would reduce potentially significant impacts from the introduction of invasive species of plants into a natural open space area.



Coastal Resilience Master Plan



Coastal Resilience Master Plan - Ocean Beach - Dog Beach





Coastal Resilience Master Plan - Pacific Beach - Tourmaline Surf Park



Coastal Resilience Master Plan - Mission Beach





Feet

Vegetation Communities and Land Cover Types Coastal Resilience Master Plan - Sunset Cliffs (North)



Coastal Resilience Master Plan - Sunset Cliffs (South)



Figure 5.3-2. Subtidal Ocean at the Sunset Cliffs Project Site


Figure 5.3-3. Estuarine Habitat on the Ocean Beach – Dog Beach Project Site



Figure 5.3-4. Sandy Beach on the Mission Beach Project Site



Figure 5.3-5. Concrete Channel Adjacent to the North of the Pacific Beach – Tourmaline Surf Park Project Site



Figure 5.3-6. Disturbed Coastal Dune Habitat



Figure 5.3-7. Disturbed Diegan Coastal Sage Scrub Habitat



Figure 5.3-8. Sandstone Cliff Habitat on the Sunset Cliffs Project Site



Figure 5.3-9. Paved (Developed) Pedestrian Pathway (La Vereda) on the La Jolla Shores Project Site











Coastal Resilience Master Plan - Mission Beach





Coastal Resilience Master Plan - Sunset Cliffs (North)





Coastal Resilience Master Plan








Sensitive Species Observed Coastal Resilience Master Plan - Sunset Cliffs



Harris & Associates



Feet



Coastal Resilience Master Plan Program EIR



Harris & Associates

0

1,000

Feet

2,000



Source: CNDDB 2023; SanBIOS 2023; USFWS 2023;Maxar Imagery 2022.

Figure 5.3-12a Sensitive Species with Potential to Occur Coastal Resilience Master Plan - Ocean Beach - Dog Beach



Feet

Sensitive Species with Potential to Occur Coastal Resilience Master Plan - La Jolla Shores



- Southern California Legless Lizard
- Fed-Diamond Rattlesnake

Harris & Associates



1,000

Feet

0

Sensitive Species with Potential to Occur

Coastal Resilience Master Plan - Pacific Beach - Tourmaline Surf Park



Source: CNDDB 2023; SanBIOS 2023; USFWS 2023;Maxar Imagery 2022.

Figure 5.3-12d Sensitive Species with Potential to Occur Coastal Resilience Master Plan - Mission Beach





N

0

1,000

Feet

2,000



Harris & Associates



Source: CNDDB 2023; SanBIOS 2023; USFWS 2023;Maxar Imagery 2022.

1,000

Feet

0

2,000

Figure 5.3-12e Sensitive Species with Potential to Occur Coastal Resilience Master Plan - Ocean Beach - Pier



Harris & Associates



Figure 5.3-12f Sensitive Species with Potential to Occur Coastal Resilience Master Plan - Sunset Cliffs



Figure 5.3-13. California Brown Pelicans Flying above the Ocean



5.4 Cultural Resources

This section of the Programmatic Environmental Impact Report (PEIR) describes the cultural setting and existing conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to cultural resources that could result from implementation of the proposed CRMP Phase 1. This section focuses the analysis on potential impacts to historical and archaeological resources. Potential impacts to TCRs are addressed in Section 5.12, Tribal Cultural Resources, of this PEIR.

The analysis in this section is based on review of available plans and technical information, including the City of San Diego's (City's) General Plan Historic Preservation Element (2023a), the Cultural Resources Technical Report (CRTR) prepared by Harris & Associates (2024) (Appendix D) for the CRMP Phase 1, and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023b).

5.4.1 Existing Conditions

5.4.1.1 Cultural Setting

Cultural resources found throughout the City are reminders of the City's past. Cultural resources are the traces left by prehistoric or historic people who inhabited the San Diego region. They encompass both the built and the archaeological environments, and could include Tribal cultural resources.

Prehistoric

The following provides a brief cultural background for the City.

Paleoindian Period (Pre-5,500 BC)

Several terms are used for the early occupation of the San Diego region and include Paleoindian Period, Early Archaic Period, Initial Period, and Scraper Maker Period (Moratto 1984). This period dates from 9,000 to 5,500 BC (Chartkoff and Chartkoff 1984; Moratto 1984; Rogers 1966; Taylor and Meighan 1978; Warren and True 1961). Early humans have been characterized as an early nomadic, hunting culture whose settlements were located on mesas and ridge tops and in deserts (Erlandson and Colton 1991; Rogers 1966; Wallace 1978; Warren et al. 1961). During this period, inhabitants relied on large game for subsistence (Rogers 1966; Warren et al. 1961) and produced "finely worked blades, spear points, choppers, and scrapers out of fine-grained volcanics" (Carrico 1977). In addition, leaf-shaped knives, foliate to ovoid bifaces, foliate to short-bladed shoulder points, crescents, engraving tools, core hammers, pebble hammers, and cores were part of the tool assemblage (Moratto 1984; Wahoff and Dolan 2000). Pottery and milling stones were missing from the assemblage, confirming the assumption that hunting was an economic focus for the culture (Moriarty 1967; Warren and True 1961). Because the tool assemblage was similar to desert cultures of the Mojave Desert, it is believed that this culture migrated west from the desert into

California (Gallegos 1995; Rogers 1939). However, no single hypothesis is universally accepted. Other hypotheses identify the movement of people into California from the south and north down the coast (Taylor and Meighan 1978; Chartkoff and Chartkoff 1984).

Archaic (8,000 BC–AD 500)

According to Hale et al. (2018), "the more than 1,500-year overlap between the presumed age of Paleoindian occupations and the Archaic Period highlights the difficulty in defining a cultural chronology in the San Diego region." The Archaic Period contains assemblages from the La Jolla complex, Millingstone Horizon, and Encinitas Tradition. This period is characterized by the presence of dart points, milling equipment, scattered hearths, shell middens, and flexed burials (Carrico 1977). Subsistence strategies placed an emphasis on gathering, possibly as a result of environmental change (Wahoff and Dolan 2000; Wallace 1978). The assemblage was composed of milling implements and cobble/core-based tools. Mortuary goods included shell beads and ornaments, points, and milling implements. Wallace (1978) interpreted archaeological sites of this period as an indication of an increase in population and permanence. Site types included coastal shell habitation bases, quarries, resource exploitation, and milling (Gallegos 1995). The sites are typified by an abundance of shellfish remains and are situated near sloughs and lagoons and on the open coast (Carrico 1977; Masters and Gallegos 1997; Moratto 1984; Wallace 1978). An inland manifestation identified as the Pauma complex is known to have existed (True 1958). Unlike the coastal people, this complex occupied "transverse valleys and sheltered canyons of inland San Diego County, ha[d] an emphasis on hunting and gathering, had a greater diversity of tool types, and lacked shellfish remains" (Masters and Gallegos 1997:12).

Similar to the Paleoindian Period, controversy surrounds the origins of the Archaic Period. Several hypotheses have been postulated. Kaldenberg (1976) and Moriarty (1967) proposed that the transition from the Paleoindian to the Archaic Period was an in-situ adaptation. In contrast, Warren et al. (1961) viewed this transition as a migration from the desert to the coast due to the adverse environmental condition of the Altithermal. Taylor and Meighan (1978:36) did not take a single position regarding the transition to the Archaic Period but, rather, incorporated all of the hypotheses as identified below:

The artifact inventory and cultural activities argue strongly that this stage began in the desert inland and spread toward the Pacific Coast, reaching it about 8,500 years ago. There is no evidence to show whether the Milling Stone Stage involved movement of the people or a conquest of earlier residents; perhaps the early hunters simply adopted this way of life as game animals became scarce.

The population of this period focused on lagoonal resources and moved up and down the river valleys exploiting a variety of inland and coastal resources (Masters and Gallegos 1997).

Late Prehistoric (AD 500–1769)

The Late Prehistoric Period is an antecedent to Spanish settlement (AD 1769). It was a "time of cultural transformations brought about by trait diffusion, immigration, and *in-situ* adaptation to environmental changes" (Moratto 1984:153). Subsistence strategies involved a focus on terrestrial collection and hunting (Christenson 1992); however, shellfish and other maritime resources were also used. Settlement included large villages near permanent water sources, temporary campsites, quarries, and resource exploitation sites. Small triangular points, pottery, and Obsidian Butte obsidian are characteristic of this period (Christenson 1992; Masters and Gallegos 1997; True 1966, 1970). Cremations replaced flexed inhumations, and mortuary goods became more elaborate (Wallace 1955). Cremations are believed to have been introduced into the area during the Late Prehistoric Period and are the result of Shoshonean intrusion (1,500 BP or 450 BC) from the deserts (True 1966) into northern San Diego County. However, in the southern part of San Diego County, this practice has been attributed to a "Colorado River origin that may have had an influence as far reaching as the Hohokam [current day Pima people and Tohono O'odham Nation] in southwestern Arizona" (True 1970:58). Kaldenberg (1976:67) had a different opinion on the origin and timing of the entrance of cremation practices into the region. He noted that the practice of cremation was introduced at the terminus of the Archaic Period (approximately 3,000 BP or 1,050 BC) with the "migration of Yuman people into the San Diego coastal region." By 2,000 BP or 50 AD, inhumations were replaced by cremations (Kaldenberg 1976).

Two complexes (San Luis Rey and Cuyamaca) are identified with the Late Prehistoric Period. True (1966) believed that the San Luis Rey complex was a precursor to the ethnographic Luiseño. Similarly, he suggested that the Cuyamaca complex was the predecessor to the ethnographic Kumeyaay. Through the examination of both geographic regions, True identified specific characteristics unique to each; however, he noted that, although geographically similar, these two cultures were distinctly different.

Ethnohistoric Period (Post-AD 1769)

The Ethnohistoric Period begins with the first permanent European settlements. Early Ethnohistoric accounts and mission documents have been used to reconstruct this period (Hale et al. 2018). Shipek (1993) delineated the boundaries between the Luiseño and the Kumeyaay as follows:

In 1769, the Kumeyaay national territory started at the coast about 100 miles south of the Mexican border (below Santo Tomas), thence north to the coast at the drainage divide south of the San Luis Rey River including its tributaries. Using the U.S. Geological Survey topographic maps, the boundary with the Luiseño then follows that divide inland. The boundary continues on the divide separating Valley Center from Escondido and then up along Bear Ridge to the 2240 contour line and then north across the divide between Valley Center and Woods Valley up to the 1,880-foot peak, then curving around east along the divide above Woods Valley.

The Kumeyaay (also known as Ipai/Tipai, Diegueño, and Kamia) lived in small villages, or rancherias, and would inhabit multiple locations throughout the year. According to Cline (1984), the typical settlement included two or more seasonal villages with temporary camps farther away from the main central villages. Hunting and gathering were the main economic focus, consisting of small game, acorns, grass seeds, and other plant resources. Similar to the Prehistoric Period, a wide range of tools (chipped and ground stone) that were made from locally available materials were used. Exotic materials, such as obsidian and chert, were imported from the deserts to the north and east. In addition to lithic tools, the Kumeyaay produced baskets and pottery.

Historic Period (Post-AD 1769)

The Historic Period can be divided into three phases (Spanish, Mexican, and American). Each phase is identified with a change in political power. Common goals in each phase included land gain, assimilation of the native population, and the attainment of wealth. However, these periods were dissimilar in the rationale behind these goals. Rationale included defense (Spain), independence and secularization (Mexico), and expansion and economics (United States). Assimilation of the Native American population was a desire of each government that came to power; however, the greatest misfortune of this period was the large decline in Native American populations (Phillips 1981).

Spanish Period (AD 1769–1821)

Although the first Spanish contact occurred in 1542, it was not until 1769 that the first permanent settlement was established. The Spanish Period was a time of European expansionism and is typically identified with the mission system. In addition, presidios (military defense) and pueblos (city government) played an important role in the structuring of the community (Campbell 1977). The mission system was the institution designated for the assimilation and exploitation of native people (Campbell 1977; Cline 1979; Jackson and Castillo 1995; Phillips 1981). Jackson and Castillo (1995:6) identified this exploitation as an extension of the "sixteenth-century policy of *congregación/reducción*." In contrast, Costo (1987) noted that the transference of the Spanish Inquisition (originally established in 1478) to the New World that was the mechanism for this exploitation because the Inquisition contained economic and religious incentives. The Spanish stronghold in California declined with Spain's loss of the Napoleonic Wars (1803–1815), which eliminated funding to the mission.

Mexican Period (AD 1821–1848)

Mexican independence from Spain occurred in 1821, and in 1833, Mexico secularized the missions. After secularization, large tracts of land were granted to private citizens. "The secularization of the missions during the Mexican Period is usually regarded as a watershed in California history because it resulted in the replacement of one Hispanic institution by another – the rancho for the mission" (Phillips 1981:33). Like the mission, the rancho became the institution

of native exploitation. This period experienced an increase in cattle ranching and the hide and tallow trade (Gallegos 1995; Wahoff and Dolan 2000). The passage of the Treaty of Guadalupe Hidalgo that ended the Mexican–American War in 1848 was the final event that culminated the Mexican Period in California.

American Period (Post-AD 1848)

The concept of a two-ocean economy and the California Gold Rush were the impetus that brought about the annexation of California (1848) to the United States. A large number of immigrants entered California with the discovery of gold and the availability of free land with the passage of the Homestead Act (1863). This population increase caused the displacement of Native Americans and brought about a deterioration in their rituals and traditions (Carrico 1986; Gallegos 1995). During this period, the ranchos experienced a decline primarily in response to their inability to validate land ownership as a result of the California Land Claims Act of 1851. "With the discovery of gold, the building of the transcontinental railroad, and the development of crops and cities, people in massive numbers from all parts of the world began to inhabit the region" (Phillips 1981: editors' introduction).

5.4.1.2 Natural Setting

Regional Geology

The majority of San Diego County is in the Peninsular Ranges Geomorphic Province, bounded by the coastal province to the west and the Salton Trough (Desert Basin) province to the east (County of San Diego 2011).

The City lies in the western (coastal) plain province which extends from the western edge of the Peninsular Ranges Geomorphic Province of California and runs roughly parallel to the coastline. The province is composed of dissected, mesa-like terraces that graduate inland into rolling hills. The terrain in the westernmost portion of the province is underlain by Upper Cretaceous, Tertiary, and Quaternary sedimentary rocks composed mainly of sandstone, shale, and conglomerate beds, reflecting the erosion of the Peninsular Ranges to the east (USGS 2023). The CRMP Phase 1 area is located within Bay Point Formation, Unnamed Marine Terrace deposits, San Diego Formation, and Ardath Shale (City of San Diego 2007).

Topography and Soils

The CRMP Phase 1 area is in the Coastal Plain, west of the Peninsular Ranges and Desert Basin. The elevation in the CRMP Phase 1 area ranges from approximately sea level to 79 feet above mean sea level (amsl). The topography of the CRMP Phase 1 area is highly variable, with the majority of the urban/developed areas gently sloping or relatively flat, and the shorelines and cliffs steeply decreasing in elevation from the ocean. The Coastal Plain region ranges in elevation from 0 feet amsl to 600 feet amsl and is characterized by topographic features including mesa tops, elevated marine

terraces, and level floodplains of river valleys (County of San Diego 2011). The CRMP Phase 1 area is characteristic of elevated marine terraces that occur in the region.

Five soil types are mapped in the CRMP Phase 1 area (Appendix C). The five soil types include coastal beaches (La Jolla Shores, Mission Beach, Pacific Beach – Tourmaline Surf Park, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites), Corralitos loamy sand (0 percent to 5 percent slopes) (La Jolla Shores project site), lagoon water (Ocean Beach – Dog Beach project site), Reiff fine sandy loam (2 percent to 5 percent slopes) (Sunset Cliffs project site), and urban land (Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites) (USDA 2023). The remaining survey area not defined by a soil type is Made Land (Ocean Beach – Dog Beach Pacific project site).

Vegetation Communities and Land Cover Types

The CRMP Phase 1 area, which includes all six project sites and 100-foot survey buffer surrounding each site, is composed of 11 vegetation communities and land cover types (six wetland communities and five upland vegetation communities and land cover types). Six wetland communities are: Subtidal Ocean, Intertidal Ocean, Estuarine, Southern Coastal Salt Marsh, Beach, and Concrete Channel; and five upland vegetation communities and land cover types are: Southern Foredunes, Diegan Coastal Sage Scrub, Sandstone Cliff, Non-Native Woodland, and developed disturbed land (refer to Section 5.3, Biological Resources).

The Ocean Beach – Dog Beach project site is approximately 12.85 acres, and the survey area is approximately 25.78 acres comprising open space beach and shoreline, and a developed parking lot with a small portion of native dunes, scrub habitat, and Smiley Lagoon (estuarine and southern coastal salt marsh) in the eastern portion of the survey area. This survey area is bordered to the southeast by residential development, to the north and west by the outlet of the San Diego River and open waters of the Pacific Ocean, and to the east by Smiley Lagoon. The southern portion is directly adjacent to Ocean Beach – Pier survey area. The northern portion of the Ocean Beach – Dog Beach survey area is in the Multi-Habitat Planning Area.

The La Jolla Shores project site is approximately 21.02 acres, and the survey area is approximately 35.63 acres and includes open space beach, shoreline, and parkland, bordered to the east by residential development and to the west by the open waters of the Pacific Ocean.

The Pacific Beach – Tourmaline Surf Park project site is approximately 3.66 acres, and the survey area is approximately 11.97 acres containing open space beach and shoreline, and a developed parking lot and stormwater infrastructure. This survey area is bordered to the north, south, and east by residential development and to the west by the open waters of the Pacific Ocean.

The Mission Beach project site is approximately 8.92 acres, and the survey area is approximately 17.09 acres consisting of open space beach and shoreline, as well as commercial development,

open space park, and a developed parking lot along the eastern edge. This survey area is bordered to the north and south by residential development, to the east by commercial development and open space parks, and to the west by the open waters of the Pacific Ocean.

The Ocean Beach – Pier project site is approximately 11.90 acres, and the survey area is approximately 21.38 acres consisting of open space beach and shoreline, as well as developed parking lot, with a small portion of commercial development along the southeastern edge. This survey area is bordered to the north by the Ocean Beach – Dog Beach survey area (open beach), to the south and east by residential development, and to the west by the open waters of the Pacific Ocean.

The Sunset Cliffs project site is approximately 0.29 acres, and the survey area is approximately 29.79 acres and includes open space shoreline along the west side and a developed roadway and residential buildings along the east side. The survey area is bordered to the east by residential development and to the west by the open waters of the Pacific Ocean. Directly south of the project site is a Multi-Habitat Planning Area.

5.4.1.3 Previously Identified Cultural Resources

A records search was conducted as part of the CRTR for the CRMP Phase 1's survey area (which includes the six project sites areas and a 100-foot survey buffer around each site) for all area the CRMP Phase 1 area (all six project sites), and a 0.25-mile buffer around each project site using the California Historical Resources Information System (CHRIS). The California Historical Resources Inventory Database was consulted for designated historical resources. The results of the records search are provided in Confidential Appendix D of the Cultural Resources Technical Report. In total, 305 studies have been conducted within the 0.25-mile radius, only 31 of the studies intersect with the survey area. A total of 223 resources have been previously recorded within the 0.25-mile radius, only eight cultural resources including one historical district (P-37-011913/CA-SDI-11913/H, P-37-011916/CA-SDI-11916, P-37-016522, P-37-024617/CA-SDI-16301, P-37-029025, P-37-031697/CA-SDI-20130, P-37-032274/CA-SDI-20455, P-37-032275/CA-SDI-20456) intersect with the CRMP Phase 1's project site, and 14 resources including one archaeological district (P-37-000039/CA-SDI-39, P-37-011912/CA-SDI-11912/H, P-37-011914/CA-SDI-11914, P-37-011915/CA-SDI-11915/H, P-37-011917/CA-SDI-11917, P-37-016217, P-37-016218/CA-SDI-18605, P-37-020909, P-37-027750/CA-SDI-18013, P-37-031696/CA-SDI-20129, P-37-031720/CA-SDI-20151, P-37-032117/CA-SDI-20351, P-37-034703, P-37-36014/CA-SDI-21939), a locally significant structure (HRB#1500), and 3 historic addresses (P-37-040107, P-37-040108, P-37-040109) intersect with the 100-foot survey buffer. Resources in the search area include prehistoric (habitation, midden, shell deposits, artifact scatters, rock features, and bedrock milling), historic (trash deposits, structural remains, features, structures, railroad, water conveyance, and sidewalk/curb stamps), and multi-component sites. A discussion of each project site is provided below.

Pilot Project: Ocean Beach – Dog Beach

The following known cultural resource is within the Ocean Beach – Dog Beach survey area:

P-37-029025, Beach Cottage Community Plan Area or the Ocean Beach Cottage Emerging Historical District overlaps with the Ocean Beach – Dog Beach survey area. The resource was originally recorded by McCoy in 1999. McCoy identified the area as potentially historic for the cottages that were built as beach residences and full-time family residences. Architectural styles include Craftsman, California Bungalow, Spanish Colonial Revival, and Folk Victorian. The historic theme for the area is "vacation architecture," and the period of significance is identified as 1887 through 1931. The City of San Diego's Historical Resources Board designated the Ocean Beach Cottage Emerging Historical District as site Number 442. The designation is based on local criteria F, as the cottages are "a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City." Under the City's regulations, the district is thematic and voluntary in nature, meaning that only properties that meet the period of significance and statement of significance for the district and are volunteered by the property owner for inclusion in the district may be designated by the City's Historical Resources Board as contributing resources to the district. Properties within the boundary of the district that are not designated as contributing resources are not regulated as part of the Ocean Beach Cottage Emerging Historical District.

La Jolla Shores

The following three known cultural resources are identified within the La Jolla Shores site area:

P-37-031697/CA-SDI-29139/SDM-W-2, was originally recorded in 1926, included recovery of at least 12 burials that included internments. In addition, a shell deposit about 2 feet in depth and a lithic scatter were identified. In 2009, testing was conducted on the site; however, the work was conducted outside the La Jolla Shores project site. No human remains were identified; however, artifacts including tools, flakes, groundstone, angular waste, fire-affected rock, and charcoal were recovered. The work conducted in 2009 included reconstructing the boundaries of the cultural site as it appeared that the mapped boundaries were in error (Pigniolo et al. 2009; Rogers 1926). The site was tested in 2010 for the Avenida de la Playa Storm Drain project (Zepeda-Herman 2010). A total of six debitage pieces, one flaked lithic artifact, one fire-affected rock fragment, 111.5 grams of marine shell, seven non-human bone fragments, and one human bone fragment were recovered. The human bone fragment has been repatriated to the Kumeyaay Cultural Repatriation Committee. The site was monitored in 2011 and 2012 for the residential developments (Robbins-Wade et al. 2011; Pigniolo 2012). Only two artifacts and two

pieces of shell were recovered. Portions of the site were tested in 2013 for a residential project. The survey and testing program identified a sparse artifact assemblage (debitage, marine shell, and fire-affected rock). The portions of the site tested represented intact deposits significant under CEQA criterion 4 and the City's Historical Resources Register under criterion A. The site was identified as significant because it exemplifies a special element in the City's cultural and archaeological development.

The site form for P-37-031697/CA-SDI-20130 indicates that the currently mapped boundary was the assumed maximum probable extent of secondary deposits from the grading of nearby P-37-000039/CA-SDI-39 (also known as the Spindrift Archeological District). Therefore, although the Spindrift Archaeological District is located outside of the site area, cultural material could be present at subsurface levels of P-37-031697/CA-SDI-20130.

- **P-37-032274/CA-SDI-20455** was recorded during the excavation of a utility trench (Case 2011). The site is described as a disturbed historical rock ring (fire ring) containing a refuse deposit. The feature and deposit were observed in the soil directly below the concrete/asphalt at the north end of a newly constructed lifeguard pad. Nine artifacts included three beer bottles, one liquor bottle, one soda bottle, one bleach bottle, one glass jar, one pencil eraser and an attached ferrule, and several pieces indeterminate corroded metal. Based upon the diagnostic markings on a few of the glass bottles, the assemblage appears to represent the early 1950s.
- **P-37-032275/CA-SDI-20456** was recorded during the sub-grade excavation of an emergency vehicle garage associated with construction of a new lifeguard station (Case 2011). The site consisted of a non-significant historic trash deposit consisting primarily of bottles; however, a bottle cap, ceramic bricks, a glass tumbler, a plastic knife, and a shell button were also identified. The assemblage appears to represent the early 1950s based on one Coke bottle with attributes dating to that time period.

The following four known cultural resources are outside the La Jolla Shores project site but within the 100-foot buffer:

• P-37-000039/CA-SDI-39 (Spindrift Archaeological District) is a resource of archaeological and cultural significance to the Kumeyaay Tribes of San Diego. It is a very large habitation site with multiple components and activity areas (Pigniolo 2009a). It is known as the Spindrift Archaeological District (Mut kula xuy/Mut lah hoy ya), of which 11 locations within the district have been locally designated by the City of San Diego's Historic Resources Board. According to Kyle Ports (2020), this site has been encountered beneath existing streets, landscaping, and residences. These remaining elements represent the surviving parts of the large prehistoric village complex which encompassed land surrounding the La Jolla Beach and Tennis Club southward toward La Jolla Cove. This site was designated as the Spindrift Archaeological District because

of the abundance of cultural materials associated with the large Native American population that occupied this site for approximately 8,000 years. Although P-37-000039/CA-SDI-39 has been substantially disturbed by land development over the past 80 years, the site is generally considered to be CEQA-significant due to the presence of human remains and associated cultural materials/features that represent a substantial human occupation at this location. P-37-000039/CA-SDI-39 is south of the La Jolla Shores project site, but no evidence of this resource site was identified during the pedestrian survey because the portion of P-37-000039/CA-SDI-39 site within the 100-foot survey boundary of La Jolla Shores project site is developed.

- P-37-031696/CA-SDI-20129/SDM-W-199 was originally recorded as a "sea-margin intermittent camping" site. Carter excavated the site in 1947, and it was described as a 20-foot-deep oyster and abalone midden containing hearths, shellfish, flakes, stone tools, a mano. In the 1950s, the site areas underwent housing developments and the installation of utility infrastructures. In 2009, Andrew Pigniolo (2009b) provided an archival search and update for the site, although no survey or testing was conducted. In 2020, Andrew Garrison conducted archaeological monitoring on site, in which he recovered a small collection of groundstones and marine shell. As such, this site was not considered eligible for listing in the California Register of Historical Resources due to the disturbed context.
- **P-37-031720/CA-SDI-20151** included fire-affected rock, debitage, charcoal, and a burned lens, which appear to delineate a hearth, identified during utility trenching (Williams 2010). The feature appears to be intact and capped by the roadway; however, this site was not evaluated for significance under any of the registers.
- **P-37-034703** was recorded in 2014 by Carmen Zepeda-Herman and Harry J. Price as two sidewalk stamps, one located on Camino Del Oro and the second on Vallecitos. The stamp located on Camino Del Oro is engraved with "TESSITORE/BULL" and is in poor condition as the lettering has been worn down.

Pacific Beach – Tourmaline Surf Park

No known cultural resources were identified on the Pacific Beach - Tourmaline Surf Park survey area.

Mission Beach

Two resources are located within the Mission Beach survey area. Resource P-37-016522 is located within the project site, and resource P-37-020909 is located within the 100-foot survey buffer. In addition, three potentially historic addresses were identified within the 100-foot survey buffer (P-37-040107, P-37-040108, and P-37-040109), but these are not considered significant historic resources.

The following known cultural resource was identified on the Mission Beach project site:

P-37-016522 (Mission Beach seawall and boardwalk [Ocean Front Walk]) is located on the Mission Beach project site (refer to Figure 5.4-1, Seawall and Boardwalk at the Mission Beach Project Site, and Figure 5.4-2, Existing Seawall and Ocean Front Walk and Concrete Stamp at the Mission Beach Project Site). The Ocean Front Walk (P-37-016522) was originally recorded in 1997. The boardwalk and seawall, which are within the project site, extend from Thomas Avenue in the north to the South Mission Beach jetty for a distance of 2.4 miles. The boardwalk and seawall were determined eligible for inclusion in the National Register of Historic Places (NRHP), at the level of local significance under Criteria A and C, but have not been formally listed. The Office of Historic Preservation concurred with the findings and found that "both the Boardwalk and the seawall have strong associations with the early development of the Mission Beach area during the area's historical period of significance (1914–1915) and were prime components of an award-winning landscape design by developer John D. Spreckels. In addition, the Boardwalk and seawall have maintained a high degree of the structural integrity of design, setting, and materials associated with the aforementioned historical period of significance" (Donaldson and Magno 1997). In 2016, the City of San Diego completed a reconstruction of the Mission Beach seawall from Ventura Place to San Fernando Place. The original seawall, which had been determined eligible for listing in the NRHP, was badly deteriorated and had suffered from patching and infill that was historically inappropriate. Utilizing historic plans and historic photographs, as well as field measurements of the existing wall, the seawall, boardwalk, open balustrade walls at beach access points, beach access points, and light standards were constructed in accordance with the U.S. Secretary of the Interior's Standards for Reconstruction. The City of San Diego has not yet designated the resource but has been deemed it eligible for designation.

The following known cultural resource is within the 100-foot survey buffer of the Mission Beach project site:

• **P-37-020909 (Belmont Amusement Park Plunge and roller coaster)** is not within the project site; however, the western side of the Plunge (pool) structure lines up with the eastern side of the 100-foot survey buffer area for the Mission Beach project site (City of San Diego 1973a). The rollercoaster was listed in the NRHP in 1978 (N734) and designated a National Historic Landmark in 1987 (City of San Diego 1973b). Designed by Frank Prior and Frederick Church, it was constructed in 1925, and is one of the few traditional wooden roller coasters. The Plunge was designed by architect Frank Walter Stevenson. The saltwater pool opened in 1925 as the Natorium and was styled after the Spanish Renaissance architecture of Balboa Park (Stone 2019). In 1940, the saltwater was replaced with fresh water. It closed in 2014 due to safety issues and lack of proper

maintenance. It was restored and reopened in 2019. This resource was designated by the City of San Diego's Historical Resources Board as number 89, Belmont Amusement Park- Plunge.

The following three potentially historic addresses were identified within the 100-foot survey buffer but are not considered significant resources.

- **P-37-040107** was recorded in 1997 as a condo residence built in 1990, located on 3215, 3217, 3209 Ocean Front Walk. This resource appears ineligible for local designation and is therefore considered non-historic.
- **P-37-040108** was recorded in 1997 as a commercial building constructed in 1970, located on 3205 Ocean Front Walk. This resource appears ineligible for local designation and is therefore considered non-historic.
- **P-37-040109** was recorded in 1997 as a multi-family residence built in 1950, located on 2999 Ocean Front Walk. This resource appears ineligible for local designation and is therefore considered non-historic.

Ocean Beach – Pier

The following two known cultural resources are within the Ocean Beach – Pier project site:

P-37-029025, Beach Cottage Community Plan Area or the Ocean Beach Cottage • Emerging Historical District overlaps with the Ocean Beach – Pier survey area. As described above, it was originally recorded in 1999 by McCoy, who identified the area as potentially historic for the cottages that were built as beach residences and full-time family residences. Architectural styles include Craftsman, California Bungalow, Spanish Colonial Revival, and Folk Victorian. The historic theme for the area is "vacation architecture," and the period of significance is identified as 1887 through 1931. The City of San Diego's Historical Resources Board designated the Ocean Beach Cottage Emerging Historical District as site Number 442. The designation is based on local criteria F, as the cottages are "a finite group of resources related to one another in a clearly distinguishable way or is a geographically definable area or neighborhood containing improvements which have a special character, historical interest or aesthetic value or which represent one or more architectural periods or styles in the history and development of the City." Under the City's regulations, the district is thematic and voluntary in nature, meaning that only properties that meet the period of significance and statement of significance for the district and are volunteered by the property owner for inclusion in the district may be designated by the City's Historical Resources Board as contributing resources to the district. Properties within the boundary of the district that are not designated as contributing resources are not regulated as part of the Ocean Beach Cottage Emerging Historical District. The Ocean Beach Pier was constructed in 1966 outside of the period of significance and is not a contributing resource to the Ocean Beach Cottage Emerging Historical District.

• HRB #1500, Ocean Beach Pier, is located at the western terminus of Niagara Street between Newport Avenue and Narragansett Avenue, west of Ocean Front Way, and was designated as a local historic resource by the City's Historical Resources Board on June 22, 2023 (City of San Diego 2023c). The Pier was designated under Criterion A as a special element of the historical and economic development of the Ocean Beach Community and the City as a whole and retains integrity to its 1966-1977 period of significance; and Criterion C as a good example of the fishing pier typology with a 1966-1968 period of significance. The Ocean Beach Pier has been determined potentially eligible for the National Register and California Register Criterion A/1 and C/3.

The following known cultural resource is outside the Ocean Beach-Pier project site but within the 100-foot buffer:

• **P-37-36014/CA-SDI-21939** was recorded in 2016 (Dittmer and Meling 2016) as a trash scatter. The site was discovered during trench monitoring for a sewer line and consisted of two loci of historic bottles dating from 1902-1929, that were removed and curated. However, the full extent of the deposit was not determined given the limited excavation of the trench.

Sunset Cliffs

The following three known cultural resources were identified within the Sunset Cliffs project site:

- **P-37-011913/CA-SDI-11913H** was recorded in 1990 as a temporary prehistoric camp with a possible historic structure cobble and concrete footing. Artifacts identified included 15 cobble-based flakes and cores. In addition, shell fragments and fire-affected rock were also present. The recorders acknowledge that most of the prehistoric component is likely underneath the parking lot and/or Sunset Cliffs Boulevard. They were not able to determine if this portion of the site still exists or was destroyed during the construction of the parking lot and road (Pigniolo and Briggs 1990a). This resource was not evaluated for significance under any of the registers.
- **P-37-011916/CA-SDI-11916** was originally recorded in 1990 and is described as a possible prehistoric habitation site. It contains lithics including flakes and tools, fire-affected rocks, a burned faunal bone fragment, midden, and a variety of shell fragments. No features were observed; however, hearths may be present. The site is subject to cliff erosion, and it is not known if the site extends underneath Sunset Cliffs Boulevard. According to the recorders, there is a Pleistocene shell lens below the site (Pigniolo and Briggs 1990b). This resource was not evaluated for significance under any of the registers.

• **P-37-024617/CA-SDI-16301** was recorded by the City of San Diego, Department of Parks and Recreation in 2002 (Hector 2002). The site is described as a shell midden with flaked stone artifacts and milling tools, appearing to be a small campsite. It is located along the bluffs of Sunset Cliffs Boulevard. This resource was not evaluated for significance under any of the registers.

The following eight known resources were identified outside the Sunset Cliffs project site but within the 100-foot survey buffer for the survey area:

- P-37-011912/CA-SDI-11912/H was recorded by in 1990 as a shell scatter and possible historic structure remains. The shell scatter appeared within the terrace sidewalk below the existing parking area of Sunset Cliffs Boulevard. A historic feature was identified as "approximately 10 concrete footings and possibly a smugglers tunnel" located from the cliff to the corner of Osprey Street and Sunset Cliffs Boulevard. Remains of the shell scatter are believed to either exist underneath the paved parking lot and Sunset Cliffs Boulevard or to have been destroyed during the construction of such infrastructure (Pigniolo and Briggs 1990c). This resource was not evaluated for significance under any of the registers.
- **P-37-011914/CA-SDI-11914** was recorded in 1990, containing shell fragments, fire-affected rock, and possible flaked cobble tool. The site was recorded in very good integrity, but with erosion potential due to its location on a steep terrace cliff (Pigniolo and Briggs 1990d). This resource was not evaluated for significance under any of the registers.
- **P-37-011915/CA-SDI-11915/H** was also recorded in 1990 as a historic refuse deposit consisting of can and metal fragments, clear and amber glass fragments, and a variety of depression-era glass (Pigniolo and Briggs 1990e). The site was observed in a gully sidewall. This resource was not evaluated for significance under any of the registers.
- **P-37-011917/CA-SDI-11917** was originally recorded in 1990 as a possible temporary prehistoric camp, including shell fragments, fire-affected rocks, and over 5 cobble-based flakes (Pigniolo and Briggs 1990f). The shell deposit lies 80-100 centimeters below ground surface, with some surface components. A nearby housing development appears to have disturbed portions of the site, while the remaining is eroding to the Pacific Ocean. This resource was not evaluated for significance under any of the registers.
- **P-37-016217** was recorded in 1998 as a shell scatter (Kyle et al. 1998). The scatter included both *Chione* and *Argopecten* species. The site was identified as occurring west of Sunset Cliffs Boulevard. This resource was not evaluated for significance under any of the registers.
- **P-37-016218/CA-SDI-18605** was originally recorded in 1998 as a shell scatter including *Chione* sp. and *Argopecten* sp. shell remains in an area approximately 70 square meters in size. This resource was not evaluated for significance under any of the registers.
- **P-37-027750/CA-SDI-18013** was recorded in 2006 as a temporary camp including marine shell, charcoal, fire-affected rocks, lithic flakes and stone tools (Elizabeth Davidson 2006). The site was tested and documented to have very high integrity. Some specimens were collected and analyzed, but further testing was recommended if additional portions of the site are to be impacted by future development projects. This resource was tested and collected for a previous project, but not evaluated for significance.
- **P-37-032117/CA-SDI-20351** was recorded in 2011 as a historic site containing glass bottles dating from 1902-1958 (Kraft 2011). The entire historic refuse scatter was removed during mitigation monitoring for the Eichen residence project.

5.4.1.4 Survey Results

An intensive pedestrian survey was conducted using standard archaeological procedures and techniques (see Appendix D for further details regarding survey methods). The six project sites, along with a 100-foot survey buffer around each location, are collectively referred to as the "survey area" in this section. The combined total for the survey area is 141.64 acres, including approximately 58.64 acres for the six project sites and approximately 83 acres for the buffer.

Continuous parallel transects (5–10 meters) were walked throughout the project sites, based upon the accessibility of the survey areas. Each site was evaluated for the presence of known and unidentified cultural and historical sites. Cleared areas including rodent burrows and eroded areas were opportunistically surveyed for the presence of resources. Identified resources were photographed and documented.

The survey area was photographed to document the environmental setting. California Department of Parks and Recreation site forms were completed for two potential historical resources (the commemorative flagpole at Kellogg Park and the restroom facility at Tourmaline Surf Park) observed. As described below, these potential resources were ultimately determined to not be significant under CEQA. Nevertheless, the California Department of Parks and Recreation (DPR) forms and maps will be submitted to the South Coastal Information Center.

Pilot Project: Ocean Beach – Dog Beach

The survey of Ocean Beach – Dog Beach survey area was conducted on two separate days due to the addition of a broader survey area after the first part of the survey had already been completed. The first segment of the survey, consisting of most of the survey area, included the southern and western sections of the survey area. This part of the survey was completed on June 27, 2023.

The northern part of the survey area included the grass lots to the southeast of Dog Beach and the western extent of the San Diego River Bikeway. These areas revealed no visible historic or prehistoric resources and were so impacted by development as to have either destroyed or obscured any resources that may have been present. The only structures within this portion of the survey

included a restroom facility at the southwestern corner of the parking lot that was determined to have been rebuilt around 2010 and a series of modern fiberglass and metal-pole lifeguard towers.

The survey area continued south along the beach to Cape May Place. This area overlaps with the mapped Beach Cottage Community Plan Area or the Ocean Beach Cottage Emerging Historical District boundaries (P-37-029025); a locally designated district by the City of San Diego's Historical Resources Board, as resource number 442. The only structures in this area are modern fiberglass and metal-pole lifeguard towers.

The additional segment of the survey was surveyed on August 3, 2023, and consisted of a narrow east–west extension to the northeast of the original survey area. It consisted mostly of the asphalt San Diego River Bikeway (biking and walking path) and the area on each side of the path. No resources were encountered in the area, although some parts of the area could not be surveyed because of the existence of occupied modern homeless encampments to the north of the path and very low (between zero and 20 percent) ground visibility in the area south of the path due to extensive landscaped vegetation.

Other than the mapped boundary of the Beach Cottage Community Plan Area or the Ocean Beach Cottage Emerging Historical District (P-37-029025), no resources were encountered during the pedestrian surveys on the Ocean Beach – Dog Beach survey area. The Ocean Beach Cottage Emerging Historical District boundaries are within the project site; however, no structures are present in that area. Structures are present within the 100-foot survey buffer only.

La Jolla Shores

The La Jolla Shores survey area was surveyed on July 6, 2023, with follow-up documentation on August 3, 2023. The eastern portion of the survey area overlaps with a known recorded resource (P-37-031697/CA-SDI-20130); however, no culturally significant elements of that resource were noted during the survey.

A detailed investigation into the P-37-031697/CA-SDI-20130 site form indicated that the currently mapped boundary was the assumed maximum probable extent of secondary deposits from the grading of a nearby site P-37-000039/CA-SDI-39, and therefore, any elements of the resource, if present, would be subsurface. Another resource (P-37-031720/CA-SDI-20151) is recorded as being directly adjacent to the project site, but within the 100-foot survey buffer. This site now appears to be covered by the graded and paved roadway and does not show surface elements. P-37-02274/CA-SDI-20455 and P-37-02275/CA-SDI-20456 are under the paved parking lot and were likely destroyed during grading and trenching for prior projects. Resources P-37-000039/CA-SDI-39 along the southern buffer, P-37-031696/CA-SDI-20129 along the northern buffer, and sidewalk stamp P-37-034703 along the east buffer were not relocated during the survey efforts.

Kellogg Park is a popular area in La Jolla, drawing thousands of tourists and locals each year as a recreational base for aquatic activities, including scuba diving, surfing, kayaking, and swimming. While Kellogg Park has prominence in the La Jolla area, due to significant changes to the park over time, the CRTR determined that the park as a whole does not rise to a level of significance under any local, state, or national criteria to be eligible for historical designation.

It was initially determined that a prominent flagpole in the southern portion of the park has potential historical significance (refer to Figure 5.4-3, Commemorative Flagpole at the La Jolla Shores Project Site, and Figure 5.4-4, Commemorative Flagpole on La Jolla Shores Project Site), and the California Department of Parks and Recreation (DPR) site form was completed for this resource. The flagpole was constructed during the beginning development of the park in 1951 as a gift from Florence Scripps Kellogg to the City. The flagpole was placed in dedication of Frederick Scripps Kellogg by his surviving wife, Florence Scripps Kellogg. Mr. and Mrs. Kellogg were instrumental in establishing the La Jolla Beach and Tennis Club along with donating the land for Kellogg Park, among several other philanthropic endeavors in San Diego during the first half of the 20th century. However, during further evaluation of the resource, it was determined that the Scripps family's association with the subject flagpole is minimal. The resource is a dedication rather than a direct association, such as a working space or residence. Criterion B of CEQA is generally restricted to those properties that are associated with a person's important achievements, rather than those that are associated with their birth or retirement, or that are commemorative in nature. Due to this, the flagpole does not retain enough association to rise to a level of significance under Criterion B or any other adopted local, state, or federal criteria.

No other cultural resources were identified in the La Jolla Shores survey area during the survey.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park survey area was surveyed on June 29, 2023, and follow-up documentation was completed on August 2, 2023.

The beach area, including the surrounding parking lot and facilities, was evaluated as a potential historical resource under Criterion A due to a long and important history related to Southern California surf culture. The survey area has several structures related to local surf culture. A community-built monument (installed in 2008) sits at the northwest corner of the parking lot and consists of a glass enclosed display board that highlights important people and events from the beach's long history as an important surfing area. The wooden display board is located in a prominent location at the entrance to the sand portion of the beach. It has a gabled shake shingle faux roof cover, and the west end is adorned with a large Tiki-style mask. The board includes newspaper clippings of events at the beach, lists of codified rules and "Surfing Etiquette," memorials to individuals significant to the beach who had passed away, and a list of individuals significant to surfing culture who had surfed at the beach over its lifespan, from its opening in

1963. Nearby this community board, approximately 30 feet to the southwest along the entrance to the sand beach, is a more formal, modern (less than 15 years old) stone memorial dedicated as the "SURFER'S MEMORIAL – TOURMALINE CANYON SURFING PARK." The stone memorial is accompanied by personally dedicated sponsor bricks and sponsor-dedicated masonry benches.

The restroom facility between the parking lot and beach was also evaluated as a potential historically significant structure under Criterion C (refer to Figure 5.4-5, Bathroom Facility at the Pacific Beach – Tourmaline Surf Park Project Site, and Figure 5.4-6, Restroom Facility and Murals on Pacific Beach – Tourmaline Surf Park Project Site). Listed under Criterion C are historically significant resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values.

The restroom facility houses a men's restroom and shower room combination on the south side, a mirrored women's restroom and shower room on the north side, and a central utility and maintenance room between the two. Its location in a potentially historic area of the City and its stylistically significant sawtooth roofline, in addition to its age and importance as the only public structure on the project site, testify to its potential historical significance. A shower room on each side occupies the farthest outside edge of the structure with an open roof covered only by wooden beams, while the restroom portion of each side maintains a fully enclosed roof with light and air being provided by a section of perforated wall leading into the open-air shower section. Two large murals of modern age occupy the exterior northern walls of the structure, reinforcing its cultural importance to the area (refer to Figure 5.4-6).

Constructed in 1963 as part of the Pacific Beach – Tourmaline surfing beach, the restroom facility shows structural and architectural continuity to the historical pictures, indicating no clear loss of historic context or value. A prominent feature of the restroom facility is the equilateral-triangular roofline, indicative of Southern California beach architecture of the 1960s. A secondary feature is the perforated masonry walls between the roofless shower/changing areas and the roofed toilet areas, allowing light and air into the restroom facility.

Due to its age, the area (park) which is potentially historic, and the distinctive sawtooth roofline of the structure, which is found throughout coastal architecture of the period, the restroom facility was initially determined to have potential historical significance, and the California Department of Parks and Recreation site form was completed for this resource. However, upon further investigation of the structure, it was determined that the restroom facility is not eligible for consideration as a historical resource under Criterion C due to its modification with murals in the mid-1990s.

Due to the importance to Southern California surf culture and the clear importance of the area to the local community, Tourmaline Surf Park was evaluated as a potential historical resource under Criterion A. The evaluation undertook a thorough review of the historical significance of the area and the built environment and concluded that while the area holds historical and cultural significance, and is clearly valued by the community, the majority of the built environment of the beach consists of modern memorials and dedications to the historical significance of the area, rather than historically significant resources themselves. All structures and objects within the park, except the restroom facility, are less than 45 years in age; therefore, they are not considered historic resources. The only built structure that appears to actually date back to the period of historical significance is the restroom facility (constructed in 1963), which itself was modified in modern times (the mid-1990s) to add its northern murals. As such, Tourmaline Surf Park was not found to be eligible for consideration as a historical resource.

Mission Beach

The Mission Beach survey area was surveyed on August 3, 2023. Ground visibility was completely unobscured (100 percent) as the survey area consisted of an unvegetated beach and adjacent concrete boardwalk. Because of the prominence and importance of the Belmont Park area, extensive research was conducted to examine the possible historic nature of the Mission Beach Boardwalk (Ocean Front Walk). The boardwalk was identified as eligible for listing in the NRHP in 1997 (P-37-016522). The City of San Diego has not yet designated the resource and it is not listed in any of the registers (local, State, national) but it has been deemed eligible for designation. Evidence of the 2016 restoration project implemented by the City of San Diego in accordance with the U.S. Secretary of the Interior's Standards for Reconstruction was documented. The only structures encountered during the pedestrian survey were modern fiberglass and metal-pole lifeguard towers.

The 100-foot survey buffer contains three historic houses that were deemed non-significant (P-37-040107, P-37-040108, P-37-040109). P-37-020909, the Belmont Amusement Park Plunge and roller coaster, is a resource that has been designated locally by the Historic Resource Board as Resource 89 (Plunge) and 90 (roller coaster). Only the Plunge falls within the 100-foot survey buffer for this project.

No other resources were encountered on the Mission Beach project site.

Ocean Beach – Pier

The survey of the Ocean Beach – Pier survey area was conducted on June 27, 2023. The survey included the beach area and sandside grass lots at the western end of Saratoga Avenue. This area overlaps the mapped Ocean Beach Cottage Emerging Historical District boundaries (P-37-029025), a locally designated district by the City of San Diego's Historic Resources Board, as resource number 442. A second resource, the Ocean Beach Pier (HRB# 1500) is located in the buffer area or this survey area. Only structures in this area are modern fiberglass and metal-pole lifeguard towers.

While the lifeguard station within the survey area at the western end of Santa Monica Avenue is prominent and possibly of historical importance to the area, it was constructed in 1980 and 1981, making it ineligible for historical status consideration. An adjacent monument (cast metal statue)

honoring lifeguards in the area was installed within the last 20 years, also making it ineligible for historic consideration (refer to Figure 5.4-7, Modern Lifeguard Statue on the Ocean Beach – Pier Project Site).

The survey covered the asphalt parking lot in the southernmost portion of the survey area and the beach adjacent to it. The only other structures encountered were modern fiberglass and metal-pole lifeguard towers. Ground visibility throughout this section of the Ocean Beach – Pier project site was very high, at or near 100 percent in most areas.

Along the southern 100-foot survey buffer, resource P-37-36014/CA-SDI-21939 was previously identified; however, this was discovered under a paved road and removed during construction monitoring.

The Ocean Beach Pier is located within the survey buffer for the Ocean Beach – Pier project site. It was constructed in 1966 and was designated by the City of San Diego under Criterion A because it is a special element of the historical and economic development of the Ocean Beach Community and the City as a whole. In addition, it was designated under Criterion C because it is a good example of the fishing pier typology.

Other than the mapped boundary of the Ocean Beach Cottage Emerging Historical District (P-37-029025), and the Ocean Beach Pier itself, no historical resources were encountered during the survey of the Ocean Beach – Pier survey area. The Ocean Beach Cottage Emerging Historical District boundaries are within the project site; however, no structures are present in that area. Structures are present within the 100-foot survey buffer only. The Ocean Beach Pier is also located within the 100-foot survey buffer but not within the Ocean Beach – Pier project site.

Sunset Cliffs

The Sunset Cliffs project site survey consisted of a very narrow strip of surface area alongside of, and sometimes crossing into, Sunset Cliffs Boulevard. The survey was conducted on July 10, 2023, and revealed a near 100 percent ground visibility in most places, with some roadside landscaping accounting for some small, localized areas of more limited visibility. The very narrow survey corridor crosses the mapped boundaries of three previously recorded cultural resources sites (P-37-011913/CA-SDI-11913/H, P-37-011916/CA-SDI-11916, P-37-024617/CA-SDI-16301) and the 100-foot survey buffer intersects with eight previously recorded sites (P-37-011912/CA-SDI-11912/H, P-37-011914/CA-SDI-11914, P-37-011915/CA-SDI-11915/H, P-37-011917/CA-SDI-11917, P-37-016217, P-37-016218/CA-SDI-18605, P-37-027750/CA-SDI-18013, and P-37-032117/CA-SDI-20351). However, the mapped boundaries that the survey area (project site and 100-foot survey buffer) crosses represent approximate or possibly subsurface site extensions that are no longer visible due to the grading and paving of Sunset Cliffs Boulevard, and as such, no resources

were encountered during the survey. The survey area consisted of either paved over street/sidewalk areas, landscaped roadside vegetation, or heavily graded dirt walking areas next to the road.

Despite crossing eleven mapped sites, no resources were encountered in the narrow, heavily impacted Sunset Cliffs survey corridor.

5.4.2 Significance Determination Thresholds

Historical resources significance determination, pursuant to the City's CEQA Significance Determination Thresholds, consists first of determining the sensitivity or significance of identified historical resources and, second, determining direct and indirect impacts that would result from project implementation. The City's CEQA Significance Determination Thresholds define a significant historical resource as one that qualifies for the CRHR or is listed in a local historic register or deemed significant in a historical resource survey, as provided under California Public Resources Code, Section 5024.1(g), although even a resource that is not listed in or determined eligible for listing in the CRHR, not included in a local register of historic resources, or not deemed significant in a historical resource survey may nonetheless be historically significant for the purposes of CEQA (City of San Diego 2023b). The City's Historical Resources Guidelines (City of San Diego 2022) state that the significance of a resource may be determined based on the potential for the resource to meet one or more of the criteria, including the potential to address important research questions as documented in a site-specific technical report prepared as part of the environmental review process.

Based on the City's CEQA Significance Determination Thresholds (City of San Diego 2023b), a significant impact regarding historical resources could occur if implementation of the project resulted in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site.

As a baseline, the City has established the following criteria to be used in the determination of significance for an archaeological resource under CEQA:

An archaeological site must consist of at least three associated artifacts/ecofacts (within a 50 square meter area) or a single feature and must be at least 45 years of age. Archaeological sites containing only a surface component are generally considered not significant, unless demonstrated otherwise. Such site types may include isolated finds, bedrock milling stations, sparse lithic scatters, and shellfish processing stations. All other archaeological sites are considered potentially significant. The determination of significance is based on a number of factors specific to a particular site including site size, type, and integrity; presence or absence of a subsurface deposit, soil stratigraphy, features,

diagnostics, and datable material; artifact and ecofact density; assemblage complexity; cultural affiliation; association with an important person or event; and ethnic importance.

The determination of significance for historic buildings, structures, objects and landscapes is based on age, location, context, association with an important person or event, uniqueness, and integrity.

A site will be considered to possess ethnic significance if it is associated with a burial or cemetery; religious social or traditional activities of a discrete ethnic population; an important person or event as defined by a discrete ethnic population; or the mythology of a discrete ethnic population.

Based on the City's CEQA Significance Determination Thresholds (City of San Diego 2023b), a significant impact regarding archaeological resources could occur if implementation of the CRMP Phase 1 would result in:

- a. a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5, an alteration, including the adverse physical or aesthetic effects and/or the destruction of prehistoric structure, objects, or sites; or
- b. the disturbance of any human remains, including those interred outside formal cemeteries.

5.4.3 Impact Analysis

5.4.3.1 Issue 1: Historical Resources

Would the proposed CRMP Phase 1 result in a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5, including the adverse physical or aesthetic effects and/or the destruction of a prehistoric or historic building (including an architecturally significant building), structure, or object or site?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The multi-use pathway would ultimately extend through the Ocean Beach – Pier project site. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway, which may improve the aesthetic of the dune compared to the existing condition. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figure 3-3, Pilot Project at Ocean Beach – Dog Beach Concept Renderings, and Figure 3-4, Pilot Project at Ocean Beach – Dog Beach with the Optional Restroom

Relocation, as well as Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

As discussed in Section 5.4.1.3, Previously Identified Cultural Resources, and Section 5.4.1.4, Survey Results, the mapped boundaries of one known historical resource, the Beach Cottage Community Plan Area, also known as the Ocean Beach Emerging Historical District (P-37-029025), overlaps with the Ocean Beach – Dog Beach project and the 100-foot survey buffer. However, no structures or elements of the built environment were identified within the Ocean Beach – Dog Beach survey area during the pedestrian survey. Therefore, implementation of the Pilot Project would not result in a substantial adverse change in the significance of a historical resource. No impact on historical resources would occur, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

As discussed in Section 5.4.1.3, P-37-034703 is located along the 100-foot survey buffer. This resource is a sidewalk stamp and is required to be preserved in accordance with the City's Municipal Code (SDMC Chapter 6, Article 2, Division 12, Section 62.1219). In addition, a prominent flagpole was identified in the southern portion of Kellogg Park during the pedestrian survey. However, as described in Section 5.4.1.4, upon further evaluation of the flagpole, it is not considered a historically significant resource. The flagpole is not listed in, or eligible for listing in the CRHR; included in a local register of historical resources; and does not meet any of the criteria for listing on the CRHR, including the following CCR Section 15064.5(a)(3):

(A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

(B) Is associated with the lives of persons important in our past.

(C) 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.

(D) Has yielded, or may be likely to yield, information important in prehistory or history.

Therefore, implementation of the La Jolla Shores project would not result in a substantial adverse change in the significance of a historical resource. No impacts on historical resources would occur, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into a sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

As discussed in Sections 5.4.1.3 and 5.4.1.4, there are no known historical resource within the Pacific Beach – Tourmaline Surf Park project site and 100-foot survey buffer. As discussed in Section 5.4.1.4, the Pacific Beach – Tourmaline Surf Park project site, including the parking lot and restroom facility, was evaluated for eligibility listing in the CRHR under Criterion A (CCR Section 15064.5(a)(3)) and Criterion C (CCR Section 15064.5(a)(3)). However, this area was determined not to be historically significant under Criterion A (CCR Section 15064.5(a)(3)) because all structures and objectives on the project site are less than 45 years in age, with the exception of the restroom facility. Additionally, although the restroom facility was constructed in 1963, it was modified in modern times (the mid-1990s) to add its northern murals; therefore, the restroom facility was determined not to be eligible for consideration as a historical resource under Criterion C (CCR Section 15064.5(a)(3)). The Pacific Beach – Tourmaline Surf Park project involves construction of a sand and cobble dune and restoration of the vegetated median west of the restrooms, and would not impact the existing restroom facility. Therefore, implementation of the Pacific Beach – Tourmaline Surf Park project would not result in a substantial adverse change in the significance of a historical resource. No impact on historical resources would occur, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando

Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

As discussed in Sections 5.4.1.3 and 5.4.1.4, the Mission Beach seawall and boardwalk known as Ocean Front Walk (P-37-016522) are located in the Mission Beach survey area. The seawall and Ocean Front Walk were determined eligible for inclusion in the NRHP, at the level of local significance under Criteria A and C but have not been formally listed. The City of San Diego has not yet designated the resource, and it is not listed in any of the registers (local, State, national) but has deemed it eligible for designation. Evidence of the 2016 restoration project implemented by the City of San Diego in accordance with the U.S. Secretary of the Interior's Standards for Reconstruction was documented, and the only structures encountered during the pedestrian survey were modern fiberglass and metal-pole lifeguard towers. In addition, the Belmont Amusement Park Plunge and roller coaster (P-37-020909), a known historical resource, is located within the 100foot survey buffer of the Mission Beach project site. Three historic addresses (P-37-040107, P-37-040108, P-37-040109) are also located within the 100-foot survey buffer however, these were deemed non-significant at the time of recordation. Given the location of the Belmont Amusement Park Plunge and roller coaster and the historic houses outside of the Mission Beach project site, the Mission Beach project would have no impact on these historical resources. Implementation of the Mission Beach project involves construction of an elevated sand dune along the back of the beach under both design options and realignment of a 350-foot section of the existing seawall and Ocean Front Walk to create a perched beach under the Perched Beach Design Option. As such, implementation of the Mission Beach project, particularly the Perched Beach Design Option, would result in a substantial, direct, adverse change in the design and material of a historical resource (Mission Beach Boardwalk/Ocean Front Walk) and would result in the change of a characterdefining feature of a NRHP-eligible resource. Therefore, impacts on historical resources would be potentially significant, and implementation of MM CUL-1 would be required.

MM CUL-1 would require compliance with the City's Historical Resources Regulations of the City's Municipal Code (SDMC Chapter 14, Article 3, Division 2) and the Historical Resources Guidelines of the City's Land Development Manual. With implementation of MM CUL-1, the Mission Beach project would result in less than significant impacts to the Mission Beach Boardwalk/Ocean Front Walk.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length

of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

As discussed in Sections 5.4.1.3 and 5.4.1.4, the mapped boundaries of two known historical resources, the Beach Cottage Community Plan Area or Ocean Beach Cottage Emerging Historic District (P-37-029025) and Ocean Beach Pier, overlap with the Ocean Beach – Pier project site and 100-foot buffer. No structures or elements of the built environment associated with the Ocean Beach Cottage Emerging Historic District were identified within the Ocean Beach – Dog Beach project site during the pedestrian survey. As such, the Ocean Beach – Pier project would have no direct impact on the historical district. The Ocean Beach Pier is located within the 100-foot survey buffer of the Ocean Beach – Pier project site but given the location of the project site, the Ocean Beach – Pier project would have no direct impact on the historical resource. Therefore, implementation of the Ocean Beach – Pier project would not result in a substantial adverse change in the significance of a historical resource. No impact on historical resources would occur, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

As discussed in Section 5.4.1.3, there is no significant historical resource within the Sunset Cliffs survey area. Implementation of the proposed road reconfiguration program would involve the use of temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). Once the road design is finalized, reconfiguration of the road would primarily include restriping and installation of barriers, and therefore, is not expected to include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Therefore, these activities would require ground-disturbing activities. However, given that there is

no significant historical resource within the Sunset Cliffs survey area, implementation of the Sunset Cliffs project would not result in a substantial adverse change in the significance of a historical resource. No impact on historical resources would occur, and no mitigation is required.

5.4.3.2 Issue 2: Archaeological Resources

Would the proposed CRMP Phase 1 result in a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5, an alteration, including the adverse physical or aesthetic effects and/or the destruction of prehistoric structure, objects, or sites; or the disturbance of any human remains, including those interred outside formal cemeteries?

Pilot Project: Ocean Beach – Dog Beach

As discussed in Sections 5.4.1.3 and 5.4.1.4, the mapped boundaries contain no known archaeological resources within the Ocean Beach – Dog Beach project site and 100-foot survey buffer and none were observed during the pedestrian survey. Additionally, the ground-disturbing activities associated with implementation of the Pilot Project (i.e., construction of the multi-use path and elevated sand dune, dune restoration area, and optional relocation of the existing restroom) would occur within previously disturbed or developed areas of the Ocean Beach – Dog Beach project site. Therefore, the potential for discovering previously unidentified archaeological resources that are listed or eligible for listing in the CRHR or in a local register of historical resources during construction of the Pilot Project would be very low. Implementation of the Pilot Project would not result in a substantial adverse change in the significance of an archaeological resource, would not disturb any human remains, and no mitigation is required.

La Jolla Shores

As discussed in Section 5.4.1.3, there are six archaeological cultural resources (P-37-000039/CA-SDI-39. P-37-031696/CA-SDI-20129/SDM-W-199. P-37-031697/CA-SDI-20130, P-37-031720/CA-SDI-20151, P-37-032274/CA-SDI-20455, and P-37-032275/CA-SDI-20456) within the La Jolla Shores survey area. The Spindrift Archaeological District (P-37-000039/CA-SDI-39), located within the 100-foot survey buffer area, is a resource of archaeological and cultural significance to the Kumeyaay Tribes of San Diego. According to the site records, soils from the Spindrift Site (P-37-000039/CA-SDI-39) were deposited on the P-37-031697/CA-SDI-20130 site. P-37-031696/CA-SDI-20129/SDM-W-199 is within the 100-foot survey buffer and was recorded as a sea-margin intermittent camping site with hearths, shellfish, flakes, stone tools, a mano and having a 20-foot depth. P-37-031697/CA-SDI-20130 is within the La Jolla Shores survey area and included recovery of at least 12 burials that included internments, a shell deposit, and a lithic scatter. P-37-031720/CA-SDI-20151 is located within the 100-foot survey buffer area and included fire-affected rock, debitage, charcoal, and a burned lens, which appear to delineate a hearth. P-37-032274/CA-SDI-20455 and P-37-032275/CA-SDI-20456 are under the paved parking lot and were likely destroyed during grading and trenching for prior projects.

Considering the previously identified subsurface archaeological resources in the area, the potential for subsurface archaeological resources exists. Construction of the proposed earthen dikes and terraced seatwall under the Amphitheater Design Option and the reconfigured recreational areas and parking lot under the Reconfigured Park Design Option would require ground-disturbing activities. Given the presence of previously recorded and listed resources within and in proximity of the La Jolla Shores project site, the CRTR determined that implementation of the La Jolla Shores project could potentially uncover existing and/or previously unidentified archaeological resources during construction-related ground-disturbing activities. Therefore, impacts to archaeological resources would be potentially significant. Mitigation Measure MM CUL-2 is provided to address potential impacts to archaeological and Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to archaeological resources would be fully avoided or minimized. Impacts to archaeological resources would be fully avoided or minimized.

Pacific Beach – Tourmaline Surf Park

As discussed in Section 5.4.1.3, the Pacific Beach – Tourmaline Surf Park project site and 100-foot survey buffer do not contain any archeological cultural resources that are listed or eligible for listing in the CRHR or in a local register of historical resources. Implementation of the Pacific Beach – Tourmaline Surf Park project involves construction of a sand and cobble dune, restoration of the existing vegetated median, and optional construction of pedestrian access by covering or undergrounding the existing drainage culvert and addition of an underground vault for water quality treatment. Implementation of the Pacific Beach – Tourmaline Surf Park project would require some earth-disturbance; however, these areas have all been previously disturbed or developed. Therefore, the potential for discovering previously unidentified archaeological resources that could be eligible for listing in the CRHR or determined to be historically significant by the City during construction of the Pacific Beach – Tourmaline Surf Park project would not result in a substantial adverse change in the significance of an archaeological resource, would not disturb any human remains, and no mitigation is required.

Mission Beach

As discussed in Section 5.4.1.3, the Mission Beach project site and 100-foot buffer do not contain any archaeological cultural resources that are listed or eligible for listing in the CRHR or in a local register of historical resources. Construction of the elevated sand dune would occur entirely on sandy beach, which has been previously disturbed, particularly during construction of the annual winter berm. Additionally, potential construction of a perched beach and realignment of the existing seawall and Ocean Front Walk under the Perched Beach Design Option would occur entirely on previously disturbed land (i.e., Ocean Front Walk and a portion of Mission Beach Park). Therefore, although construction of the proposed elevated sand dune and potential perched beach would require some ground-disturbance, the potential for discovering previously unidentified archaeological resources that could be eligible for listing in the CRHR or determined to be historically significant by the City during construction of the Mission Beach project would be very low. Implementation of the Mission Beach project would not result in a substantial adverse change in the significance of an archaeological resource, would not disturb any human remains, and no mitigation is required.

Ocean Beach – Pier

As discussed in Section 5.4.1.3, the Ocean Beach – Pier project site and 100-foot buffer contain one archaeological cultural resource along the southern 100-foot survey buffer, resource P-37-36014/CA-SDI-21939, which was previously identified. However, this resource was discovered under a paved road and removed during construction monitoring. There are no archaeological cultural resources listed or eligible for listing in the CRHR or in a local register of historical resources. Implementation of the Ocean Beach – Pier project would require some earth-disturbing activities involving the construction of a multi-use path and elevated sand dune; however, the ground-disturbing activities associated with implementation of the Ocean Beach – Pier project would occur within previously disturbed or developed areas of the Ocean Beach – Pier project site. Therefore, the potential for discovering previously unidentified archaeological resources that could be eligible for listing in the CRHR or determined to be historically significant by the City during construction of the Ocean Beach – Pier project would be very low. Implementation of the Ocean Beach – Pier project would not result in a substantial adverse change in the significance of an archaeological resource, would not disturb any human remains, and no mitigation is required.

Sunset Cliffs

As discussed in Section 5.4.1.3, the Sunset Cliffs survey area contains known archaeological (P-37-011912/CA-SDI-11912/H, P-37-011913/CA-SDI-11913H, cultural resources P-37-011914/CA-SDI-11914, P-37-011915/CA-SDI-11915H, P-37-011916/CA-SDI-11916, P-37-011917/CA-SDI-11917, P-37-016217, P-37-016218/CA-SDI-18605, P-37-024617/CA-SDI-16301, P-37-27750/CA-SDI-18013, and P-37-032117/CA-SDI-20351). P-37-011912/CA-SDI-11912/H is a shell scatter and possible historic structure remains; P-37-011913/CA-SDI-11913/H is a temporary prehistoric camp with a possible historic structure cobble and concrete footing; P-37-011914/CA-SDI-11914 is an artifact scatter with shell, fire-affected rock, and a cobble tool; P-37-011915/CA-SDI-11915H is a historic refuse deposit; P-37-011916/CA-SDI-11916 is a possible prehistoric habitation site; P-37-011917/CA-SDI-11917 is a temporary prehistoric camp; P-37-016217 is a shell scatter; P-37-016218/CA-SDI-18605 is a shell scatter; P-37-024617/CA-SDI-16301 is a possible campsite with a shell midden with flaked stone artifacts and milling tools; and P-37-027750/CA-SDI-18013 is a temporary camp with marine shell, charcoal, fire-affected rocks, lithic flakes and stone tools; and P-37-032117/CA-SDI-20351 is a historic refuse scatter.

Considering the previously identified subsurface archaeological resources in the area, the potential for subsurface archaeological resources exists. Implementation of the proposed road reconfiguration program would involve the use of temporary traffic calming devices (e.g., cones, signage, waterfilled Jersey barriers). Once the road design is finalized, reconfiguration of the road would primarily include restriping and installation of barriers, and therefore is not expected to include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Therefore, these activities would require grounddisturbing activities that could adversely affect potential subsurface archaeological resources. Given the presence of listed resources within and in proximity of the Sunset Cliffs project site, the CRTR determined that implementation of the Sunset Cliffs project could potentially uncover previously unidentified archaeological resources during minor ground-disturbing construction activities (e.g., trail enhancement, habitat enhancement, drainage improvements, and potential parking realignment and erosion control improvements). Therefore, impacts on archaeological resources would be potentially significant. Mitigation Measure MM CUL-2 is provided to address potential impacts to archaeological and Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to archaeological resources would be fully avoided or minimized. Impacts to archaeological resources would remain potentially significant.

5.4.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project would not result in a substantial adverse change in the significance of a historical resource or archaeological resource, and would not disturb any human remains. No impact would occur, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would not result in a substantial adverse change in the significance of a historical resource. The La Jolla Shores project could result in a substantial adverse change in the significance of an archaeological resource or disturbance of human remains; therefore, impacts would be potentially significant. Mitigation Measure MM CUL-2 is provided to address potential impacts to archaeological and Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to archaeological resources would be fully avoided or minimized. Impacts to archaeological resources would remain potentially significant.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not result in a substantial adverse change in the significance of a historical resource or archaeological resource, and would not disturb any human remains. No impact would occur, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach Perched Beach Design Option would result in a substantial, direct, adverse change in the design and material of a historical resource (Mission Beach Boardwalk/Ocean Front Walk). Impacts would be less than significant with implementation of MM CUL-1. Implementation of the Mission Beach project would not result in a substantial adverse change in the significance of an archaeological resource, and would not disturb any human remains. No impact would occur, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not result in a substantial adverse change in the significance of a historical resource or archaeological resource, and would not disturb any human remains. No impact would occur, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would not result in a substantial adverse change in the significance of a historical resource. The Sunset Cliffs project could result in a substantial adverse change in the significance of an archaeological resource or disturbance of human remains; therefore, impacts would be potentially significant. Mitigation Measure MM CUL-2 is provided to address potential impacts to archaeological and Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to archaeological resources would be fully avoided or minimized. Impacts to archaeological resources would remain potentially significant.

5.4.5 Mitigation Framework

Implementation of the CRMP Phase 1 would result in a substantial, direct, adverse change in the design and material of a historical resource at the Mission Beach project site. Implementation of mitigation measure (MM) CUL-1 would be required to reduce adverse impacts to the Mission Beach Boardwalk/Ocean Front Walk.

Implementation of the CRMP Phase 1 would result in potential impacts to archaeological resources at the La Jolla Shores and Sunset Cliffs project sites. To reduce adverse impacts, MM CUL-2 would need to be implemented during ground disturbance activities at the La Jolla and Sunset Cliffs project sites.

MM CUL-1 Compliance with Historical Resources Regulations. If the Mission Beach Perched Beach Design Option is selected and implemented, it is recommended that the following mitigation measure be implemented prior to permit issuance for the project.

I. Prior to Permit Issuance

- A. Future development shall comply with the Historical Resources Regulations of the City's Municipal Code (SDMC Chapter 14, Article 3, Division 2) and the Historical Resources Guidelines of the City's Land Development Manual and shall be required to implement avoidance, minimization, and mitigation measures in accordance with the City's Historical Resources Regulations and Historical Resources Guidelines.
 - 1. The project shall be reviewed by Heritage Preservation staff in the City Planning Department for consistency with the Historical Resources Regulations and Historical Resources Guidelines.
 - 2. A historical contractor(s) who meets the Secretary of the Interior's Qualifications (36 CFR Part 61) in the fields of History or Architectural History shall be retained to prepare a Historical Resources Technical Report in accordance with the Historical Resource Technical Report Guidelines and Requirements and the Guidelines for the Application of Historical Resources Board Designation Criteria, both of which are appendices to the City's Land Development Manual.
- MM CUL-2 Archaeological and Tribal Cultural Resources Monitoring Program. The following monitoring program shall be implemented to protect unknown prehistoric and historic archaeological resources, sacred sites, and human remains that may be identified during any construction-related activities:

I. Prior to Permit Issuance or Bid Opening/Bid Award

- A. Entitlements Plan Check
 - 1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Environmental Designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.

- B. Letters of Qualification have been submitted to ADD
 - 1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego HRG. If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
 - 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
 - 3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

- A. Verification of Records Search
 - 1. The PI shall provide verification to MMC that a site-specific records search (1/4-mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.
 - 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
 - 3. The PI may submit a detailed letter to MMC requesting a reduction to the 1/4-mile radius.
- B. PI Shall Attend Precon Meetings
 - 1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a precon meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related precon meetings to make

comments and/or suggestions concerning the Archaeological Monitoring program with the CM and/or Grading Contractor.

- a. If the PI is unable to attend the precon meeting, the Applicant shall schedule a focused precon meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
- 2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)

The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.

- 3. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.
 - b. The AME shall be based on the results of a site-specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).
 - c. MMC shall notify the PI that the AME has been approved.
- 4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site

graded to bedrock, etc., which may reduce or increase the potential for resources to be present.

5. Approval of AME and Construction Schedule

After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Construction Schedule from the CM.

III. During Construction

- A. Monitor(s) Shall be Present During Grading/Excavation/Trenching
 - 1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.
 - 2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.
 - 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
 - 4. The archaeological and Native American consultant/monitor shall document field activity via the CSVR. The CSVRs shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
 - 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but

not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.

- 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
- 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by email with photos of the resource in context, if possible.
- 4. No soil shall be exported off site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
 - 1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.
 - a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
 - b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume. Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.
 - (1).Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
 - c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in

the Final Monitoring Report. The letter shall also indicate that that no further work is required.

- (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
- (2). Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources Pipeline Trenching and other Linear Projects in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

- 1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
 - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.

d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California PRC (Section 5097.98) and State Health and Safety Code (Section 7050.5) shall be undertaken:

- A. Notification
 - 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the City Planning Department or Development Services Department to assist with the discovery notification process.
 - 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.
- B. Isolate Discovery Site
 - 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.
 - 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.
 - 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains **ARE** Determined to be Native American
 - 1. The Medical Examiner will notify the NAHC within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
 - 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.

- 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
- 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
- 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94(k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the property in a location not subject to further and future subsurface disturbance, THEN
 - c. To protect these sites, the landowner shall do one or more of the following:
 - (1) Record the site with the NAHC;
 - (2) Record an open space or conservation easement; or
 - (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.
 - d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological

standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.

- D. If Human Remains are NOT Native American
 - 1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
 - 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
 - 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

V. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 - 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 - 2. The following procedures shall be followed.
 - a. No Discoveries: In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.
 - b. Discoveries: All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
 - c. Potentially Significant Discoveries: If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III During Construction and IV-Discovery of Human Remains shall be followed.

- d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
 - 1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.
 - a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
 - b. Recording Sites with State of California Department of Parks and Recreation: The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines , and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.

- 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
- 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
- 4. MMC shall provide written verification to the PI of the approved report.
- 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
 - 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
 - 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.
- C. Curation of artifacts: Accession Agreement and Acceptance Verification
 - 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
 - 2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV Discovery of Human Remains, Subsection C.
 - 3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 - 4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
 - 5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.

- D. Final Monitoring Report(s)
 - 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
 - 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

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Figure 5.4-2. Existing Seawall and Ocean Front Walk and Concrete Stamp at the Mission Beach Project Site

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Figure 5.4-4. Commemorative Flagpole on La Jolla Shores Project Site





Figure 5.4-6. Restroom Facility and Murals on Pacific Beach – Tourmaline Surf Park Project Site



Figure 5.4-7. Modern Lifeguard Statue on the Ocean Beach – Pier Project Site

5.5 Geology and Soils

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing conditions related to geology, soils, and seismicity in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area described in Section 2.3, Project Locations, in Chapter 2.0, Environmental Setting, and within the wider region. This section evaluates potential impacts related to geology and soils that could result from implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the City of San Diego (City's) General Plan Public Facilities, Services and Safety Element (2023a); City's General Plan PEIR (2007); City's Coastal Erosion Assessment Photograph Analysis Update: 2003–2018; Southern California Earthquake Data Center; California Department of Conservation California Geological Survey; and California Emergency Management Agency.

5.5.1 Existing Conditions

5.5.1.1 Regional Geology

The majority of San Diego County is in the Peninsular Ranges Province, bounded by the coastal province to the west and the Salton Trough (Desert Basin) province to the east (County of San Diego 2011). The western edge of the Peninsular Ranges province corresponds with the eastern hills and mountains along the edge of the cities of Poway, Lakeside, and El Cajon. Extending east of Julian and Jacumba, the province abruptly ends along a series of faults. To the north, the Peninsular Ranges province continues into the Los Angeles basin area; to the south, it makes up the peninsula of Baja California.

As the Peninsular Ranges province experienced uplifting and tilting, a series of large faults, such as the Elsinore and San Jacinto, developed along the edge of the province. The eastern area "dropped" down, creating what is now known as the Salton Trough–Gulf of California depression. The Salton Trough province, being lower than the surrounding landscape, became an area of deposition, with sediments being carried to the depressed area by drainages of the Peninsular Ranges. Occasionally, the Salton Trough was inundated with marine waters from the Gulf of California, adding marine deposits to the sediment (Peterson 1977).

The City lies in the western (coastal) plain province which extends from the western edge of the Peninsular Ranges Geomorphic Province of California and runs roughly parallel to the coastline. The province is composed of dissected, mesa-like terraces that graduate inland into rolling hills. The terrain in the westernmost portion of the province is underlain by Upper Cretaceous, Tertiary, and Quaternary sedimentary rocks composed mainly of sandstone, shale, and conglomerate beds, reflecting the erosion of the Peninsular Ranges to the east (USGS 2023). The CRMP Phase 1 area is located within Bay Point Formation, Unnamed Marine Terrace deposits, San Diego Formation, and Ardath Shale (City of San Diego 2007).

5.5.1.2 Topography and Soils

The CRMP Phase 1 area is in the Coastal Plain, west of the Peninsular Ranges and Desert Basin. The elevation in the CRMP Phase 1 area ranges from approximately sea level to 79 feet above mean sea level (amsl). The topography of the CRMP Phase 1 area is highly variable, with the majority of the urban/developed areas gently sloping or relatively flat, and the shorelines and cliffs steeply decreasing in elevation from the ocean. The Coastal Plain region ranges in elevation from 0 feet amsl to 600 feet amsl and is characterized by topographic features including mesa tops, elevated marine terraces, and level floodplains of river valleys (County of San Diego 2011). The CRMP Phase 1 area is characteristic of elevated marine terraces that occur in the region.

Five soil types are mapped in the CRMP Phase 1 area (Appendix C). The five soil types include coastal beaches (La Jolla Shores, Mission Beach, Pacific Beach – Tourmaline Surf Park, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites), Corralitos loamy sand (0 percent to 5 percent slopes) (La Jolla Shores project site), lagoon water (Ocean Beach – Dog Beach project site), Reiff fine sandy loam (2 percent to 5 percent slopes) (Sunset Cliffs project site), and urban land (Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites) (USDA 2023). The remaining survey area not defined by a soil type is Made Land (Ocean Beach – Dog Beach project site).

5.5.1.3 Surface Fault Rupture and Seismicity

Surface fault rupture is the result of movement on an active fault reaching the surface. Southern California is one of the most seismically active regions in the United States, with numerous active faults and a history of destructive earthquakes. An active fault is defined by the State Mining and Geology Board as one that has experienced surface displacement within the Holocene epoch, i.e., during the last 11,000 years. The Elsinore, San Jacinto, and the San Andreas Faults are major active fault systems located northeast of the City. The Rose Canyon, San Diego Trough, Coronado Banks, and San Clemente Faults are major active faults located within or west–southwest of the City (refer to Figure 5.5-1, Earthquake Faults). Portions of the City are located above active strands of the Rose Canyon Fault. These faults, as well as other faults in the region, have the potential for generating strong ground motions in the CRMP Phase 1 area.

Damage to structures and improvements caused by a major earthquake will depend on the distance to the epicenter, the magnitude of the event, the underlying soil, and the quality of construction. The severity of an earthquake can be expressed in terms of both intensity and magnitude. The Rose Canyon Fault can produce an earthquake of magnitude from 6.2 to 7.0 on the Richter scale. Portions of the Elsinore and San Jacinto Fault Zones, located east of San Diego, have the capacity to produce earthquakes at maximum magnitudes on the Richter scale from 7.5 to 7.8 and 6.9 to 7.0 respectively (City of San Diego 2007).

5.5.1.4 Ground Shaking

When a break or rapid relative displacement occurs along the two sides of a fault, the tearing and snapping of the earth's crust creates seismic waves that are felt as a shaking motion at the ground surfaces (City of San Diego 2007). Ground shaking during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and the type of geologic material underlying the area. The composition of underlying soils, even those relatively distant from faults, can intensify ground shaking. Areas that are underlain by bedrock tend to experience less ground shaking than those underlain by unconsolidated sediments such as artificial fill or unconsolidated alluvial fill.

The most useful measure of severity of ground shaking for planning purposes is the Modified Mercalli Intensity scale. This scale, ranging from Intensities I to XII, judges shaking severity by the amount of damage it produces. Intensity VII marks the point at which damage becomes significant. Intensity VIII and above correspond to severe damage and problems that are of great community concern (City of San Diego 2007).

For comparison, the Rose Canyon Fault, capable of producing a 7.0 magnitude earthquake, would have an intensity of VII–IX. Intensity IX earthquakes are characterized by great damage to structures including collapse (City of San Diego 2007).

5.5.1.5 Liquefaction, Seismically Induced Settlement, and Lateral Spread

Liquefaction is a process by which water-saturated granular soils transform from a solid to a liquid state during strong ground shaking (City of San Diego 2007). The relatively rapid loss of soil shear strength during strong earthquake shaking results in a temporary, fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Research and historical data indicate that the three key factors that indicate whether an area is potentially susceptible to liquefaction are the capacity for severe ground shaking, shallow groundwater, and low-density granular deposits (mainly finer grained sands).

Among the potential hazards related to liquefaction are seismically induced settlement and lateral spread. Settlement of the ground may come from fault movement, slope instability, and liquefaction and compaction of the soil at a site. Seismically induced settlement is caused by the reduction of shear strength due to loss of grain-to-grain contact during liquefaction and may result in differential settlement on the order of several inches to several feet. Settlement is not necessarily destructive; it is usually differential settlement that damages structures (City of San Diego 2007). Lateral spreading of the ground surface during an earthquake usually takes place along weak shear zones that have formed within a liquefiable soil layer. Other factors such as earthquake magnitude, distance from the earthquake epicenter, thickness of the liquefiable layers, and the fines content and particle sizes of the liquefiable layers will also affect the amount of settlement or lateral ground displacement.

5.5.1.6 Landslide and Slope Instability

Old landslides and landslide-prone formations are the primary non-seismic geologic hazards within the City. The factors that indicate the potential for slope instability include inclination, characteristics of the soil and rock orientation of the bedding, and the presence of groundwater. Slopes steeper than 2:1 (horizontal:vertical) are susceptible to landslides or slope failure. Common causes of landslides or slope failure can be both natural events such as earthquakes, rainfall, and erosion and human activities such as grading and filling. Earthquake motions can induce significant horizontal and vertical dynamic stresses along potential failure surfaces within a slope.

Areas of the City where landslides have occurred include Otay Mesa; the east side of Point Loma; the vicinities of Mount Soledad, Rose Canyon, Sorrento Valley, and Torrey Pines; portions of Rancho Bernardo and Los Peñasquitos; and along Mission Gorge in the vicinity of the second San Diego Aqueduct (City of San Diego 2007).

5.5.1.7 Soil Erosion

Erosion is defined as a combination of processes in which the materials of the earth's surface are loosened, dissolved, or worn away, and transported from one place to another by natural agents. There are two types of soil erosion: wind erosion and water erosion. Erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soils can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of structures and impervious surfaces and the removal of vegetative cover. Because much of the City is characterized as having slopes greater than 25 percent in grade, there are many areas subject to erosion (City of San Diego 2007).

5.5.1.8 Coastal Bluff Erosion

Coastal bluffs are land features that have resulted from the actions of sea wave forces on geologic formations and soil deposits. Geologic factors that affect the stability of bluffs include rock type, jointing and fracturing, faulting and shear zones, and base erosion. Where bluffs are eroding quickly, measures to reduce bluff degradation may be necessary in order to preserve the bluff line. In the Torrey Pines area, the coastal bluffs have experienced sizable landslides where oversteepening of the seacliff has resulted in unstable conditions. In addition, rock falls have occurred in the Sunset Cliffs area due to undermining of the sandstone (City of San Diego 2007).

In 1993, the City commissioned a Coastal Erosion Impact Assessment of the 13 miles of ocean shoreline within its land use jurisdiction. Portions of the shoreline that are not within its jurisdiction, such as federal and Port of San Diego lands, were not included. The 1993 report summarized methods of analysis, interpreted results, and provided long-term rates of cliff retreat. The Coastal

Erosion Impact Assessment enables City staff to make informed decisions regarding corrective measures that can be taken, including improvements the City can make to the San Diego coastline.

The 1993 Coastal Erosion Impact Assessment was updated in 2003 and 2018. The 2018 update found that erosion had affected several pedestrian access ways and staircases, bluffs, and sea caves over the previous 15 years. A rating scale was developed to help prioritize sites that require additional review. The rating scale contains four levels: no rating, low, moderate, and high priority. Of the 71 sites, 6 percent were ranked no rating, 55 percent were ranked low priority, 18 percent were ranked moderate priority, and 21 percent were ranked high priority. The project sites include the rankings shown in Table 5.5-1, as identified by the 2018 Coastal Erosion Impact Assessment Update.

Project Site	Priority Rating
La Jolla Shores	Low
Pacific Beach – Tourmaline Surf Park	Low
Mission Beach	Low
Ocean Beach – Dog Beach	Low
Ocean Beach – Pier	Low to Moderate
Sunset Cliffs	Low to High

 Table 5.5-1. Coastal Erosion Priority Rating at the Project Sites

Source: City of San Diego 2018.

5.5.1.9 Expansive Soils

Expansive soils are characterized by significant volume changes (shrink or swell) due to variations in moisture content. Expansion of the soil may result in unacceptable settlement or heave of structures or concrete slabs supported on grade. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, significant removal of native vegetation, or other factors. Soils with a relatively high fines content (clays dominantly) are generally considered expansive or potentially expansive. These soils may be found in areas underlain by the Friars Formation (outside the CRMP Phase 1 area) and in areas underlain by young colluvial or undocumented fill soils.

5.5.1.10 Geologic Conditions at the Project Locations

All six project sites are located within 5 miles of the Rose Canyon Fault, which runs offshore adjacent to and within a portion of the City limits. All project sites are located within Bay Point Formation and Unnamed Marine Terrace deposits. Given the coastal locations of all six project sites, they are vulnerable to coastal erosion, particularly with sea-level rise and wave runup during storms.

Ocean Beach – Dog Beach

The Ocean Beach – Dog Beach project site is located approximately 4 miles west of the Rose Canyon Fault within a Low to Moderate Relative Risk Area (refer to Figure 5.5-1; City of San Diego 2007;

California Department of Conservation 2021). The site includes a paved parking lot, a vegetated park/recreation area, and a sandy beach and comprises Coastal beaches (Cr), made land and lagoon water (refer to Figure 5.5-2, Soil Types – Index, and Figure 5.5-2a; USDA 1973). The site is not within a liquefaction zone; however, the site is prone to coastal erosion, especially along the shoreline (California State Geoportal 2022).

La Jolla Shores

The La Jolla Shores project site is located along the Rose Canyon Fault within a Low to Moderate Relative Risk Area (refer to Figure 5.5-1; City of San Diego 2007; California Department of Conservation 2021). The site includes a paved parking lot, a vegetated park/recreation area, and a sandy beach and comprises Coastal beaches (Cr), and Corralitos loamy sand, zero to 5 percent slopes (CsB) (refer to Figure 5.5-2b; USDA 1973). The site is not within a liquefaction zone; however, the site is prone to coastal erosion, especially along the shoreline (California State Geoportal 2022).

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site is located approximately 3 miles west of the Rose Canyon Fault within a Low to Moderate Relative Risk Area (refer to Figure 5.5-1; City of San Diego 2007; California Department of Conservation 2021). The site includes a paved parking lot, a vegetated park/recreation area, and a sandy beach and comprises Coastal beaches (Cr) and Urban land (Ur) (refer to Figure 5.5-2c; USDA 1973). The site is not within a liquefaction zone; however, the site is prone to coastal erosion, especially erosion of cliffside areas and other unstable regions (e.g., hills, slopes) (California State Geoportal 2022). Particularly, the westernfacing cliffsides adjacent to the north and south of the parking lot experience wind and coastal erosion. A cobble berm and riprap near the beach entrance (inland) and a winter berm program provide erosion control at the project site to help prevent the beach's sand from washing away (refer to Figure 5.5-3, Cobble Berm and Riprap and Winter Sand Berm on the Pacific Beach – Tourmaline Surf Park Project Site).

Mission Beach

The Mission Beach project site is located approximately 3.5 miles west of the Rose Canyon Fault within a Low to Moderate Relative Risk Area (refer to Figure 5.5-1; City of San Diego 2007; California Department of Conservation 2021). The site includes a sandy beach, which is adjacent to a paved boardwalk, an amusement park, and a vegetated park/recreation area. Soils on the site are comprised of Coastal beaches (Cr) (refer to Figure 5.5-2d; USDA 1973). The site is not within a liquefaction zone; however, the site is prone to coastal erosion, especially along the shoreline (California State Geoportal 2022).

Ocean Beach – Pier

The Ocean Beach – Pier project site is located approximately 4 miles west of the Rose Canyon Fault within a Low to Moderate Relative Risk Area (refer to Figure 5.5-1; City of San Diego 2007; California Department of Conservation 2021). The site includes two paved parking lots, vegetated park/recreation areas, and a sandy beach. Soils on site comprise Coastal beaches (Cr) and Urban land (Ur) (refer to Figure 5.5-2e; USDA 1973). The site is not within a liquefaction zone; however, the site is prone to coastal erosion, especially along the shoreline (California State Geoportal 2022).

Sunset Cliffs

The Sunset Cliffs project site is located approximately 5 miles west of the Rose Canyon Fault within a Low to Moderate Relative Risk Area (refer to Figure 5.5-1; City of San Diego 2007; California Department of Conservation 2021). The site includes a dirt pedestrian trail between a paved road and oceanfront properties to the east and seaside cliffs and the Pacific Ocean to the west. Soils at the site comprise Urban land (Ur) and Reiff fine sandy loam (refer to Figure 5.5-2f; USDA 1973). The site is not within a liquefaction zone; however, the site is prone to coastal erosion, particularly along the bluffs (California State Geoportal 2022). In fact, several segments of the coastal trail are fenced off from the cliffsides to the west or blocked off completely due to the severe bluff erosion that has occurred along the cliffs. Rock riprap has been placed along much of the shoreline below Sunset Cliffs to prevent further erosion from wave runup (refer to Figure 5.5-4, Rock Riprap at the Bottom of Sunset Cliffs, and Figure 5.5-5, Eroding Cliffside on the Sunset Cliffs Project Site).

5.5.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to geology, soils, and seismicity are based on applicable criteria in Appendix G of the California Environmental Quality Act (CEQA) Guidelines and the City's CEQA Significance Determination Thresholds (2023b). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards;
- b. Result in a substantial increase in wind or water erosion of soils, either on or off the site; or
- c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

This section does not include an analysis related to potential impacts to paleontological resources, which are discussed in Chapter 7.0, Other Mandatory Discussion Areas.

5.5.3 Impact Analysis

5.5.3.1 Issue 1: Seismic Hazards

Would the proposed CRMP Phase 1 expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?

Pilot Project: Ocean Beach – Dog Beach

As described in Section 5.5.1.3, Surface Fault Rupture and Seismicity, portions of the City are located above active strands of the Rose Canyon Fault. These faults, as well as other faults in the region (e.g., Elsinore, San Jacinto, San Andreas, San Diego Trough, Coronado Banks, and San Clemente Faults), have the potential for generating strong ground motions in the CRMP Phase 1 area. The Ocean Beach – Dog Beach project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial evidence of a known fault. However, the Ocean Beach – Dog Beach project site is located approximately 2.91 miles from the Rose Canyon Fault Zone (California Department of Conservation 2022). Due to the proximity of the Ocean Beach – Dog Beach project site to active fault zones in the region, there remains potential for seismic-induced ground shaking at the project site.

Damage to structures and improvements caused by a major earthquake will depend on the distance to the epicenter, the magnitude of the event, the underlying soil, and the quality of construction. The Rose Canyon Fault can produce an earthquake of magnitude from 6.2 to 7.0 on the Richter scale. Portions of the Elsinore and San Jacinto Fault Zones, located east of San Diego, have the capacity to produce earthquakes at maximum magnitudes on the Richter scale from 7.5 to 7.8 and 6.9 to 7.0 respectively (City of San Diego 2007).

As described in Section 5.5.1.6, Landslide and Slope Instability, areas of the City where landslides have occurred include Otay Mesa; the east side of Point Loma; the vicinities of Mount Soledad, Rose Canyon, Sorrento Valley, and Torrey Pines; portions of Rancho Bernardo and Los Peñasquitos; and along Mission Gorge in the vicinity of the second San Diego Aqueduct (City of San Diego 2007). Therefore, the Ocean Beach – Dog Beach project site is not an area where historic landslides have occurred.

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway (refer to Figure 3-3, Pilot Project at Ocean Beach – Dog Beach Concept Renderings). The elevated sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The

proposed sand dune and dune restoration area would be vegetated with native plants, which would help stabilize the sand dune. Therefore, construction of the vegetated sand dune and multi-use path would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists.

Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. The Pilot Project would not include development of any habitable structures. The optional restroom relocation or reconstruction would occur in compliance with the California Building Code (CBC) and San Diego Municipal Code (SDMC), which include design criteria for seismic loading and other geologic hazards and require that a geotechnical investigation be conducted for the structure (SDMC Section 145.1803). Additionally, SDMC Section 145.1803(a)(2) states that no building permit shall be issued for construction where the geotechnical investigation report establishes that the construction of buildings or structures would be unsafe because of geologic hazards. Thus, while the Ocean Beach - Dog Beach project site could be subject to seismic events, the Pilot Project would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Potential hazards associated with ground shaking and seismically induced hazards such as surface fault rupture, ground failure, liquefaction, and landslides would be reduced to a less than significant level through regulatory compliance including compliance with seismic requirements in the Building Code, SDMC, and implementation of site-specific geotechnical report recommendations. Therefore, impacts would be less than significant, and no mitigation is required.

Liquefaction and landslide impacts are further addressed in Section 5.5.3.3, Issue 3: Geologic Instability below.

La Jolla Shores

The La Jolla Shores project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial evidence of a known fault. However, the Rose Canyon Fault Zone is in close proximity (less than 0.25 mile) to the southern portion of the La Jolla Shores project site (California Department of Conservation 2022). Due to the close proximity of the La Jolla Shores project site to active fault zones in the region, there is potential for seismic-induced ground shaking at the project site. The La Jolla Shores project site is not an area where historic landslides have occurred (refer to Section 5.5.1.6, Landslide and Slope Instability).

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla

Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). The proposed earthen dike(s) would be constructed similarly to the annual winter berm that is constructed near the project site every fall and maintained through the winter season. The earthen dike(s) would be vegetated with native plants, which would help stabilize it. Therefore, construction of proposed earthen dike(s), terraced seatwall, or a waterfront park would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists.

The La Jolla Shores project would not include development of any habitable structures. Thus, while the La Jolla Shores project site could be subject to seismic events, the La Jolla Shores project would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Potential hazards associated with ground shaking and seismically induced hazards such as surface fault rupture, ground failure, liquefaction, and landslides would be less than significant, and no mitigation is required.

Liquefaction and landslide impacts are further addressed in Section 5.5.3.3 below.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial evidence of a known fault. However, the Pacific Beach – Tourmaline Surf Park project site is located approximately 2.13 miles from the Rose Canyon Fault Zone (California Department of Conservation 2022). Due to the proximity of the Pacific Beach – Tourmaline Surf Park project site to active fault zones in the region, there remains potential for seismic-induced ground shaking at the project site. Additionally, the Pacific Beach – Tourmaline Surf Park project site is not an area where historic landslides have occurred (refer to Section 5.5.1.6, Landslide and Slope Instability).

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would

include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment (refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings). The proposed sand and cobble dune would be constructed similarly to the annual winter berm that is constructed adjacent to the project site every fall and maintained through the winter season. The dune would be reinforced with a rock core using existing cobble riprap at the site and would be vegetated with native plants, which would help further stabilize the dune. Therefore, construction of the dune would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Further, restoration of the existing vegetated median between the restrooms and the access ramp and the optional pedestrian walking north of the parking lot would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides. The optional underground stormwater vault would not be a habitable structure, and construction of the vault would occur in accordance with all recommendations of the required project-level geotechnical investigation report once future site-specific project designs are finalized. Thus, the Pacific Beach - Tourmaline Surf Park project would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking; ground failure, including liquefaction; or landslides beyond that which presently exists. Impacts would be less than significant, and no mitigation is required.

Liquefaction and landslide impacts are further addressed in Section 5.5.3.3 below.

Mission Beach

The Mission Beach project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial evidence of a known fault. However, the Mission Beach project site is located approximately 2.53 miles from the Rose Canyon Fault Zone (California Department of Conservation 2022). Due to the proximity of the Mission Beach project site to active fault zones in the region, there remains potential for seismic-induced ground shaking at the project site. Additionally, the Mission Beach project site is not an area where historic landslides have occurred (refer to Section 5.5.1.6, Landslide and Slope Instability).

The Mission Beach project includes two different design options. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north-south along the project site, similar to the Dune Design Option. The proposed sand dune

would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. Therefore, construction of the dune would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Impacts would be less than significant, and no mitigation is required.

Liquefaction and landslide impacts are further addressed in Section 5.5.3.3 below.

Ocean Beach – Pier

The Ocean Beach – Pier project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial evidence of a known fault. However, the Ocean Beach – Pier project site is located approximately 2.91 miles from the Rose Canyon Fault Zone (California Department of Conservation 2022). Due to the proximity of the Ocean Beach – Pier project site to active fault zones in the region, there remains potential for seismic-induced ground shaking at the project site. Additionally, the Ocean Beach – Pier project site is not an area where historic landslides have occurred (refer to Section 5.5.1.6, Landslide and Slope Instability).

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier (refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings). The proposed sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. Therefore, construction of the dune would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Impacts would be less than significant, and no mitigation is required.

Liquefaction and landslide impacts are further addressed in Section 5.5.3.3 below.

Sunset Cliffs

The Sunset Cliffs project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial evidence of a known fault. However, the Sunset Cliffs project site is located approximately 3.77 miles from the Rose Canyon Fault Zone (California Department of Conservation 2022). Due to the proximity of the Sunset Cliffs project site to active fault zones in the region, there remains potential for seismic-induced ground shaking at the project site. Further, the Sunset Cliffs project site is not an area where historic landslides have occurred (refer to Section 5.5.1.6, Landslide and Slope Instability).

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Construction of the reconfigured roadway and trail enhancements would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Further, the proposed drainage improvements and vegetation included as part of the Sunset Cliffs project may improve the stability of the cliffs by reducing water erosion and stabilizing the soils.

The Sunset Cliffs project would not include development of any habitable structures. Thus, while the Sunset Cliffs project site could be subject to seismic events, the Sunset Cliffs project would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Potential hazards associated with ground shaking and seismically induced hazards such as surface fault rupture, ground failure, liquefaction, and landslides would be less than significant, and no mitigation is required.

Liquefaction and landslide impacts are further addressed in Section 5.5.3.3 below.

5.5.3.2 Issue 2: Erosion or Loss of Topsoil

Would the proposed CRMP Phase 1 result in a substantial increase in wind or water erosion of soils, either on or off the site?

Pilot Project: Ocean Beach – Dog Beach

As described in Section 5.5.1.7, Soil Erosion, erosion potential in soils is influenced primarily by loose soil texture and steep slopes. Loose soils, such as those along the beaches in the CRMP Phase 1 area, can be eroded by water or wind forces, whereas soils with high clay content are generally susceptible only to water erosion. The potential for erosion generally increases as a result of human activity, primarily through the development of structures and impervious surfaces and the removal of vegetative cover.

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Construction of these project components would primarily occur on sandy beach with no soil cover, where erosion is a naturally occurring process. The elevated sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which would help stabilize the sand dune. Further, the proposed sand dune would provide additional sediment on the beach to reduce the effects of coastal erosion. Therefore, the sand dune would not result in erosion and topsoil loss beyond that which presently occurs.

Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. These improvements would be focused within existing developed areas within limited exposed topsoil. However, during construction limited soil erosion could occur associated with grading and relocation or reconstruction of the existing restroom. For example, construction and grading activities would temporarily disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust, if protective measures are not taken.

SDMC Section 142.0146 requires grading work to incorporate erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and the standards established in the Land Development Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant soil erosion impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provisions. Compliance with the NPDES Construction General Permit would trigger preparation and compliance with an approved Storm Water Pollution Prevention Plan that would consider the full range of erosion control Best Management Practices (BMPs), including any additional site-specific and seasonal conditions. Project compliance with NPDES requirements would reduce the potential for substantial soil erosion or topsoil loss to occur from new development associated with the restroom relocation or reconstruction. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The Amphitheater Design Option would construct earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot would provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards.

Construction of the earthen dikes and terraced seatwall under the Amphitheater Design Option would occur on existing grassy recreational park and paved land. The earthen dike(s) would be contoured and planted with grass (similar to the existing recreational areas), drought tolerant and native species, or a combination of vegetation types to integrate more natural elements and provide ecological benefits. Similarly, construction of the waterfront park under the Reconfigured Park Design Option would occur on existing grassy recreational park and paved parking lot. The reconfigured park would be vegetated with grass and the reconfigured parking lot would be paved. Therefore, while construction of the grass recreational areas, these areas would be immediately vegetated again, which would help to stabilize the soil. Further, the earthen dikes, terraced seatwall, and waterfront park would also provide flood protection benefits, which would reduce water erosion of soils within the grassy recreational areas and other areas inland of these proposed features. Therefore, the La Jolla Shores project would not result in erosion and topsoil loss beyond that which presently occurs. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. Construction of the sand and cobble dune would primarily occur on sandy beach with no soil cover, where erosion is a naturally occurring process. The sand and cobble dune would be constructed similarly to the annual winter berm that is constructed adjacent to the project site every fall and maintained through the winter season. The dune would be reinforced with a rock core using existing cobble riprap at the site and would be vegetated with native plants, which would help further stabilize the dune. Further, the proposed sand dune would provide additional sediment on the beach to reduce the effects of coastal erosion. Therefore, the sand dune would not result in erosion and topsoil loss beyond that which presently occurs.

In addition to the sand and cobble dune, the Pacific Beach – Tourmaline Surf Park project would restore the existing vegetated median between the restrooms and the access ramp with native vegetation. The invasive iceplant that currently covers the vegetated median would be removed and replaced with appropriate native vegetation. While removal of the iceplant would expose the

sand and topsoil along the median, this area would be immediately vegetated again, which would help to stabilize the soil. Additionally, optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. The optional stormwater vault would result in some ground disturbance; however, this optional improvement would be focused within an existing developed area within limited exposed topsoil. However, during construction, limited soil erosion could occur associated with excavation for the underground stormwater vault. For example, excavation and grading activities would temporarily disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities necessary to reduce airborne dust if protective measures are not taken.

As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Pacific Beach – Tourmaline Surf Park project, and any potential impacts related to erosion would be avoided, minimized, or mitigated as conditions of subsequent projectlevel approval prior to the implementation of the Pacific Beach – Tourmaline Surf Park project. The Pacific Beach – Tourmaline Surf Park project would be required to comply with erosion, sedimentation, and water pollution control measures outlined in SDMC Section 142.0146; SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and Division 2 (Storm Water Runoff Control and Drainage Regulations); and the standards established in the Land Development Manual. Conformance to these mandated City grading requirements would ensure that proposed excavation and grading operations would avoid significant soil erosion impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the NPDES Construction General Permit provisions, which include compliance with an approved Storm Water Pollution Prevention Plan that would consider the full range of erosion control BMPs. Project compliance with NPDES requirements would reduce the potential for substantial soil erosion or topsoil loss to occur. Therefore, the Pacific Beach - Tourmaline Surf Park project would not result in adverse soil erosion. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run northsouth along the back of the beach from Ventura Place to San Fernando Place. The sand dune would be vegetated with native plantings. Construction of the sand dune would primarily occur on sandy beach with no soil cover, where erosion is a naturally occurring process. The dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. Following construction of the perched beach, this area would be covered with sand. Further, the proposed sand dune and potential perched beach would provide additional sediment on the beach to reduce the effects of coastal erosion. Therefore, the sand dune would not result in erosion and topsoil loss beyond that which presently occurs. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Construction of the sand dune would primarily occur on sandy beach with no soil cover, where erosion is a naturally occurring process. The dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. Further, the proposed sand dune would provide additional sediment on the beach to reduce the effects of coastal erosion. Therefore, the sand dune would not result in erosion and topsoil loss beyond that which presently occurs. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, would not include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Therefore, these activities would require grounddisturbing activities that could result in temporary erosion and topsoil loss during construction. For example, construction and grading activities would temporarily disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust, if protective measures are not taken.

However, as future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Sunset Cliffs project, and any potential impacts related to erosion would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Sunset Cliffs project. The Sunset Cliffs project would be required to comply with erosion, sedimentation, and water pollution control measures outlined in SDMC Section 142.0146, SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and Division 2 (Storm Water Runoff Control and Drainage Regulations), and the standards established in the Land Development Manual. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant soil erosion impacts. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the NPDES Construction General Permit provisions, which include compliance with an approved Storm Water Pollution Prevention Plan that would consider the full range of erosion control BMPs. Project compliance with NPDES requirements would reduce the potential for substantial soil erosion or topsoil loss to occur.

Additionally, the Sunset Cliffs project would include drainage improvements and erosion control measures to improve the stability of the cliffs by reducing stormwater runoff and coastal bluff erosion. The proposed habitat enhancement would involve installation of native vegetation, which would help stabilize the soils. The optional realigned parking areas could also be graded to ensure that drainage moves towards Sunset Cliffs Boulevard, which would prevent stormwater runoff on the bluff to minimize erosion. Additional stormwater infrastructure and drainage improvements could be implemented as the new parking configurations are designed and implemented. With compliance with City grading requirements, NPDES requirements, and implementation of the proposed drainage improvements, habitat enhancement, and erosion control measures, impacts related to erosion and loss of topsoil at the Sunset Cliffs project site would be less than significant, and no mitigation is required.

5.5.3.3 Issue 3: Geologic Instability

Would the proposed CRMP Phase 1 be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the CRMP Phase 1, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Pilot Project: Ocean Beach – Dog Beach

As described in Section 5.5.1.6, Landslide and Slope Instability, areas of the City where landslides have occurred include Otay Mesa; the east side of Point Loma; the vicinities of Mount Soledad, Rose Canyon, Sorrento Valley, and Torrey Pines; portions of Rancho Bernardo and Los Peñasquitos; and along Mission Gorge in the vicinity of the second San Diego Aqueduct (City of San Diego 2007). Therefore, the Ocean Beach – Dog Beach project site is not an area where historic landslides have occurred. Additionally, the Ocean Beach – Dog Beach project site does not have a history of lateral spreading, subsidence, liquefaction, or collapse. Therefore, the Ocean Beach – Dog Beach project site is not located on a geologic unit or soil that is unstable.

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side

of the San Diego River Bikeway. The elevated sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The proposed sand dune and dune restoration area would be vegetated with native plants, which would help stabilize the sand dune.

Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. As described under Issue 1: Seismic Hazards, the optional restroom relocation or reconstruction would occur in compliance with the CBC and SDMC, which include design criteria for geologic hazards and require that a geotechnical investigation be conducted for the structure (SDMC Section 145.1803). Additionally, SDMC Section 145.1803(a)(2) states that no building permit shall be issued for construction where the geotechnical investigation report establishes that the construction of buildings or structures would be unsafe because of geologic hazards. Further, the Pilot Project would not include development of any habitable structures. Therefore, the Pilot Project would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists. Potential hazards associated with landslide, lateral spreading, subsidence, liquefaction, or collapse would be reduced to a less than significant level through regulatory compliance including compliance with seismic requirements in the Building Code, SDMC, and implementation of site-specific geotechnical report recommendations. The Pilot Project would not create an unstable soil condition. Therefore, impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project site is not an area where historic landslides have occurred. Additionally, the La Jolla Shores project site does not have a history of lateral spreading, subsidence, liquefaction, or collapse. Therefore, the La Jolla Shores project site is not located on a geologic unit or soil that is unstable.

The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards. The earthen dike(s) would be vegetated with native plantings, which would help to stabilize the soil. Under the Reconfigured Park Design Option, the reconfigured park would be vegetated with grass, which would stabilize the soil, and the reconfigured parking lot would be paved. The La Jolla Shores project would not create an unstable soil condition. Therefore, impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site is not an area where historic landslides have occurred. Additionally, the Pacific Beach – Tourmaline Surf Park project site does not have a history of lateral spreading, subsidence, liquefaction, or collapse. Therefore, the Pacific Beach – Tourmaline Surf Park project site is not located on a geologic unit or soil that is unstable.

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. The dune would be constructed similarly to the annual winter berm that is constructed adjacent to the project site every fall and maintained through the winter season. The dune would be reinforced with a rock core using existing cobble riprap at the site and would be vegetated with native plants, which would help further stabilize the dune. The optional underground stormwater vault would not be a habitable structure, and construction of the vault would occur in accordance with all recommendations of the required project-level geotechnical investigation report once future site-specific project designs are finalized. The Pacific Beach – Tourmaline Surf Park project would not create an unstable soil condition. Therefore, impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project site is not an area where historic landslides have occurred. Additionally, the Mission Beach project site does not have a history of lateral spreading, subsidence, liquefaction, or collapse. Therefore, the Mission Beach project site is not located on a geologic unit or soil that is unstable.

The Dune Design Option would include construction of an elevated sand dune that would run northsouth along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. The elevated sand dune and potential perched beach would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which would help stabilize the sand dune. The Mission Beach project would not create an unstable soil condition. Therefore, impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project site is not an area where historic landslides have occurred. Additionally, the Ocean Beach – Pier project site does not have a history of lateral spreading, subsidence, liquefaction, or collapse. Therefore, the Ocean Beach – Pier project site is not located on a geologic unit or soil that is unstable.

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. The elevated sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which would help stabilize the sand dune. The Ocean Beach – Pier project would not create an unstable soil condition. Therefore, impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project site is not an area where historic landslides have occurred. However, the Sunset Cliffs project site has a history of substantial coastal bluff erosion. Therefore, the western cliff edge of the Sunset Cliffs project site is considered unstable.

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Given the narrow cliff edges and limited amount of recreational space consisting of informal trails, the major focus for the Sunset Cliffs project is to enhance the existing resources without compromising the structural integrity of the cliff or current infrastructure. Operation of the Sunset Cliffs project would align vehicle use on the roadway more inland and further from the unstable cliff edge. Additionally, the Sunset Cliffs project would include drainage improvements and erosion control measures to improve the stability of the cliffs by reducing stormwater runoff and coastal bluff erosion. The proposed habitat enhancement would involve installation of native vegetation, which would help stabilize the soils. The optional realigned parking areas could also be graded to ensure that drainage moves towards Sunset Cliffs Boulevard, which would prevent stormwater runoff on the bluff to minimize erosion. Additional stormwater infrastructure and drainage improvements could be implemented as the new parking configurations are designed and implemented. Implementation of the Sunset Cliffs project would not create an unstable soil condition beyond its current condition. Therefore, impacts would be less than significant, and no mitigation is required.

5.5.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project at the Ocean Beach – Dog Beach project site would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards, or result in a substantial increase in wind or water erosion of soils, beyond that which presently exists. Additionally, implementation of the Pilot Project at the Ocean Beach – Dog Beach project site would not 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, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards, or result in a substantial increase in wind or water erosion of soils, beyond that which presently exists. Additionally, implementation of the La Jolla Shores project would not 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, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards, or result in a substantial increase in wind or water erosion of soils, beyond that which presently exists. Additionally, implementation of the Pacific Beach – Tourmaline Surf Park project would not 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, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards, or result in a substantial increase in wind or water erosion of soils, beyond that which presently exists. Additionally, implementation of the Mission Beach project would not 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, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards, or result in a substantial increase in wind or water erosion of soils, beyond that which presently exists. Additionally, implementation of the Ocean Beach – Pier project would not 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, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would not expose people or structures to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards, or result in a substantial increase in wind or water erosion of soils, beyond that which presently exists. Additionally, implementation of the Sunset Cliffs project would not 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, and no mitigation is required.

5.5.5 Mitigation Framework

Impacts to geology and soils would be less than significant; therefore, no mitigation is required.


















Figure 5.5-3. Cobble Berm and Riprap and Winter Sand Berm on the Pacific Beach – Tourmaline Surf Park Project Site



Figure 5.5-4. Rock Riprap at the Bottom of Sunset Cliffs



Figure 5.5-5. Eroding Cliffside on the Sunset Cliffs Project Site

5.6 Greenhouse Gas Emissions

This section of the Programmatic Environmental Impact Report describes the existing conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to greenhouse gas (GHG) emissions that could result from implementation of the proposed CRMP Phase 1. The analysis focuses on the major GHGs generated by human activities including carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons. An analysis of other impacts related to air pollutant emissions is included in Section 5.2, Air Quality.

The analysis in this section is based on a review of available plans and technical information, including the Intergovernmental Panel on Climate Change (IPCC), U.S. Environmental Protection Agency (USEPA), California Air Resources Board, San Diego County Air Pollution Control District, and San Diego Association of Governments, as well as City of San Diego's (City's) Climate Action Plan (CAP) (City of San Diego 2022), the City's Climate Resilient SD Plan (City of San Diego 2021), and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023).

5.6.1 Existing Conditions

5.6.1.1 Overview of Global Climate Change

The USEPA defines climate change as "any significant change in the measures of climate lasting for an extended period of time." In other words, climate change includes major changes in air temperature, precipitation, or wind patterns, among others, that occur over several decades or longer. These changes are caused by a number of natural factors, including oceanic processes, variations in solar radiation reaching Earth's atmosphere and surface, plate tectonics, and volcanic eruptions, as well as anthropogenic (i.e., human-related) activities. The primary anthropogenic driver of climate change is the release of GHGs into the atmosphere (National Research Council 2010; IPCC 2014).

Earth's natural warming process is known as the "greenhouse effect." Earth's atmosphere consists of various gases that regulate Earth's temperature by trapping solar energy; these gases are cumulatively referred to as GHGs because they trap heat like the glass of a greenhouse. Relying on decades of research, the overwhelming majority of the scientific community agrees that human activities, including the burning of fossil fuels to produce energy and deforestation, have contributed to elevated concentrations of GHGs in the atmosphere since the Industrial Revolution (National Research Council 2010). The human production and release of GHGs to the atmosphere has caused an increase in the average global temperature. While the increase in global temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change."

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The 2014 IPCC Synthesis Report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. Signs that global climate change has occurred include warming of the atmosphere and ocean, diminished amounts of snow and ice, and rising sea levels (IPCC 2014).

In California, climate change impacts have the potential to affect sea-level rise and coastal flooding, agriculture, snowpack and water supply, forestry, wildfire risk, public health, and electricity demand and supply. A summary of current and future climate change impacts to resource areas in California is in Safeguarding California: 2018 Update (State of California 2018).

5.6.1.2 Potential Effects of Global Climate Change

Potential adverse physical and environmental effects of global climate change include sea-level rise, flooding, increased weather variability and intensified storm events, reduced reliability of water supplies, reduced quality of water supplies, and increased stress on ecosystems that would reduce biodiversity. Additionally, climate change has resulted in impacts to human health due to heat waves and extreme weather events, reduced air quality, and increased climate-sensitive diseases, including foodborne, waterborne, and animalborne diseases.

Adverse effects from climate change are distributed across the world and have global consequences. Sensitive communities, such as low-lying nations that are more susceptible to impacts from sea-level rise, may be more heavily impacted than communities in other regions.

5.6.1.3 Greenhouse Gases

Although GHGs include a variety of gases that have the potential to trap heat, policies and regulations to manage their effects generally focus on CO₂, CH₄, and N₂O. The following provides a brief description of each of these GHGs and their sources:

• **CO**₂. The natural production and absorption of CO₂ occurs through the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees and wood products, and as a result of other chemical reactions, such as those required to manufacture cement. CO₂ is constantly being exchanged among the atmosphere, ocean, and land surface as it is both produced and absorbed by many microorganisms, plants, and animals. Emissions and removal of CO₂ by these natural processes tend to balance. However, recent climate changes cannot be explained by natural causes alone. Since the Industrial Revolution began around 1750, human-related activities had increased CO₂ concentrations in the atmosphere by 50 percent (USEPA 2024a; NASA 2024). Globally, the largest source of CO₂ emissions is the combustion of fossil fuels such as coal, oil, and gas in power plants, motor vehicles, and industrial facilities. CO₂ is sequestered (i.e., removed from

the atmosphere) when it is absorbed by plants as part of the biological carbon cycle. When in balance, total CO_2 emissions and removals from the entire carbon cycle are roughly equal.

- **CH**₄. CH₄ is emitted from various human-related and natural sources. Anthropogenic sources include energy; industry; land use; the production and transport of coal, natural gas, and oil; livestock and other agricultural practices; and the decay of organic waste in municipal solid waste landfills. It is estimated that 50–65 percent of global CH₄ emissions are related to human activities. Natural sources of CH₄ include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and wildfires (USEPA 2024b).
- N₂O. Concentrations of N₂O also began to rise at the beginning of the Industrial Revolution, reaching 334 parts per billion by 2021 (USEPA 2023). Microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen, produce N₂O. In addition to agricultural sources, some industrial processes (e.g., fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of N₂O (USEPA 2024b).

The IPCC developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of a GHG is defined as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram of a trace substance relative to that of 1 kilogram of a reference gas (IPCC 2014).

 CO_2 is the most widely emitted GHG and is the reference gas for determining the GWP of other GHGs. Because the impact each GHG has on climate change varies, the common metric of carbon dioxide equivalent (CO_2e) is used to report a combined impact from all GHGs. This metric scales the GWP of each GHG to that of CO_2 . GHG emissions are typically expressed in metric tons of carbon dioxide equivalent (MT CO_2e) (USEPA 2024c).

Federal, State, and City of San Diego Greenhouse Gas Inventories

U.S. Environmental Protection Agency Inventory

Per the USEPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2020, total U.S. GHG emissions were approximately 5,981 million metric tons (MMT) of CO₂e in 2020. The primary GHG emitted by human activities in the United States was CO₂, which represented approximately 79 percent of total GHG emissions (4,715.7 MMT CO₂e). The largest source of CO₂, and of overall GHG emissions, was fossil fuel combustion, which accounted for approximately 72.6 percent of CO₂ emissions in 2020 (4,342.7 MMT CO₂e). Total U.S. GHG emissions have decreased by 7 percent since 1990 (USEPA 2022).

California Air Resources Board Inventory

According to California's 2000–2019 GHG emissions inventory (2021 edition), California emitted 418.1 MMT CO₂e in 2018, including emissions resulting from out-of-state electrical generation. The sources of GHG emissions in California include transportation, industry, electric power production from both in-state and out-of-state sources, residential and commercial activities, agriculture, high GWP substances, and recycling and waste. The transportation sector remains the largest source of GHG emissions in the state. Direct emissions from vehicle tailpipes, off-road transportation sources, and intrastate aviation accounted for almost 40 percent of statewide emissions in 2019. Emissions from the electric power sector composed 15 percent of 2019 statewide GHG emissions. Between 2001 and 2019, per-capita GHG emissions in California dropped from a peak of 14 MT CO₂e per person in 2001 to 10.5 MT CO₂e per person in 2019, representing a 25 percent decrease. In addition, total GHG emissions in 2019 were approximately 7.2 MMT CO₂e less than 2018 emissions (CARB 2021).

City of San Diego Climate Action Plan

In December 2015, the City adopted a CAP and updated it in 2022 (City of San Diego 2022). With implementation of the CAP, the City aims to achieve net zero GHG emissions by 2035. It is anticipated that the City would achieve a reduction of 8,774,000 MT CO₂e by 2035 with implementation of the 2022 CAP Update. However, additional reductions would be required to achieve net zero emissions. The CAP relies on significant City and regional actions, continued implementation of federal and state mandates, and local strategies with associated action steps for target attainment. The CAP includes an inventory of the City's GHG emissions for 2019. The San Diego GHG emissions source categories and their relative contributions in 2019 are presented in Table 5.6-1, 2019 Greenhouse Gas Emissions Sources in the City of San Diego.

Source Category	Annual GHG Emissions (MMT CO ₂ e)	Percentage of Total ¹
On-Road Transportation	5.805	55%
Electricity	2.375	23%
Natural Gas	1.911	18%
Solid Waste	0.277	3%
Construction Equipment	0.07	1%
Water	0.068	1%
Wastewater	0.026	<1%
Total	10.532	100%

Table 5.6-1. 2019 Greenhou	e Gas Emissions Sou	urces in the City of	San Diego
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Source: City of San Diego 2022.

Notes: MMT CO_2e = million metric tons of CO_2 equivalent

¹ Percentage of total has been rounded, and total may not sum due to rounding.

5.6.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to GHG emissions are based on applicable criteria in the Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (2023). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- b. Conflict with the City's Climate Action Plan or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The City adopted an updated qualified CAP in August 2022 that establishes a Citywide goal of net zero by 2035. A qualified CAP is one that meets the requirements of CEQA Guidelines, Section 15183.5(b), so that future development projects requiring discretionary environmental review under state law can streamline GHG impact analyses by demonstrating consistency with the CAP. Therefore, the CRMP Phase 1 is evaluated for consistency with the City's CAP based on guidance issued by the City for plan-level environmental documents to determine the significance of CRMP Phase 1 GHG emissions (City of San Diego 2022). The City Planning Department prepared the CAP Consistency for Plan- and Policy-Level Documents and Public Infrastructure Projects Memorandum to provide guidance on significance determination as it relates to consistency with the CAP strategies.

5.6.3 Impact Analysis

5.6.3.1 Issue 1: Generation of Greenhouse Gas Emissions

Would the proposed CRMP Phase 1 generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Pilot Project: Ocean Beach – Dog Beach

In accordance with the City's CAP Consistency for Plan- and Policy-Level Documents and Public Infrastructure Projects Memorandum, CAP consistency for public infrastructure projects is determined through a discussion of overall consistency with the six CAP strategies. Table 5.6-2, Pilot Project: Ocean Beach – Dog Beach Climate Action Plan Consistency, compares the Pilot Project to the CAP strategies. As shown in Table 5.6-2, the Pilot Project would be consistent with all six CAP strategies. As such, the Pilot Project would be consistent with the CAP and would not generate GHG emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant, and no mitigation is required.

Climate Action Plan Strategy	Project Consistency
Strategy 1: Decarbonization of the Built Environment A project would be consistent with the strategy if it would not conflict with the achievement of the decarbonization of the built environment. The City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035. Any projects/project features that would reduce or eliminate the use of fossil fuels should be discussed.	The Pilot Project would construct a new multi-use trail and sand dunes and would not include components that would interfere with decarbonization of existing or future buildings. The optional restroom facility relocation or reconstruction would replace an existing facility and would not result in a net increase in energy use. The multi-use path would enhance pedestrian and cycling infrastructure and would have the potential to reduce fossil fuel use. The Pilot Project would be consistent with this strategy.
Strategy 2: Access to Clean & Renewable Energy A project would be consistent with this strategy if it would not conflict with the achievement of a goal of 100% renewable energy.	As described previously, the Pilot Project consists of a new multi-use trail and restored sand dunes and an optional replacement or relocation of the existing restroom that would not result in a net increase in energy demand. The Pilot Project would not interfere with achievement of 100 percent renewable energy. The Pilot Project would be consistent with this strategy.
Strategy 3: Mobility & Land Use A project would be consistent with this strategy if it would not conflict with the achievement of the Strategy 3 goals, or would further the goals of Strategy 3, such as providing or facilitating the delivery of bicycle, pedestrian, or transit improvements. The analysis should note where any public infrastructure project would support new development that achieves the City's climate goals, specifically to provide housing and development located within Transit Priority Areas.	The Pilot Project includes development of a new multi-use trail. The trail would be a Class I bikeway and separated pedestrian trail connecting the existing western terminus of the San Diego River Bikeway to the Ocean Beach Pier. Additionally, the Pilot Project includes an optional shuttle stop that would provide a connection to a transportation center and reduce vehicle trips to the site. The Pilot Project would not provide new housing but would provide protections against flooding for existing coastal housing. The Pilot Project would be consistent with this strategy.
Strategy 4: Circular Economy & Clean Communities A project would be consistent with this strategy if it would comply with the City's Construction and Demolition Debris Diversion Ordinance, if applicable. The analysis should note where project operations would generally not increase solid waste production, and thus, would not impede the achievement of this goal.	Construction of the Pilot Project would result in minimal construction debris and would consist primarily of sand and trail material import. The Pilot Project would comply with the City's Construction and Demolition Debris Diversion Ordinance as applicable. Additionally, operation of the Pilot Project would consist of an active transportation corridor and would generally not increase solid waste production. The Pilot Project would be consistent with this strategy.
Strategy 5: Resilient Infrastructure and Healthy Ecosystems A project would be consistent with this strategy if it would include project features that further the City's climate resiliency goals, such as new street trees or storm drain maintenance to prepare for greater prevalence of extreme rain events.	The purpose of the Pilot Project is to provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and providing a reservoir of sand to the beach that can be used during erosive conditions. As such, the Pilot Project is a resilient infrastructure project. The Pilot Project would be consistent with this strategy.
Strategy 6: Emerging Climate Actions A project would be consistent with this strategy if it would not conflict with the achievement of this strategy. Any project that includes implementing emerging climate actions, i.e., new GHG removal technologies, should include a discussion of that in the analysis.	The Pilot Project consists of a new multi-use trail and restored sand dunes in an existing public open space area and does not include components that would conflict with research or implementation of emerging climate technologies. The Pilot Project supports Strategy 6 goals related to reducing air quality pollutants of concern by providing a new pedestrian and bicycle facility and optional transit connection to reduce vehicle trips, as described previously. The Pilot Project would be consistent with this strategy.

Table 5.6-2. Pilot Project: Ocean Beach – Dog Beach Climate Action Plan Consistency

La Jolla Shores

Table 5.6-3, La Jolla Shores Project Climate Action Plan Consistency, compares the La Jolla Shores project to the CAP strategies. As shown in Table 5.6-3, the La Jolla Shores project would be consistent with all six CAP strategies. As such, the La Jolla Shores project would be consistent with the CAP and would not generate GHG emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant, and no mitigation is required.

Climate Action Plan Strategy	Project Consistency
Strategy 1: Decarbonization of the Built Environment A project would be consistent with the strategy if it would not conflict with the achievement of the decarbonization of the built environment. The City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035. Any projects/project features that would reduce or eliminate the use of fossil fuels should be discussed.	The La Jolla Shores project would consist of either earthen dikes and a terraced seatwall or a reconfigured waterfront and parking lot and would not include components that would interfere with decarbonization of existing or future buildings. The La Jolla Shores project would be consistent with this strategy.
Strategy 2: Access to Clean & Renewable Energy A project would be consistent with this strategy if it would not conflict with the achievement of a goal of 100% renewable energy.	The La Jolla Shores project would not result in a net increase in energy demand and would not interfere with achievement of 100 percent renewable energy. The La Jolla Shores project would be consistent with this strategy.
Strategy 3: Mobility & Land Use A project would be consistent with this strategy if it would not conflict with the achievement of the Strategy 3 goals, or would further the goals of Strategy 3, such as providing or facilitating the delivery of bicycle, pedestrian, or transit improvements. The analysis should note where any public infrastructure project would support new development that achieves the City's climate goals, specifically to provide housing and development located within Transit Priority Areas.	The La Jolla Shores project would make improvements to an existing recreational area and would not include components that would interfere with implementation of regional bicycle, pedestrian, or transit improvements. The La Jolla Shores project would not provide new housing but would provide protections against flooding and would not interfere with development in a Transit Priority Area. The La Jolla Shores project would be consistent with this strategy.
Strategy 4: Circular Economy & Clean Communities A project would be consistent with this strategy if it would comply with the City's Construction and Demolition Debris Diversion Ordinance, if applicable. The analysis should note where project operations would generally not increase solid waste production, and thus, would not impede the achievement of this goal.	Construction of the La Jolla Shores project would result in minimal construction debris and would consist primarily of earthen dike material import. The La Jolla Shores project would comply with the City's Construction and Demolition Debris Diversion Ordinance as applicable. Additionally, the La Jolla Shores project includes improvements to the existing recreational areas adjacent to the beach and would generally not increase solid waste production. The La Jolla Shores project with this strategy.
Strategy 5: Resilient Infrastructure and Healthy Ecosystems A project would be consistent with this strategy if it would include project features that further the City's climate resiliency goals, such as new street trees or storm drain maintenance to prepare for greater prevalence of extreme rain events.	The purpose of the La Jolla Shores project is to provide flood protection to the coastal park infrastructure and community of La Jolla. The La Jolla Shores project is a resilient infrastructure project. The La Jolla Shores project would be consistent with this strategy.
Strategy 6: Emerging Climate Actions A project would be consistent with this strategy if it would not conflict with the achievement of this strategy. Any project that includes implementing emerging climate actions, i.e., new GHG removal technologies, should include a discussion of that in the analysis.	The La Jolla Shores project consists of improved recreational amenities and does not include components that would conflict with research or implementation of emerging climate technologies. The La Jolla Shores project supports Strategy 6 goals related to carbon sequestration by providing enhanced green spaces. The La Jolla Shores project would be consistent with this strategy.

Table 5.6-3. La Jolla Shores Project Climate Action Plan Consistency

Pacific Beach – Tourmaline Surf Park

Table 5.6-4, Pacific Beach – Tourmaline Surf Park Climate Action Plan Consistency, compares the Pacific Beach – Tourmaline Surf Park project to the CAP strategies. As shown in Table 5.6-4, the Pacific Beach – Tourmaline Surf Park project would be consistent with all six CAP strategies. As such, the Pacific Beach – Tourmaline Surf Park project would be consistent with the CAP and would not generate GHG emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant, and no mitigation is required.

Climate Action Plan Strate	egy	Project Consistency
Strategy 1: Decarbonization of the Built A project would be consistent with the strat conflict with the achievement of the decarb built environment. The City has adopted a zero emissions municipal buildings and op Any projects/project features that would rea the use of fossil fuels should be discussed.	Environment tegy if it would not onization of the goal to achieve erations by 2035. duce or eliminate	The Pacific Beach – Tourmaline Surf Park project would convert existing shoreline protection features into hybrid nature-based solutions and would not include components that would interfere with decarbonization of existing or future buildings. The Pacific Beach – Tourmaline Surf Park project would be consistent with this strategy.
Strategy 2: Access to Clean & Renewab A project would be consistent with this stra conflict with the achievement of a goal of 1 energy.	le Energy tegy if it would not 00% renewable	The Pacific Beach – Tourmaline Surf Park project would not result in a net increase in energy demand and would not interfere with achievement of 100 percent renewable energy. The Pacific Beach – Tourmaline Surf Park project would be consistent with this strategy.
Strategy 3: Mobility & Land Use A project would be consistent with this stra conflict with the achievement of the Strategy would further the goals of Strategy 3, such facilitating the delivery of bicycle, pedestria improvements. The analysis should note where any public project would support new development the City's climate goals, specifically to provide development located within Transit Priority	tegy if it would not gy 3 goals, or as providing or in, or transit infrastructure at achieves the housing and Areas.	The Pacific Beach – Tourmaline Surf Park project would preserve and enhance existing coastal access and would not include components that would interfere with implementation of regional bicycle, pedestrian, or transit improvements. The Pacific Beach – Tourmaline Surf Park project would not provide new housing but would provide enhanced protections against flooding for existing coastal housing. The Pacific Beach – Tourmaline Surf Park project would be consistent with this strategy.
Strategy 4: Circular Economy & Clean C A project would be consistent with this stra comply with the City's Construction and De Diversion Ordinance, if applicable. The ana where project operations would generally r waste production, and thus, would not imper achievement of this goal.	communities tegy if it would emolition Debris alysis should note not increase solid ede the	Construction of the Pacific Beach – Tourmaline Surf Park project would result in minimal construction debris, and existing riprap would be reused on site. The Pacific Beach – Tourmaline Surf Park project would comply with the City's Construction and Demolition Debris Diversion Ordinance as applicable. Additionally, the Pacific Beach – Tourmaline Surf Park project would enhance existing public open space and would not increase solid waste production. The Pacific Beach – Tourmaline Surf Park project would be consistent with this strategy.
Strategy 5: Resilient Infrastructure and Ecosystems A project would be consistent with this stratinclude project features that further the City resiliency goals, such as new street trees of maintenance to prepare for greater prevale rain events.	Healthy tegy if it would y's climate or storm drain ence of extreme	The purpose of the Pacific Beach – Tourmaline Surf Park project is to enhance existing shoreline protection and native habitat opportunities. The Pacific Beach – Tourmaline Surf Park project would provide new native vegetation areas and enhance an existing vegetated median. As such, the Pacific Beach – Tourmaline Surf Park project is a resilient infrastructure project. The Pacific Beach – Tourmaline Surf Park project would be consistent with this strategy.

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Table 5.6-4.	Pacific Beach –	Tourmaline	Surf Park	Climate A	Action Plan	Consistency

Climate Action Plan Strategy	Project Consistency
Strategy 6: Emerging Climate Actions A project would be consistent with this strategy if it would not conflict with the achievement of this strategy. Any project that includes implementing emerging climate actions, i.e., new GHG removal technologies, should include a discussion of that in the analysis.	The Pacific Beach – Tourmaline Surf Park project consists of conversion of existing shoreline protection into a hybrid nature-based solution and does not include components that would conflict with research or implementation of emerging climate technologies. The Pacific Beach – Tourmaline Surf Park project supports Strategy 6 goals related to carbon sequestration by restoring and providing new native plant vegetation, which would help sequester carbon dioxide. The Pacific Beach – Tourmaline Surf Park project would be consistent with this strategy.

Table 5.6-4. Pacific Beach – Tourmaline Surf Park Climate Action Plan Consistency

Mission Beach

Table 5.6-5, Mission Beach Project Climate Action Plan Consistency, compares the Mission Beach project to the CAP strategies. As shown in Table 5.6-5, the Mission Beach project would be consistent with all six CAP strategies. As such, the Mission Beach project would be consistent with the CAP and would not generate GHG emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant, and no mitigation is required.

Climate Action Plan Strategy	Project Consistency
Strategy 1: Decarbonization of the Built Environment A project would be consistent with the strategy if it would not conflict with the achievement of the decarbonization of the built environment. The City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035. Any projects/project features that would reduce or eliminate the use of fossil fuels should be discussed.	The Mission Beach project would construct a new elevated sand dune and potential perched beach and would not include components that would interfere with decarbonization of existing or future buildings. The Mission Beach project would be consistent with this strategy.
Strategy 2: Access to Clean & Renewable Energy A project would be consistent with this strategy if it would not conflict with the achievement of a goal of 100% renewable energy.	As described previously, the Mission Beach project consists of a new sand dune that would not result in a net increase in energy demand. The Mission Beach project would not interfere with achievement of 100 percent renewable energy. The Mission Beach project would be consistent with this strategy.
Strategy 3: Mobility & Land Use A project would be consistent with this strategy if it would not conflict with the achievement of the Strategy 3 goals, or would further the goals of Strategy 3, such as providing or facilitating the delivery of bicycle, pedestrian, or transit improvements. The analysis should note where any public infrastructure project would support new development that achieves the City's climate goals, specifically to provide housing and development located within Transit Priority Areas.	The Mission Beach project would not include components that would interfere with implementation of regional bicycle, pedestrian, or transit improvements and would provide new protection for the Ocean Front Walk multimodal facility. Under the Perched Beach Design Option, a 350-foot section of Ocean Front Walk would be realigned, but would maintain multi-modal access along the coast. The Mission Beach project would not provide new housing but would provide protections against flooding for existing coastal housing. The Mission Beach project would be consistent with this strategy.

Table 5.6-5. Mission Beach Project Climate Action Plan Consistency

Climate Action Plan Strategy	Project Consistency
Strategy 4: Circular Economy & Clean Communities A project would be consistent with this strategy if it would comply with the City's Construction and Demolition Debris Diversion Ordinance, if applicable. The analysis should note where project operations would generally not increase solid waste production, and thus, would not impede the achievement of this goal.	Construction of the Mission Beach project would result in minimal construction debris, and construction would consist primarily of sand import. The Mission Beach project would comply with the City's Construction and Demolition Debris Diversion Ordinance, as applicable. Operation of the Mission Beach project would consist of a passive sand dune and potential perched beach and would not increase solid waste production. The Mission Beach project would be consistent with this strategy.
Strategy 5: Resilient Infrastructure and Healthy Ecosystems A project would be consistent with this strategy if it would include project features that further the City's climate resiliency goals, such as new street trees or storm drain maintenance to prepare for greater prevalence of extreme rain events.	The purpose of the Mission Beach project is to provide flood protection for the Mission Beach community. The sand dune would also provide a new habitat opportunity. As such, the Mission Beach project is a resilient infrastructure project. The Mission Beach project would be consistent with this strategy.
Strategy 6: Emerging Climate Actions A project would be consistent with this strategy if it would not conflict with the achievement of this strategy. Any project that includes implementing emerging climate actions, i.e., new GHG removal technologies, should include a discussion of that in the analysis.	The Mission Beach project consists of a new sand dune and does not include components that would conflict with research or implementation of emerging climate technologies. The Mission Beach project supports Strategy 6 goals related to carbon sequestration by restoring and providing new native plant vegetation, which would help sequester carbon dioxide. The Mission Beach project would be consistent with this strategy.

Ocean Beach – Pier

Table 5.6-6, Ocean Beach – Pier Project Climate Action Plan Consistency, compares the Ocean Beach – Pier project to the CAP strategies. As shown in Table 5.6-6, the Ocean Beach – Pier project would be consistent with all six CAP strategies. As such, the Ocean Beach – Pier project would be consistent with the CAP and would not generate GHG emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant, and no mitigation is required.

 Table 5.6-6. Ocean Beach – Pier Project Climate Action Plan Consistency

Climate Action Plan Strategy	Project Consistency
Strategy 1: Decarbonization of the Built Environment	The Ocean Beach – Pier project would construct a new multi-
A project would be consistent with the strategy if it would not	use trail and sand dune and would not include components
conflict with the achievement of the decarbonization of the	that would interfere with decarbonization of existing or future
built environment. The City has adopted a goal to achieve	buildings. The multi-use trail would enhance pedestrian and
zero emissions municipal buildings and operations by 2035.	cycling infrastructure and would have the potential to reduce
Any projects/project features that would reduce or eliminate	fossil fuel use. The Ocean Beach – Pier project would be
the use of fossil fuels should be discussed.	consistent with this strategy.

Climate Action Plan Strategy	Project Consistency
Strategy 2: Access to Clean & Renewable Energy A project would be consistent with this strategy if it would not conflict with the achievement of a goal of 100% renewable energy.	The Ocean Beach – Pier project consists of a new multi-use trail and sand dune that would not result in a net increase in energy demand. The Ocean Beach – Pier project would not interfere with achievement of 100 percent renewable energy. The Ocean Beach – Pier project would be consistent with this strategy.
Strategy 3: Mobility & Land Use A project would be consistent with this strategy if it would not conflict with the achievement of the Strategy 3 goals, or would further the goals of Strategy 3, such as providing or facilitating the delivery of bicycle, pedestrian, or transit improvements. The analysis should note where any public infrastructure project would support new development that achieves the City's climate goals, specifically to provide housing and development located within Transit Priority Areas.	The Ocean Beach – Pier project includes development of a new multi-use trail. The trail would be a Class I bikeway and separated pedestrian trail connecting the existing western terminus of the San Diego River Bikeway to the Ocean Beach Pier. The Ocean Beach – Pier project would not provide new housing but would provide protections against flooding for existing coastal housing. The Ocean Beach – Pier project would be consistent with this strategy.
Strategy 4: Circular Economy & Clean Communities A project would be consistent with this strategy if it would comply with the City's Construction and Demolition Debris Diversion Ordinance, if applicable. The analysis should note where project operations would generally not increase solid waste production, and thus, would not impede the achievement of this goal.	Construction of the Ocean Beach – Pier project would result in minimal construction debris and would consist primarily of sand and trail material import. The Ocean Beach – Pier project would comply with the City's Construction and Demolition Debris Diversion Ordinance as applicable. Additionally, operation of the Ocean Beach – Pier project would consist of an active transportation corridor in an existing recreational area and would generally not increase solid waste production. The Ocean Beach – Pier project would be consistent with this strategy.
Strategy 5: Resilient Infrastructure and Healthy Ecosystems A project would be consistent with this strategy if it would include project features that further the City's climate resiliency goals, such as new street trees or storm drain maintenance to prepare for greater prevalence of extreme rain events.	The purpose of the Ocean Beach – Pier project is to provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and providing a reservoir of sand to the beach that can be used during erosive conditions. As such, the Ocean Beach – Pier project would be consistent with this strategy.
Strategy 6: Emerging Climate Actions A project would be consistent with this strategy if it would not conflict with the achievement of this strategy. Any project that includes implementing emerging climate actions, i.e., new GHG removal technologies, should include a discussion of that in the analysis.	The Ocean Beach – Pier project consists of a new trail and sand dunes in an existing public open space and does not include components that would conflict with research or implementation of emerging climate technologies. The Ocean Beach – Pier project supports Strategy 6 goals related to reducing air quality pollutants of concern by providing a new pedestrian and bicycle facility. The Ocean Beach – Pier project would be consistent with this strategy.

Table 5.6-6. Ocean Beach – Pier Project	Climate Action Plan Consistency
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Sunset Cliffs

Table 5.6-7, Sunset Cliffs Project Climate Action Plan Consistency, compares the Sunset Cliffs project to the CAP strategies. As shown in Table 5.6-7, the Sunset Cliffs project would be consistent with all six CAP strategies. As such, the Sunset Cliffs project would be consistent with

the CAP and would not generate GHG emissions that may have a significant impact on the environment. Therefore, impacts would be less than significant, and no mitigation is required.

Climate Action Plan Strategy	Project Consistency
Strategy 1: Decarbonization of the Built Environment A project would be consistent with the strategy if it would not conflict with the achievement of the decarbonization of the built environment. The City has adopted a goal to achieve zero emissions municipal buildings and operations by 2035. Any projects/project features that would reduce or eliminate the use of fossil fuels should be discussed.	The Sunset Cliffs project consists of changes to existing transportation patterns on Sunset Cliffs Boulevard and would not include components that would interfere with decarbonization of existing or future buildings. The proposed road reconfiguration and trail enhancements would have the potential to reduce fossil fuel use by encouraging non- motorized travel. The Sunset Cliffs project would be consistent with this strategy.
Strategy 2: Access to Clean & Renewable Energy A project would be consistent with this strategy if it would not conflict with the achievement of a goal of 100% renewable energy.	The Sunset Cliffs project consists primarily of changes to traffic patterns and habitat and trail enhancement. The Sunset Cliffs project would not interfere with achievement of 100 percent renewable energy. The Sunset Cliffs project would be consistent with this strategy.
Strategy 3: Mobility & Land Use A project would be consistent with this strategy if it would not conflict with the achievement of the Strategy 3 goals, or would further the goals of Strategy 3, such as providing or facilitating the delivery of bicycle, pedestrian, or transit improvements. The analysis should note where any public infrastructure project would support new development that achieves the City's climate goals, specifically to provide housing and development located within Transit Priority Areas.	The Sunset Cliffs project includes changes to the existing travel configuration on Sunset Cliffs Boulevard and trail enhancement and drainage improvements. The Sunset Cliffs project would not provide new housing but would address erosion hazards in an existing neighborhood. The Sunset Cliffs project would be consistent with this strategy.
Strategy 4: Circular Economy & Clean Communities A project would be consistent with this strategy if it would comply with the City's Construction and Demolition Debris Diversion Ordinance, if applicable. The analysis should note where project operations would generally not increase solid waste production, and thus, would not impede the achievement of this goal.	Construction of the Sunset Cliffs project would result in minimal construction debris because it would consist primarily of temporary road signage and traffic calming devices. If a permanent road reconfiguration is proposed in the future, that effort would consist mostly of striping existing roadways. Trail and habitat enhancement, drainage improvements, and potential reconfiguration of parking may result in minimal construction debris. Additionally, operation of the Sunset Cliffs project would consist of an active transportation corridor and enhancements to an existing trail and would not increase solid waste production. The Sunset Cliffs project would be consistent with this strategy.
Strategy 5: Resilient Infrastructure and Healthy Ecosystems A project would be consistent with this strategy if it would include project features that further the City's climate resiliency goals, such as new street trees or storm drain maintenance to prepare for greater prevalence of extreme rain events.	The purpose of the Sunset Cliffs project is to address an existing erosion hazard and enhance existing resources without compromising the structural integrity of the cliff or current infrastructure. As such, the Sunset Cliffs project is a resilient infrastructure project. The Sunset Cliffs project would be consistent with this strategy.
Strategy 6: Emerging Climate Actions A project would be consistent with this strategy if it would not conflict with the achievement of this strategy. Any project that includes implementing emerging climate actions, i.e., new	The Sunset Cliffs project would improve an existing roadway and recreational facilities and does not include components that would conflict with research or implementation of emerging climate technologies. The Sunset Cliffs project supports Strategy 6 goals related to carbon sequestration and reducing

Table 5.6-7. Sunset Cliffs Project Climate Action Plan Consistency

Climate Action Plan Strategy	Project Consistency
GHG removal technologies, should include a discussion of that in the analysis.	air quality pollutants of concern by restoring and providing new native plant vegetation and improving safety for non-motorized travel. The Sunset Cliffs project would be consistent with this strategy.

5.6.3.2 Issue 2: Conflict with Applicable Plan

Would the proposed CRMP Phase 1 conflict with the City's Climate Action Plan or another applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Pilot Project: Ocean Beach - Dog Beach

Project consistency with the City's CAP is addressed in Section 5.6.3.1, Issue 1: Generation of Greenhouse Gas Emissions. The Climate Resilient SD Plan is also applicable to the project. The Climate Resilient SD Plan provides strategies to prepare, respond, and recover from potential climate change hazards, such as extreme heat, wildfires, sea-level rise, and flooding and drought, as well as how the proposed investments can improve local communities. The Climate Resilient SD Plan will increase the City's ability to adapt, recover, and thrive in a changing climate. Key plan components include connected and informed communities, resilient and equitable planning and investment, protection for historical and Tribal cultural resources, protection for natural environments, and maintenance of critical infrastructure. As described in Section 3.2, Relationship to Other Documents, the CRMP Phase 1 supports implementation of the Climate Resilient SD Plan. The CRMP Phase 1 uses the Climate Resilient SD Plan to inform development of nature-based coastal resilience projects to build resilience to the impacts of sea-level rise and enhance and protect the City's coastline. Specifically, the CRMP Phase 1, including the Pilot Project, would prioritize implementation of nature-based climate change solutions where feasible, consistent with applicable Climate Resilient SD Plan Policy TNE-3. The Pilot Project would be consistent with the Climate Resilient SD Plan, and impacts would be less than significant. No mitigation is required.

La Jolla Shores

Project consistency with the City's CAP is addressed in Section 5.6.3.1. As described for the Pilot Project, as part of CRMP Phase 1, the La Jolla Shores project would implement a nature-based coastal resiliency project consistent with Climate Resilient SD Plan Policy TNE-3. The La Jolla Shores project would be consistent with the Climate Resilient SD Plan, and impacts would be less than significant. No mitigation is required.

Pacific Beach – Tourmaline Surf Park

Project consistency with the City's CAP is addressed in Section 5.6.3.1. As described for the Pilot Project, as part of CRMP Phase 1, the Pacific Beach – Tourmaline Surf Park project would

implement a nature-based coastal resiliency project consistent with Climate Resilient SD Plan Policy TNE-3. The Pacific Beach – Tourmaline Surf Park project would be consistent with the Climate Resilient SD Plan, and impacts would be less than significant. No mitigation is required.

Mission Beach

Project consistency with the City's CAP is addressed in Section 5.6.3.1. As described for the Pilot Project, as part of CRMP Phase 1, the Mission Beach project would implement a nature-based coastal resiliency project consistent with Climate Resilient SD Plan Policy TNE-3. The Mission Beach project would be consistent with the Climate Resilient SD Plan, and impacts would be less than significant. No mitigation is required.

Ocean Beach – Pier

Project consistency with the City's CAP is addressed in Section 5.6.3.1. As described for the Pilot Project, as part of CRMP Phase 1, the Ocean Beach – Pier project would implement a nature-based coastal resiliency project consistent with Climate Resilient SD Plan Policy TNE-3. The Ocean Beach – Pier project would be consistent with the Climate Resilient SD Plan, and impacts would be less than significant. No mitigation is required.

Sunset Cliffs

Project consistency with the City's CAP is addressed in Section 5.6.3.1. As described for the Pilot Project, as part of CRMP Phase 1, the Sunset Cliffs project would implement a nature-based coastal resiliency project consistent with Climate Resilient SD Plan Policy TNE-3. The Sunset Cliffs project would be consistent with the Climate Resilient SD Plan, and impacts would be less than significant. No mitigation is required.

5.6.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would be consistent with the City's CAP and Climate Resilient SD Plan. Impacts related to GHG emissions would be less than significant. No mitigation is required.

La Jolla Shores

The La Jolla Shores project would be consistent with the City's CAP and Climate Resilient SD Plan. Impacts related to GHG emissions would be less than significant. No mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would be consistent with the City's CAP and Climate Resilient SD Plan. Impacts related to GHG emissions would be less than significant. No mitigation is required.

Mission Beach

The Mission Beach project would be consistent with the City's CAP and Climate Resilient SD Plan. Impacts related to GHG emissions would be less than significant. No mitigation is required.

Ocean Beach – Pier

The Ocean Beach - Pier project would be consistent with the City's CAP and Climate Resilient SD Plan. Impacts related to GHG emissions would be less than significant. No mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would be consistent with the City's CAP and Climate Resilient SD Plan. Impacts related to GHG emissions would be less than significant. No mitigation is required.

5.6.5 Mitigation Framework

Impacts to GHG emissions would be less than significant; therefore, no mitigation is required.

5.7 Hydrology and Water Quality

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing hydrology and water quality conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to hydrology and water quality that could result from implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the San Diego Regional Water Quality Control Board's (RWQCB's) Water Quality Control Plan for the San Diego Basin (Basin Plan) (2021), the Biological Resources Technical Report prepared by Harris & Associates (2023) (Appendix C) for the CRMP Phase 1, and the City of San Diego's (City's) California Environmental Quality Act (CEQA) Significance Determination Thresholds (2023).

5.7.1 Existing Conditions

5.7.1.1 Watersheds

A watershed (also called a drainage basin or catchment) is an area of land that drains streams and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. Larger watersheds encompass many smaller watersheds, and watersheds can often be identified differently for the same site, depending on the scale of interest. The Basin Plan identifies watersheds using the terms hydrologic unit (HU), hydrologic area (HA), and watershed management area. The Basin Plan defines an HU as the entire watershed or one or more major streams (RWQCB 2021). An HA consists of watersheds of major tributaries and groundwater basins within an HU. A watershed management area is an area in which one or more watersheds (HAs and HUs) are evaluated by the RWQCB; it is usually a part of a water quality improvement plan and/or comprehensive load reduction plan. As set forth in the Basin Plan, the San Diego region consists of 11 HUs and 54 HAs. These watersheds all ultimately drain to the Pacific coast. Of the 11 HUs, seven are within the jurisdiction of the City.

The CRMP Phase 1 area lies in three HUs: the Peñasquitos, the San Diego, and the Pueblo San Diego HUs. The La Jolla Shores, Pacific Beach – Tourmaline Surf Park, and Mission Beach project sites are in the Peñasquitos HU, Ocean Beach – Dog Beach and Ocean Beach – Pier are in the San Diego HU, and Sunset Cliffs is in the Pueblo San Diego HU. These three watersheds are described further below.

5.7.1.2 Peñasquitos Hydrologic Unit

The Peñasquitos HU (907.0) is a triangular area covering approximately 170 square miles (Project Clean Water 2022). This hydrologic unit is bordered by the San Dieguito HU to the north and the San Diego HU to the east and south. The Peñasquitos HU includes Rose Creek and several other small creeks. This HU drains into Mission Bay and the San Diego River (Project Clean Water 2022).

5.7.1.3 San Diego River Hydrologic Unit

The San Diego River HU (907.1) encompasses approximately 434 square miles, making it the second largest watershed management area located in San Diego County. It occurs in the central portion of San Diego County and neighbors Peñasquitos and San Dieguito HUs to the north and Pueblo San Diego HU and San Diego Bay – Sweetwater HU to the south. The major water bodies in the San Diego River HU include the San Diego River, Alvarado Creek, Forester Creek, and Lake Murray. Surface runoff in the San Diego River HU primarily drains into the San Diego River and is discharged directly into the Pacific Ocean at Ocean Beach (Project Clean Water 2022).

5.7.1.4 Pueblo San Diego Hydrologic Unit

The Pueblo San Diego HU (908.0) is the smallest of the San Diego County watersheds, covering approximately 59.38 square miles, or about 14 percent, of the San Diego Bay Watershed Management Area. Pueblo San Diego HU has no central stream system and, instead, consists primarily of a group of relatively small local creeks and pipe conveyances, many of which are concrete lined and drain directly into San Diego Bay. Major water features in the Pueblo San Diego HU include Chollas Creek, Paleta Creek, and San Diego Bay (Project Clean Water 2022).

5.7.1.5 Surface Waters

The National Wetlands Inventory and National Hydrography Dataset results identify several aquatic resources in the CRMP Phase 1 area, primarily the Pacific Ocean, as both estuarine and marine deepwater and estuarine and marine wetland, to the west of all six project sites. The San Diego River is also identified in the National Wetlands Inventory results as estuarine and marine wetland to the north of the Ocean Beach – Dog Beach project site (Figure 5.7-2, Estuarine Wetland North of the Ocean Beach – Dog Beach Project Site). The National Wetlands Inventory also documents a freshwater pond, freshwater forested/shrub wetlands, and riverine features to the northeast and southeast of the La Jolla Shores project site (USFWS 2023; USGS 2023).

5.7.1.6 Flooding and Drainage

The Federal Emergency Management Agency (FEMA) is an agency of the U.S. Department of Homeland Security that is responsible for coordinating the federal government's response to disasters. FEMA regulates and determines areas with a potential for hazards to human health and safety, including flood hazards. Flood Hazard Zones are zones that are designated by FEMA to quantify the annual chance that an area will be inundated by a flood event are summarized in Table 5.7-1, Federal Emergency Management Agency Flood Hazard Zone Definitions. Special Flood Hazard Areas are identified on FEMA's Flood Insurance Rate Maps. Special Flood Hazard Areas are defined as areas that will be inundated by the flood event having a 1 percent chance of being equaled or exceeded in any given year. The 1 percent annual-chance flood is also referred to as the base flood or 100-year flood. Moderate Flood Hazard Areas, also shown on the Flood Insurance
Rate Maps, are the areas between the limits of the base flood and the 0.2 percent annual-chance (or 500-year) flood. Areas of minimal flood hazard are outside the Special Flood Hazard Area and higher than the elevation of the 0.2 percent annual-chance flood (labeled Zone C or Zone X [unshaded]) (FEMA 2020).

Zone A Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30- year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones. Zone A99 Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones. Zone AE The base floodplain where base flood elevations are provided. AE Zones are now used on new format Flood Insurance Rate Maps instead of A1-A30 Zones. Zone AH Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 25% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones. Zone AO River or stream Flood Hazard Areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones. Zone AR Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for numuneered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations. Zone V Coastal	Flood Hazard Zones	Definition
Zone A99 Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones. Zone AE The base floodplain where base flood elevations are provided. AE Zones are now used on new format Flood Insurance Rate Maps instead of A1-A30 Zones. Zone AH Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones. Zone AO River or stream Flood Hazard Areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones. Zone AR Areas with a 1% or greater chance of flooding over the life of a 30-year mortgage. Basef flood elevations derived from detailed analyses are shown within these zones. Zone VE and V1-30 Coastal areas with a 1% or greater chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones. Zone V Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flo	Zone A	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a 30- year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.
Zone AE The base floodplain where base flood elevations are provided. AE Zones are now used on new format Flood Insurance Rate Maps instead of A1-A30 Zones. Zone AH Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones. Zone AO River or stream Flood Hazard Areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones. Zone AR Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations. Zone VE and V1-30 Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations are shown within these zones. Zone V Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations are shown within these zones. Zone	Zone A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.
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	Zone D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.

Table 5.7-1. Federal Emergency Management Agency Flood Hazard Zone Definitions

Source: FEMA 2023.

The CRMP Phase 1 area is located within areas designated by FEMA to constitute potential flooding hazards. As shown on Figure 5.7-1, FEMA Flood Hazard Zones – Index, and Figures 5.7-1a through Figure 5.7-1f, all of the project sites are entirely within, partially within, or immediately adjacent to flood Hazard Zones identified by FEMA. These flood Hazard Zones are summarized in Table 5.7-2, Federal Emergency Management Agency Flood Hazard Zones in the CRMP Phase 1 Area.

 Table 5.7-2. Federal Emergency Management Agency Flood Hazard Zones in the CRMP Phase 1 Area

Project Site	Flood Hazard Zones	Portion of the Project Site
La Jolla Shores	Zone VE	Western (beach) portion of the project site
Pacific Beach – Tourmaline Surf Park	Zone VE	Southwestern (beach) portion of the project site
Mission Beach Zone VE		Western (beach) portion of the project site
	Zone VE	Western (beach) portion of the project site
Ocean Beach – Dog Beach	Zone AE	Northern (beach) portion of the project site
	Zone A	Southern (parking lot) portion of the project site
Ocean Beach – Pier	Zone VE	The entire project site
Sunset Cliffs	Zone VE	The entire project site

Source: FEMA 2019.

5.7.1.7 Water Quality

Several portions of the Pacific Ocean shorelines are listed on the 2020–2022 California Integrated Report for impairments (Clean Water Act Section 303[d] List/305[b] Report) (SWRCB 2022a). Portions of the Pacific Ocean within the CRMP Phase 1 area that are listed for impairments are shown in Table 5.7-3, Clean Water Act 303(d) Listed Waterbodies in the CRMP Phase 1 Area.

Water Body Name	Water Body Type	Pollutant(s)	Source
Pacific Ocean Shoreline, Scripps HA, at Vallecitos Court at La Jolla Shores Beach	Coastal and Bay Shoreline	Trash	Unknown
Pacific Ocean Shoreline, Scripps HA, at Avenida de la Playa at La Jolla Shores Beach	Coastal and Bay Shoreline	Indicator Bacteria	Unknown
Pacific Ocean Shoreline, Scripps HA, at Whispering Sands Beach, Nicholson Point, La Jolla	Coastal and Bay Shoreline	Indicator Bacteria	Unknown
Pacific Ocean Shoreline, San Diego HU, at Stub Jetty, south of the San Diego River outlet, near Cape May Avenue	Coastal and Bay Shoreline	Indicator Bacteria, Trash	Unknown
Pacific Ocean Shoreline, Mission San Diego HSA, at Newport Avenue	Coastal and Bay Shoreline	Indicator Bacteria	Unknown
Pacific Ocean Shoreline, Point Loma HA, at Bermuda Avenue	Coastal and Bay Shoreline	Indicator Bacteria	Unknown
Pacific Ocean Shoreline, Point Loma HA, at Sunset Cliffs and Froude Street	Coastal and Bay Shoreline	Trash	Unknown

Table 5.7-3. Clean Water Act 303(d) Listed Waterbodies in the CRMP Phase 1 Area

Source: SWRCB 2022a. Notes: HA = hydrologic area; HSA = hydrologic subarea; HU = hydrologic unit

Being impaired (also referred to as "water quality limited") means that a water body is "not reasonably expected to attain or maintain water quality standards" without additional regulation. The Clean Water Act requires that each state develop Total Maximum Daily Loads for each impaired water body in the nation, which specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards. A Total Maximum Daily Load is required but has not yet been developed for the Pacific Ocean shoreline for the above-listed impairments (SWRCB 2020, 2022b).

Due to the high volume of in-water human activity, nearby landscaped areas, parking areas, and urban runoff, water quality impairments within the CRMP Phase 1 area are likely due to nonpoint sources of nearby and in-water activities. Pollutants in stormwater runoff are a primary cause of water quality degradation in urbanized areas due to inadequate runoff treatment facilities and control measures prior to discharging to a natural drainage or waterbody, such as the Pacific Ocean. Growth in the City and the San Diego region have increased pressure on improving the quality of stormwater runoff and protecting local surface waters and resources. Urbanization has the potential to increase pollutants in stormwater due to the high surface area of impervious surfaces that can readily transport oils, greases, nutrients, and other chemicals that would normally infiltrate the soil and be filtered naturally.

Beneficial Uses

State policy for water quality control in California is directed toward achieving the highest water quality consistent with maximum benefits to the people of the state. Aquatic ecosystems and underground aquifers provide numerous different benefits to the people of the state. Beneficial uses of surface waters, groundwater, marshes, and wetlands serve as a basis for establishing water quality objectives and discharge prohibitions to attain those goals. Table 5.7-4, Beneficial Uses of the Pacific Ocean, summarizes the beneficial uses within the coastal waters of the Pacific Ocean and whether an existing beneficial use has been designated in the Basin Plan.

Beneficial Use Code	Beneficial Use Description	Existing Use Designated?
MUN	Municipal and Domestic Supply – Includes uses of water for community, military, or individual water supply systems, including but not limited to drinking water supply.	N/A
IND	Industrial Service Supply – Includes uses of water for industrial activities that do not depend primarily on water quality, including but not limited to mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.	Yes
NAV	Navigation – Includes uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.	Yes

	Table 5.7-4.	Beneficial	Uses	of the	Pacific	Ocean
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Beneficial Use Code	Beneficial Use Description	Existing Use Designated?
REC1	Contact Water Recreation – Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include but are not limited to swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.	Yes
REC2	Non-Contact Water Recreation – Includes uses of water for recreational activities involving proximity to water but not normally involving body contact with water where ingestion of water is reasonably possible. These uses include but are not limited to picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.	Yes
COMM	Commercial and Sport Fishing – Includes 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.	Yes
BIOL/ASBS	Preservation of Biological Habitats of Special Significance – Includes uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance, where the preservation or enhancement of natural resources requires special protection.	Yes
EST	Estuarine Habitat – Includes uses of water that support estuarine ecosystems, including but not limited to preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife. Areas of Special Biological Significance are those areas designated by the State Water Resources Control Board as requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable.	N/A
WILD	Wildlife Habitat – Includes uses of water that support terrestrial ecosystems, including but not limited to preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.	Yes
RARE	Rare, Threatened, or Endangered Species – Includes 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.	Yes
MAR	Marine Habitat – Includes uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).	Yes
AQUA	Aquaculture – Includes uses of water for aquaculture or mariculture operations, including but not limited to propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.	Yes
MIGR	Migration of Aquatic Organisms – Includes uses of water that support habitats necessary for migration, acclimatization between fresh and saltwater, or other temporary activities by aquatic organisms, such as anadromous fish.	Yes
SPWN	Spawning, Reproduction, and/or Early Development – Includes uses of water that support high-quality habitats suitable for reproduction, early development, and sustenance of marine fish and/or cold freshwater fish.	Yes
WARM	Warm Freshwater Habitat – Includes uses of water that support warm water ecosystems, including but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.	N/A
SHELL	Shellfish Harvesting – Includes uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters and mussels) for human consumption, commercial, or sport purposes.	Yes

Table 5.7-4. Beneficial Uses of the Pacific Ocean

Source: RWQCB 2021.

5.7.1.8 Groundwater

As shown in Table 5.7-4, the Basin Plan does not identify the Pacific Ocean as a waterbody that has a potential beneficial use for municipal and domestic water supply or industrial service water supply. The Mission Valley Groundwater Basin underlies an east–west trending valley, which is drained by the San Diego River flowing to the Pacific Ocean at the Ocean Beach – Dog Beach project site. Groundwater data for the CRMP Phase 1 area was not available.

5.7.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to hydrology and water quality are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (City of San Diego 2023). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- b. Substantially deplete groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. Result in substantial erosion or siltation on- or off-site;
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii. 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;
 - iv. Impede or redirect flood flows.
- d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;
- e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.7.3 Impact Analysis

5.7.3.1 Issue 1: Water Quality Standards

Would the proposed CRMP Phase 1 violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

Construction activities could impact water quality by exposing disturbed soils, thereby increasing erosion potential, or by introducing typical construction pollutants (e.g., fuels, lubricants) into the runoff. Construction of the Pilot Project would involve earthwork that would disturb soils across the Ocean Beach - Dog Beach project site, including movement of sand to construct the elevated sand dune, grading and pavement of the proposed multi-use path, potential demolition of the existing restrooms, and grading and potential reconstruction of the relocated restrooms, which would disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust (refer to Section 5.5, Geology and Soils). Surface runoff from exposed construction areas could flow into on-site storm drains, the Pacific Ocean, and the San Diego River, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Construction activities would occur during the dry season, which would limit the potential for soil erosion and sediment transport during storm events; however, erosion and sedimentation could result during potential unseasonal storm events or on-site watering. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes.

Construction of the Pilot Project would be required to comply with SDMC Section 142.0146, which requires grading work to incorporate erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations), and the standards established in the Land Development Manual and Stormwater Standards Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant water quality impacts from soil erosion and sedimentation. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the National Pollutant

Discharge Elimination System (NPDES) Construction General Permit provisions. Compliance with the NPDES Construction General Permit would trigger preparation and compliance with an approved Storm Water Pollution Prevention Plan (SWPPP) that would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal conditions to minimize any water quality impacts that could result during construction.

Sand used to construct the proposed dunes would be beach compatible, as determined by the U.S. Environmental Protection Agency (USEPA) and U.S. Army Corps of Engineers (USACE), and would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone or the San Diego River flood shoal. Therefore, the imported sand used to construct the proposed dunes would not result in potential water quality impacts due to contaminated sand.

Operation of the Pilot Project would not result in waste discharge. Therefore, construction and operation of the Pilot Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts to water quality would be less than significant, and no mitigation is required.

The Pilot Project would provide long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system due to the proposed sand dunes. For example, the Pilot Project would construct sand dunes along the back of the beach to provide protection from waves that would otherwise overtop existing flood protections (e.g., concrete k-rails along the parking lot) and other coastal infrastructure (e.g., the parking lot), primarily during heavy winter storms. This would improve water quality from stormwater runoff and sedimentation by preventing overtopping waves that would mix with polluted runoff and other potentially hazardous materials (e.g., oil slick at the parking lot) and eventually bring these materials back to coastal waters or the City's storm drain system.

Additionally, the Pilot Project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Dog Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Implementation of the City's existing winter berm program involves dredging sand from littoral sources and constructing berms along the beach to protect coastal infrastructure from coastal flooding and wave runup during heavy storm events. The annual disturbance of soils across the Ocean Beach – Dog Beach project site increases the potential for impacts to water quality from erosion and sedimentation. Therefore, implementation of the permanent sand dunes as part of the Pilot Project would eliminate the potential for long-term water quality impacts, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

Construction activities could impact water quality by exposing disturbed soils, thereby increasing erosion potential, or by introducing typical construction pollutants (e.g., fuels, lubricants) into the runoff. Construction of both design options under La Jolla Shores project would involve earthwork that would disturb soils across the La Jolla Shores project site, including movement of soil to construct the earthen dikes or reconfigure the recreational areas and parking lot, which would disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust (refer to Section 5.5, Geology and Soils). Surface runoff from exposed construction areas could flow into on-site storm drains and the Pacific Ocean, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Construction activities would occur during the dry season, which would limit the potential for soil erosion and sediment transport during storm events; however, erosion and sedimentation could result during potential unseasonal storm events or on-site watering. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes.

Construction of the La Jolla Shores project would be required to comply with SDMC Section 142.0146, which requires grading work to incorporate erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations), and the standards established in the Land Development Manual and Stormwater Standards Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant water quality impacts

from soil erosion and sedimentation. Furthermore, the La Jolla Shores project would be subject to the NPDES General Construction General Permit provisions, including preparation and compliance with an approved SWPPP that would consider the full range of erosion control BMPs.

Operation of the La Jolla Shores project would not result in waste discharge. Therefore, construction and operation of the La Jolla Shores project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts to water quality would be less than significant, and no mitigation is required.

Both design options under the La Jolla Shores project would provide long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system. For example, the proposed earthen dikes and terraced seatwall under the Amphitheater Design Option would provide protection from waves that would otherwise overtop existing flood protections (e.g., existing seawall) and other coastal infrastructure (e.g., the La Vereda pedestrian path), primarily during heavy winter storms. Additionally, the waterfront park under the Reconfigured Park Design Option would be designed to accommodate coastal flooding and would protect the reconfigured parking lot from flooding. These design options would improve water quality from stormwater runoff and sedimentation by preventing overtopping waves that would mix with polluted runoff and other potentially hazardous materials (e.g., oil slick at the parking lot) and eventually bring these materials back to coastal waters or the City's storm drain system. Therefore, implementation of the La Jolla Shores project would eliminate the potential for long-term water quality impacts, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Construction activities could impact water quality by exposing disturbed soils, thereby increasing erosion potential, or by introducing typical construction pollutants (e.g., fuels, lubricants) into the runoff. Construction of the Pacific Beach – Tourmaline Surf Park project would involve earthwork that would disturb soils across the Pacific Beach – Tourmaline Surf Park project site, including movement of soil to construct the sand and cobble dune and potential excavation for the optional underground stormwater vault, which would disturb the underlying soils and expose them to

potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust (refer to Section 5.5, Geology and Soils). Surface runoff from exposed construction areas could flow into on-site storm drains and the Pacific Ocean, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Construction activities would occur during the dry season, which would limit the potential for soil erosion and sediment transport during storm events; however, erosion and sedimentation could result during potential unseasonal storm events or on-site watering. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes.

Construction of the Pacific Beach – Tourmaline Surf Park project would be required to comply with SDMC Section 142.0146, which requires grading work to incorporate erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations), and the standards established in the Land Development Manual and Stormwater Standards Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant water quality impacts from soil erosion and sedimentation. Furthermore, the Pacific Beach – Tourmaline Surf Park project would be subject to the NPDES General Construction General Permit provisions, including preparation and compliance with an approved SWPPP that would consider the full range of erosion control BMPs.

Sand used to construct the proposed dune would be beach compatible, as determined by the USEPA and USACE, and would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone. Therefore, the imported sand used to construct the proposed dunes would not result in potential water quality impacts due to contaminated sand.

Operation of the Pacific Beach – Tourmaline Surf Park project would not result in waste discharge. Therefore, construction and operation of the Pacific Beach – Tourmaline Surf Park project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts to water quality would be less than significant, and no mitigation is required.

The Pacific Beach – Tourmaline Surf Park project would provide long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system due to the proposed sand and cobble dune. Additionally, the Pacific Beach – Tourmaline

Surf Park project would provide a long-term beneficial impact due to the permanent construction of the proposed sand and cobble dune, which would reduce disturbance of the Pacific Beach – Tourmaline Surf Park project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. The optional undergrounding of the culvert would likely involve installing a new drainage pipe, which would be appropriately sized to improve drainage and water quality (e.g., by reducing trash from directly entering the system) and reduce scour at the outflow. Further, the optional underground stormwater vault would provide water quality treatment for stormwater runoff across the parking lot and other paved areas on site. Therefore, implementation of the Pacific Beach – Tourmaline Surf Park project would eliminate the potential for long-term water quality impacts, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north—south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

Construction activities could impact water quality by exposing disturbed soils, thereby increasing erosion potential, or by introducing typical construction pollutants (e.g., fuels, lubricants) into the runoff. Construction of the Mission Beach project would involve earthwork that would disturb soils across the Mission Beach project site, including movement of soil to construct the sand dunes and potential perched beach, which would disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust (refer to Section 5.5, Geology and Soils). Surface runoff from exposed construction areas could flow into on-site storm drains and the Pacific Ocean, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Construction activities would occur during the dry season, which would limit the potential for soil erosion and sediment transport during storm events; however, erosion and sedimentation could result during potential unseasonal storm events or on-site watering. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes.

Construction of the Mission Beach project would be required to comply with SDMC Section 142.0146, which requires grading work to incorporate erosion and siltation control measures in

accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations), and the standards established in the Land Development Manual and Stormwater Standards Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant water quality impacts from soil erosion and sedimentation. Furthermore, the Mission Beach project would be subject to the NPDES Construction General Permit provisions, including preparation and compliance with an approved SWPPP that would consider the full range of erosion control BMPs.

Sand used to construct the proposed dunes and potential perched beach would be beach compatible, as determined by the USEPA and USACE, and would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone or the San Diego River flood shoal. Therefore, the imported sand used to construct the proposed dunes and potential perched beach would not result in potential water quality impacts due to contaminated sand.

Operation of the Mission Beach project would not result in waste discharge. Therefore, construction and operation of the Mission Beach project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts to water quality would be less than significant, and no mitigation is required.

The Mission Beach project would provide long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system due to the proposed sand dunes and potential perched beach. Additionally, the Mission Beach project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Mission Beach project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Therefore, implementation of the permanent sand dunes as part of both design options under the Mission Beach project would eliminate the potential for long-term water quality impacts, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

Construction activities could impact water quality by exposing disturbed soils, thereby increasing erosion potential, or by introducing typical construction pollutants (e.g., fuels, lubricants) into the runoff. Construction of the Ocean Beach – Pier project would involve earthwork that would disturb soils across the Ocean Beach – Pier project site, including movement of sand to construct the elevated sand dune and grading and pavement of the proposed multi-use path, which would disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust (refer to Section 5.5, Geology and Soils). Surface runoff from exposed construction areas could flow into on-site storm drains and the Pacific Ocean, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Construction activities would occur during the dry season, which would limit the potential for soil erosion and sediment transport during storm events; however, erosion and sedimentation could result during potential unseasonal storm events or onsite watering. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes.

Construction of the Ocean Beach – Pier project would be required to comply with SDMC Section 142.0146, which requires grading work to incorporate erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations), and the standards established in the Land Development Manual and Stormwater Standards Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant water quality impacts from soil erosion and sedimentation. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the NPDES Construction General Permit provisions. Compliance with the NPDES Construction General Permit would trigger preparation and compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions to minimize any water quality impacts that could result during construction.

Sand used to construct the proposed dunes would be beach compatible, as determined by the USEPA and USACE, and would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone or the San Diego River flood shoal. Therefore, the imported sand used to construct the proposed dunes would not result in potential water quality impacts due to contaminated sand.

Operation of the Ocean Beach – Pier project would not result in waste discharge. Therefore, construction and operation of the Ocean Beach – Pier project would not violate any water quality

standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts to water quality would be less than significant, and no mitigation is required.

The Ocean Beach – Pier project would provide long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system due to the proposed sand dunes. Additionally, the Ocean Beach – Pier project would provide a long-term beneficial impact due to the permanent construction of the proposed sand dunes, which would reduce disturbance of the Ocean Beach – Pier project site when compared to the existing annual implementation of the City's winter berm program and other beach grooming practices. Therefore, implementation of the permanent sand dunes as part of the Ocean Beach – Pier project would eliminate the potential for long-term water quality impacts, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, would not include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Therefore, there is potential for construction activities that could impact water quality by exposing disturbed soils, thereby increasing erosion potential, or by introducing typical construction pollutants (e.g., fuels, lubricants) into the runoff. Construction of these components would involve earthwork that would disturb the underlying soils and expose them to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust (refer to Section 5.5, Geology and Soils). Surface runoff from exposed construction areas could flow into on-site storm drains and the Pacific Ocean, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Construction activities would occur during the dry season, which would limit the potential for soil erosion and sediment transport

during storm events; however, erosion and sedimentation could result during potential unseasonal storm events or on-site watering. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes.

Construction of the Sunset Cliffs project would be required to comply with SDMC Section 142.0146, which requires grading work to incorporate erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations), and the standards established in the Land Development Manual and Stormwater Standards Manual. The regulations prohibit sediment and pollutants from leaving the worksite and require the property owner to implement and maintain temporary and permanent erosion, sedimentation, and water pollution control measures. Controls include measures outlined in SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations) that address potential erosion and sedimentation impacts. Conformance to these mandated City grading requirements would ensure that proposed grading and construction operations would avoid significant water quality impacts from soil erosion and sedimentation. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the NPDES Construction General Permit provisions. Compliance with the NPDES Construction General Permit would trigger preparation and compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions to minimize any water quality impacts that could result during construction.

Implementation of the Sunset Cliffs project would not result in waste discharge. Therefore, construction and operation of the Sunset Cliffs project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Impacts to water quality would be less than significant, and no mitigation is required.

The Sunset Cliffs project would provide long-term benefits related to water quality due to the proposed drainage improvements, habitat enhancement, and erosion control measures. Therefore, implementation of the Sunset Cliffs project would result in long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system, and no mitigation is required.

5.7.3.2 Issue 2: Groundwater Supplies

Would the proposed CRMP Phase 1 substantially deplete groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

Limited water would be required during the construction phase and would be obtained from the San Diego County Water Authority (SDCWA) (see Section 5.13, Public Utilities and Service Systems). The temporary use of water for construction activities (e.g., watering exposed soils to reduce dust) would be short-term and negligible. Operationally, the Pilot Project would not require or result in additional restroom facilities beyond the existing facilities or any other structures with associated use of potable water. Further, the Pilot Project would not include or require the extraction of groundwater. Therefore, the Pilot Project would not deplete groundwater supplies.

The Pilot Project would not result in a substantial increase in impervious surfaces that would interfere with groundwater recharge. The proposed multi-use path would require the use of impervious surfaces along the back of the beach and would be approximately 1,200 feet long and 14 feet wide, for a total footprint of 16,800 square feet (sf) (0.39 acre). This incremental increase in impervious surface at the Ocean Beach – Dog Beach project site would have a negligible impact on regional groundwater recharge. The Pilot Project would not involve regional diversion of water to another groundwater basin, or diversion or channelization of a stream course or waterway with impervious layers, such as concrete lining or culverts. Thus, impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards. Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

Limited water would be required during the construction phase and obtained from the SDCWA (see Section 5.13, Utilities and Service Systems). The temporary use of water for construction activities (e.g., watering exposed soils to reduce dust) would be short-term and negligible. Operationally, the La Jolla Shores project would not require or result in the use of potable water.

Further, the La Jolla Shores project would not include or require the extraction of groundwater. Therefore, the La Jolla Shores project would not deplete groundwater supplies.

The La Jolla Shores project would not result in an increase in impervious surfaces that would interfere with groundwater recharge. Under the Amphitheater Design Option, the proposed seatwall would be constructed along the western border of the existing parking lot, which is currently paved. The proposed earthen dikes would be vegetated with grass or native vegetation and would remain pervious. Under the Reconfigured Park Design Option, portions of the existing grassy recreational areas would be converted to impervious paved parking lot; however, a portion of the existing parking lot would also be converted to pervious grassy recreational area. The footprint of the proposed parking lot would remain the same as the footprint of the existing parking lot within the project site, and the footprint of the proposed recreational area would remain the same as the combined footprint of the existing recreational areas at La Jolla Shores Park and Kellogg Parks. As such, no increase in impervious surfaces would occur under either design option. The La Jolla Shores project would not involve regional diversion of water to another groundwater basin, or diversion or channelization of a stream course or waterway with impervious layers, such as concrete lining or culverts, for substantial distances (e.g., 0.25-mile). Therefore, the La Jolla Shores project site would have no impact on regional groundwater recharge. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Limited water would be required during the construction phase and obtained from the SDCWA (see Section 5.13, Utilities and Service Systems). The temporary use of water for construction activities (e.g., watering exposed soils to reduce dust) would be short-term and negligible. Operationally, the Pacific Beach – Tourmaline Surf Park project would not require or result in the use of potable water. Further, the Pacific Beach – Tourmaline Surf Park project would not include or require the extraction of groundwater. Therefore, the Pacific Beach – Tourmaline Surf Park project would not deplete groundwater supplies.

The Pacific Beach – Tourmaline Surf Park project would not result in an increase in impervious surfaces that would interfere with groundwater recharge. The optional pedestrian pathway would

be installed over an existing drainage culvert, which is impervious. The Pacific Beach – Tourmaline Surf Park project would not involve regional diversion of water to another groundwater basin, or diversion or channelization of a stream course or waterway with impervious layers, such as concrete lining or culverts, for substantial distances (e.g., 0.25-mile). Thus, impacts would be less than significant, and no mitigation is required.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

Limited water would be required during the construction phase and obtained from the SDCWA (see Section 5.13, Utilities and Service Systems). The temporary use of water for construction activities (e.g., watering exposed soils to reduce dust) would be short-term and negligible. Operationally, the Mission Beach project would not require or result in the use of potable water. Further, the Mission Beach project would not include or require the extraction of groundwater. Therefore, the Mission Beach project would not deplete groundwater supplies.

The Mission Beach project would not result in construction of additional impervious surfaces. Under the Dune Design Option, no changes would occur to existing paved surfaces. Under the Perched Beach Design Option, an approximately 350-foot section of the existing seawall and Ocean Front Walk would be removed and realigned inland along the southern parking lot adjacent to Mission Beach Park to allow for the creation of a perched beach area while still preserving the connectivity of the seawall and Ocean Front Walk (refer to Figure 3-9). Additionally, the Mission Beach project would not involve regional diversion of water to another groundwater basin, or diversion or channelization of a stream course or waterway with impervious layers, such as concrete lining or culverts, for substantial distances (e.g., 0.25-mile). Therefore, the Mission Beach project would not interfere with groundwater recharge. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

Limited water would be required during the construction phase and obtained from the SDCWA (see Section 5.13, Utilities and Service Systems). The temporary use of water for construction

activities (e.g., watering exposed soils to reduce dust) would be short-term and negligible. Operationally, the Ocean Beach – Pier project would not require or result in the use of potable water. Further, the Ocean Beach – Pier project would not include or require the extraction of groundwater. Therefore, the Ocean Beach – Pier project would not deplete groundwater supplies.

The Ocean Beach – Pier project would not result in a substantial increase in impervious surfaces that would interfere with groundwater recharge. The proposed multi-use path would require the use of impervious surfaces along the back of the beach and would be approximately 1,200 feet long and 10- to 14 feet wide. This incremental increase in impervious surface at the Ocean Beach – Pier project site would have a negligible impact on regional groundwater recharge. Therefore, the Ocean Beach – Pier project would not result in a substantial increase in impervious surfaces that would interfere with groundwater recharge. The Ocean Beach – Pier project would not involve regional diversion of water to another groundwater basin, or diversion or channelization of a stream course or waterway with impervious layers, such as concrete lining or culverts, for substantial distances (e.g., 0.25-mile). Thus, impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

The Sunset Cliffs project would not result in construction of additional impervious surfaces. In fact, the Sunset Cliffs project may reduce the existing area of impervious surfaces with implementation of the optional component to convert and reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard. Specific parking layout opportunities such as head in, reverse angle, and other layout options would be evaluated to consider the space available, optimize the space gained and flow of traffic, reduce conflicts with bicyclists, and maintain and/or increase the existing number of parking spaces provided in these four parking lots. The existing pavement of the lots would be removed and converted to more natural material (e.g., decomposed granite, bare earth). The Sunset Cliffs project does not propose the use of groundwater, nor does it introduce new impervious areas or features that would interfere with groundwater recharge. Therefore, impacts would be less than significant, and no mitigation is required.

5.7.3.3 Issue 3: Site Drainage and Hydrology

Would the proposed CRMP Phase 1 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 offsite; 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?

Pilot Project: Ocean Beach - Dog Beach

The Pilot Project would not substantially alter existing drainage patterns at the Ocean Beach – Dog Beach project site. The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The elevated sand dune would be similar in height and width to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which would help stabilize the sand dune. As described under Section 5.7.3.2, Issue 2: Groundwater Supplies, the Pilot Project would incrementally increase impervious surfaces across the project site with construction of a 0.39-acre multi-use path. This incremental increase in impervious surface at the Ocean Beach – Dog Beach project site would not alter drainage patterns across the site.

Additionally, the Pilot Project would not result in substantial erosion or siltation on or off site due to required compliance with erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations), as well as the standards established in the Land Development Manual and Stormwater Standards Manual. The Pilot Project would also be subject to the NPDES Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs (refer to Section 5.5, Geology and Soils, for a complete discussion of potential impacts related to soil erosion).

Further, implementation of the Pilot Project would not result in flooding on or off site, create or contribute runoff water which would exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. The purpose of the proposed elevated sand dune, which is inspired by the City's existing winter berm program, is to protect the coastal park infrastructure at the Ocean Beach – Dog Beach project site and community of Ocean Beach from the effects of projected sea-level rise and coastal flooding by adding elevation to the back of the beach and providing a reservoir of sand to the beach that can be utilized during erosive conditions. The proposed sand dune would make the annual winter berm feature a permanent fixture at the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise.

Therefore, the Pilot Project at the Ocean Beach – Dog Beach project site would not alter the existing drainage pattern of the project site or surrounding area 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, and no mitigation is required.

La Jolla Shores

The Amphitheater Design Option would construct earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards. Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

The La Jolla Shores project would not substantially alter existing drainage patterns at the La Jolla Shores project site. Under the Amphitheater Design Option, the proposed earthen dikes would be vegetated with grass or native plants, which would help stabilize the soils. The waterfront park under the Reconfigured Park Design Option would also be vegetated. Under both design options, stormwater drainage would continue to be conveyed to the existing storm drain system. As described under Section 5.7.3.2, Issue 2: Groundwater Supplies, the La Jolla Shores project would not increase impervious surfaces at the project site. Therefore, the La Jolla Shores project would not substantially alter drainage patterns across the site.

Additionally, the La Jolla Shores project would not result in substantial erosion or siltation on or off site due to required compliance with erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations), as well as the standards established in the Land Development Manual and Stormwater Standards Manual. The La Jolla Shores project would also be subject to the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs (refer to Section 5.5, Geology and Soils, for a complete discussion of potential impacts related to soil erosion).

Further, implementation of the La Jolla Shores project would not result in flooding on or off site, create or contribute runoff water which would exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. For example, the proposed earthen dikes and terraced seatwall under the Amphitheater

Design Option would provide protection from waves that would otherwise overtop existing flood protections (e.g., existing seawall) and other coastal infrastructure (e.g., the La Vereda pedestrian path), primarily during heavy winter storms. Additionally, the waterfront park under the Reconfigured Park Design Option would be designed to accommodate coastal flooding and would protect the reconfigured parking lot from flooding. These design options would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. Therefore, the La Jolla Shores project would result in less than significant impacts, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would not substantially alter existing drainage patterns at the Pacific Beach – Tourmaline Surf Park project site. The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The proposed sand and cobble dune would be similar in height and width to the existing shoreline protection feature. The dune would be vegetated with native plants, which would help stabilize the dune. Further, restoration of the existing vegetated median between the restrooms and the access ramp and the optional pedestrian walking north of the parking lot would not substantially alter drainage patterns across the site. Water runoff from the shower currently flows down the access ramp. The restoration of the vegetated median could be designed to integrate drainage from the shower area, which would help irrigate the dune plants while reducing slip hazards along the walkway and access ramp. As described under Section 5.7.3.2, Issue 2: Groundwater Supplies, the Pacific Beach – Tourmaline Surf Park project would not result in construction of any impervious surfaces across the project site with construction of the dune. The optional pedestrian walkway would cover or underground the existing drainage culvert along the north edge of the parking lot; however, drainage conveyed by the culvert would remain the same. Additionally, the optional underground stormwater vault under the existing parking lot area would capture, store, and treat stormwater runoff across the parking lot and other paved areas. Thus, the Pacific Beach - Tourmaline Surf Park project would not substantially alter existing drainage patterns across the site in a manner that would result in erosion or siltation.

Additionally, the Pacific Beach – Tourmaline Surf Park project would not result in substantial erosion or siltation on or off site due to required compliance with erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations), as well as the standards established in the Land Development Manual and Stormwater Standards Manual. The Pacific Beach – Tourmaline Surf Park project would also be subject to the NPDES Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs (refer to Section 5.5, Geology and Soils, for a complete discussion of potential impacts related to soil erosion).

Further, implementation of the Pacific Beach – Tourmaline Surf Park project would not result in flooding on or off site, create or contribute runoff water which would exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. The purpose of the proposed sand and cobble dune is to protect the coastal infrastructure at the Pacific Beach – Tourmaline Surf Park project site from the effects of projected sea-level rise and coastal flooding by adding elevation to the back of the beach and providing a reservoir of sand to the beach that can be utilized during erosive conditions. The proposed sand and cobble dune would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. Additionally, the optional undergrounding of the culvert would likely involve installing a new drainage pipe, which would be appropriately sized to improve drainage and water quality (e.g., by reducing trash from directly entering the system) and reduce scour at the outflow. The optional underground stormwater vault under the existing parking lot area would also improve surface water quality by capturing, storing, and treating stormwater runoff across the parking lot and other paved areas. Therefore, the Pacific Beach - Tourmaline Surf Park project would result in less than significant impacts, and no mitigation is required.

Mission Beach

The Mission Beach project would not substantially alter existing drainage patterns at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north—south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. The proposed sand dunes under both design options would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The dunes would be vegetated with native plants, which would help stabilize the dunes. The Perched Beach Design Option would extend and elevate an approximately 350-foot section of the existing beach and realign the existing seawall and Ocean Front Walk. As described under Section 5.7.3.2, Issue 2: Groundwater Supplies, the Mission Beach project would not result in construction of additional impervious surfaces across the project site. Under the Perched Beach Design Option, stormwater drainage would continue to be conveyed to the existing storm drain system. Thus, the Mission Beach project would not alter drainage patterns across the site.

Additionally, the Mission Beach project would not result in substantial erosion or siltation on or off site due to required compliance with erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations), as well as the standards established in the Land Development Manual and Stormwater Standards Manual. The Mission Beach project would also be subject to the NPDES General Construction General Permit

provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs (refer to Section 5.5, Geology and Soils, for a complete discussion of potential impacts related to soil erosion).

Further, implementation of the Mission Beach project would not result in flooding on or off site, create or contribute runoff water which would exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. The purpose of the proposed elevated sand dune, which is inspired by the City's existing winter berm program, is to provide flood protection to the coastal park infrastructure and community of Mission Beach from the effects of projected sea-level rise and coastal flooding at the Mission Beach project site. Both the sand dunes and potential perched beach would add elevation to the back of the beach and provide a reservoir of sand to the beach that can be utilized during erosive conditions. The proposed elevated dune would make the annual winter berm feature a permanent fixture at the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. Therefore, the Mission Beach project would result in less than significant impacts, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would not substantially alter existing drainage patterns at the Ocean Beach – Pier project site. The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. The proposed sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. As described under Section 5.7.3.2, Issue 2: Groundwater Supplies, the Ocean Beach – Pier project would negligibly increase the footprint of impervious surfaces across the project site with construction of the multi-use path. This incremental increase in impervious surface at the Ocean Beach – Pier project would not alter drainage patterns across the site.

Additionally, the Ocean Beach – Pier project would not result in substantial erosion or siltation on or off site due to required compliance with erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations), as well as the standards established in the Land Development Manual and Stormwater Standards Manual. The Ocean Beach – Pier project would also be subject to the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs (refer to Section 5.5, Geology and Soils, for a complete discussion of potential impacts related to soil erosion).

Further, implementation of the Ocean Beach – Pier project would not result in flooding on or off site, create or contribute runoff water which would exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. The purpose of the proposed elevated sand dune, which is inspired by the City's existing winter berm program, is to provide flood protection to the coastal park infrastructure and community of Ocean Beach from the effects of projected sea-level rise and coastal flooding at the Ocean Beach – Pier project site by adding elevation to the back of the beach and by providing a reservoir of sand to the beach that can be utilized during erosive conditions. The proposed elevated dune would make the annual winter berm feature a permanent fixture at the project site and would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. Therefore, the Ocean Beach – Pier project would result in less than significant impacts, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures.

Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, would not include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. As future site-specific project designs are finalized, project-specific analysis would be conducted upon submittal of the Sunset Cliffs project, and any potential impacts to site drainage and hydrology would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Sunset Cliffs project.

The Sunset Cliffs project would include drainage improvements, habitat enhancement, and erosion control measures to address safety issues and reduce stormwater runoff and coastal bluff erosion. The optional realigned parking areas could also be graded to ensure that drainage moves towards Sunset Cliffs Boulevard, which would prevent stormwater runoff on the bluff to minimize erosion. Additional stormwater infrastructure and drainage improvements could be implemented as the new parking configurations are designed and implemented. Additionally, the Sunset Cliffs project would not result in substantial erosion or siltation on or off site due to required compliance with erosion and siltation control measures in accordance with SDMC Chapter 14, Article 2, Division 2 (Grading Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations), as well as the standards established in the Land Development

Manual and Stormwater Standards Manual. The Sunset Cliffs project would also be subject to the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs (refer to Section 5.5, Geology and Soils, for a complete discussion of potential impacts related to soil erosion).

Therefore, the proposed drainage improvements would not alter the existing drainage pattern of the project site or surrounding area 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, and no mitigation is required.

5.7.3.4 Issue 4: Flood Hazard, Tsunami, or Seiche Zones

Would the proposed CRMP Phase 1, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Pilot Project: Ocean Beach – Dog Beach

The majority of the Ocean Beach – Dog Beach project site is designated by FEMA as Zone VE, which includes coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves; however, the northernmost portion of the project site, north of the San Diego River Bikeway, is designated as Zone AE, base floodplain where base flood elevations are provided (refer to Table 5.7-1; FEMA 2023). Due to proximity to the Pacific Ocean, the Ocean Beach – Dog Beach project site is also within a tsunami zone. However, no habitable structures are proposed as part of the Pilot Project. In addition, the proposed sand dune and multi-use path would be passive uses and would not result in an increased risk of pollutants release due to inundation of the Ocean Beach – Dog Beach project site. Therefore, impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The western portion of the La Jolla Shores project site is designated by FEMA as Zone VE, which includes coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves (refer to Table 5.7-1; FEMA 2023). Due to proximity to the Pacific Ocean, the La Jolla Shores project site is also within a tsunami zone. However, no habitable structures are proposed as part of the La Jolla Shores project. In addition, the proposed earthen dikes and seatwall under the Amphitheater Design Option and the waterfront park under the Reconfigured Park Design Option would be passive uses and would not result in an increased risk of pollutants release due to inundation of the La Jolla Shores project site. Therefore, impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The southwestern portion of the Pacific Beach – Tourmaline Surf Park project site is designated by FEMA as Zone VE, which includes coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves (refer to Table 5.7-1; FEMA 2023). Due to proximity to the Pacific Ocean, the Pacific Beach – Tourmaline Surf Park project site is also within a tsunami zone. However, no habitable structures are proposed as part of the Pacific Beach – Tourmaline Surf Park project. In addition, the proposed sand and cobble dune, restoration area, optional pedestrian walkway, and underground stormwater vault would be passive uses and would not result in an increased risk of pollutants release due to inundation of the Pacific Beach – Tourmaline Surf Park project site. Therefore, impacts would be less than significant, and no mitigation is required.

Mission Beach

The western portion of the Mission Beach project site is designated by FEMA as Zone VE, which includes coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves (refer to Table 5.7-1; FEMA 2023). Due to proximity to the Pacific Ocean, the Mission Beach project site is also within a tsunami zone. However, no habitable structures are proposed as part of the Mission Beach project. In addition, the proposed elevated sand dune and potential perched beach would not result in an increased risk of pollutants release due to inundation of the Mission Beach project site. Therefore, impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project site is designated by FEMA as Zone VE, which includes coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves (refer to Table 5.7-1; FEMA 2023). Due to proximity to the Pacific Ocean, the Ocean Beach – Pier project site is also within a tsunami zone. However, no habitable structures are proposed as part of the Ocean Beach – Pier project. In addition, the proposed elevated sand dune would not result in an increased risk of pollutants release due to inundation of the Ocean Beach – Pier project site. Therefore, impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project site is designated by FEMA as Zone VE, which includes coastal areas with a 1 percent or greater chance of flooding and an additional hazard associated with storm waves (refer to Table 5.7-1; FEMA 2023). Due to proximity to the Pacific Ocean, the Sunset Cliffs project site is also within a tsunami zone. However, no habitable structures are proposed as part of the Sunset Cliffs project. In addition, none of the proposed components of the Sunset Cliffs project, including the road reconfiguration program, trail enhancement, interpretative signage, drainage

improvements, and habitat enhancement, would result in an increased risk of pollutants release due to inundation of the Sunset Cliffs project site. Additionally, none of the optional components of the Sunset Cliffs project, including the realigned parking lots, trail enhancement, inland drainage improvements, native plant installation, and erosion control measures, would result in an increased risk of pollutants release due to inundation of the Sunset Cliffs project site. Therefore, impacts would be less than significant, and no mitigation is required.

5.7.3.5 Issue 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan

Would the proposed CRMP Phase 1 conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would occur in compliance with the San Diego Basin Water Quality Control Plan. Refer to discussions under Section 5.7.3.1 through Section 5.7.3.3. Potential impacts related to surface and groundwater quality, groundwater supplies, and drainage patterns would be less than significant. Further, the Ocean Beach – Dog Beach project site is not subject to a sustainable groundwater management plan. Therefore, the Pilot Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project would occur in compliance with the San Diego Basin Water Quality Control Plan. Refer to discussions under Section 5.7.3.1 through Section 5.7.3.3. Potential impacts related to surface and groundwater quality, groundwater supplies, and drainage patterns would be less than significant. Further, the La Jolla Shores project site is not subject to a sustainable groundwater management plan. Therefore, the La Jolla Shores project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would occur in compliance with the San Diego Basin Water Quality Control Plan. Refer to discussions under Section 5.7.3.1 through Section 5.7.3.3. Potential impacts related to surface and groundwater quality, groundwater supplies, and drainage patterns would be less than significant. Further, the Pacific Beach – Tourmaline Surf Park project site is not subject to a sustainable groundwater management plan. Therefore, the Pacific Beach – Tourmaline Surf Park project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project would occur in compliance with the San Diego Basin Water Quality Control Plan. Refer to discussions under Section 5.7.3.1 through Section 5.7.3.3. Potential impacts related to surface and groundwater quality, groundwater supplies, and drainage patterns would be less than significant. Further, the Mission Beach project site is not subject to a sustainable groundwater management plan. Therefore, the Mission Beach project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would occur in compliance with the San Diego Basin Water Quality Control Plan. Refer to discussions under Section 5.7.3.1 through Section 5.7.3.3. Potential impacts related to surface and groundwater quality, groundwater supplies, and drainage patterns would be less than significant. Further, the Ocean Beach – Pier project site is not subject to a sustainable groundwater management plan. Therefore, the Ocean Beach – Pier project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would occur in compliance with the San Diego Basin Water Quality Control Plan. Refer to discussions under Section 5.7.3.1 through Section 5.7.3.3. Potential impacts related to surface and groundwater quality, groundwater supplies, and drainage patterns would be less than significant. Further, the Sunset Cliffs project site is not subject to a sustainable groundwater management plan. Therefore, the Sunset Cliffs project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

5.7.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially deplete groundwater supplies or interfere with groundwater recharge; substantially alter the existing drainage pattern of the site or area; risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially alter the existing drainage pattern of the site or area; risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant. Additionally, the La Jolla Shores project would have no impact on depletion of groundwater supplies or interference with groundwater recharge. No mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially alter the existing drainage pattern of the site or area; risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant. Additionally, the Pacific Beach – Tourmaline Surf Park project would have no impact on depletion of groundwater supplies or interference with groundwater recharge. No mitigation is required.

Mission Beach

The Mission Beach project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially alter the existing drainage pattern of the site or area; risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant. Additionally, the Mission Beach project would have no impact on depletion of groundwater supplies or interference with groundwater recharge. No mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially deplete groundwater supplies or interfere with groundwater recharge; substantially alter the existing drainage pattern of the site or area; risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality; substantially deplete groundwater supplies or interfere with groundwater recharge; substantially alter the existing drainage pattern of the site or area; risk release of pollutants due to project inundation in flood hazard, tsunami, or seiche zones; or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, and no mitigation is required.

5.7.5 Mitigation Framework

Impacts to hydrology and water quality would be less than significant; therefore, no mitigation is required.

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Figure 5.7-2. Estuarine Wetland North of the Ocean Beach – Dog Beach Project Site

5.8 Land Use and Planning

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing land use and planning conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to land use and planning that could result from implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the City of San Diego's (City's) General Plan (City of San Diego 2023a), the California Coastal Zone Management Act, the City's Parks Master Plan (City of San Diego 2021a), the City's Climate Resilient SD Plan (City of San Diego 2021b), the City's Climate Action Plan (City of San Diego 2022), the City's Multiple Species Conservation Program Subarea Plan (City of San Diego 1997), the City's La Jolla Community Plan and Local Coastal Program Land Use Plan (City of San Diego 2014), the City's Mission Beach Precise Plan and Local Coastal Program Addendum (City of San Diego 2017), the City's Ocean Beach Community Plan and Local Coastal Program Land Use Plan (City of San Diego 2015), the City's Peninsula Community Plan and Local Coastal Program Land Use Plan (City of San Diego 2011), and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023b).

The consistency of CRMP Phase 1 with greenhouse gas (GHG) reduction and climate change plans is addressed in Section 5.6, Greenhouse Gas Emissions.

5.8.1 Existing Conditions

As described in Chapter 2.0, Environmental Setting, the CRMP Phase 1 includes six separate project sites along the City's coastline: La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs (see Figures 2-2, Project Sites – Index, through 2-14, Sunset Cliffs Project Site – Photos).

All six sites are located along the coast and are, therefore, within the Coastal Overlay Zone and covered by the regulations contained within the California Coastal Zone Management Action. All sites are regulated by the City through the General Plan, community area plans, as described below, as well as by the City's Parks Master Plan. Additionally, portions of the Ocean Beach – Dog Beach and Sunset Cliffs project sites are in the Multi-Habitat Planning Area (MHPA) of the City's Multiple Species Conservation Program (MSCP) Subarea Plan. Further, each site is subject to the climate planning policies contained within the City's Climate Resilient SD and Climate Action Plan.

The CRMP Phase 1 area consists of approximately 58.38 acres of land and approximately 0.26 acre of open water for a total of 58.64 acres. According to the City's General Plan Land Use Map (Figure LU-2; City of San Diego 2023a), the majority of the CRMP Phase 1 area's western and central portions are designated as Park, Open Space, and Recreation, and the eastern edges are

designated as Residential. The existing land uses and associated acreages in the CRMP Phase 1 area and survey buffer (100-foot radius) are shown in Table 5.8-1, Existing Land Use Acreages.

	Acres		
Land Use	CRMP Phase 1 Area	Survey Buffer	Total Survey Area
Urban/Residential Land (Including Roads)	22.56	41.60	64.15
Vegetated Land	1.91	2.07	3.98
Shoreline	33.92	25.48	59.39
Open Water	0.26	13.86	14.12
Total	58.64	83.00	141.64

Table 5.8-1. Existing Land Use Acreages

Source: Appendix C.

Notes: The land uses shown are general and not representative of official land use designations established in the City's General Plan and Community Plans, which are described in Sections 5.8.1.1 through 5.8.1.6. Acreages rounded to one-hundredth of an acre. Totals may not sum due to rounding.

5.8.1.1 Pilot Project: Ocean Beach – Dog Beach

Ocean Beach – Dog Beach is a curved sandy beach north of the Ocean Beach –Pier project site. It faces north and west along the mouth of the San Diego River (to the north), where it meets the Pacific Ocean (to the west). Immediately north of the San Diego River is the Quivira Jetty, which separates the mouth of the San Diego River to the south of the jetty and the entrance channel to Mission Bay to the north. The western portion of the beach is a wide and sandy beach designated as an off-leash dog run area. A small cobble groin northwest of temporary Lifeguard Tower 5 separates Ocean Beach – Dog Beach from the western-facing Ocean Beach to the south. The eastern and southeastern portion of the beach meets Smiley Lagoon. The San Diego River Bikeway runs east–west along the southern border of Smiley Lagoon to the entrance of Ocean Beach – Dog Beach north of a parking lot that serves the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites.

The Ocean Beach – Dog Beach project site is approximately 12.85 acres comprising open space beach and shoreline, a developed parking lot, and a small portion of native dune and scrub habitat in the eastern portion of the site (refer to Figure 2-3, Ocean Beach – Dog Beach). A small sliver of the northern portion of the site is in the MHPA of the MSCP Subarea Plan. The Ocean Beach – Dog Beach project site consists of the paved entrance to Ocean Beach – Dog Beach, parking lot, Brighton Park, a portion of the San Diego River Bikeway, and the western-facing portion of beach between the two small cobble groins between the Quivera Jetty and the Ocean Beach Pier. The Lshaped parking lot provides approximately 307 vehicle parking spaces, including nine Americans with Disabilities Act (ADA) accessible parking spaces.

The Ocean Beach – Dog Beach project site is subject to the Ocean Beach Community Plan and Local Coastal Program Land Use Plan (Ocean Beach Community Plan) (refer to Section 4.8.3.6, Ocean Beach Community Plan and Local Coastal Program). The land use designations of the Ocean Beach – Dog Beach project site are as follows:

- General Plan designation: Open Space
- Ocean Beach Community Plan designation: Resource Based Park

5.8.1.2 La Jolla Shores

The La Jolla Shores project site is approximately 21.02 acres and extends along the beach area from the intersection of Paseo Del Ocaso and El Paseo Grande at the northern boundary to Avenida De La Playa at the southern end. The site includes open space beach, shoreline, parkland, and the La Jolla Shores parking lot (refer to Figure 2-5, La Jolla Shores Project Site). The La Jolla Shores project site consists of two grassy park areas (Kellogg Park to the south and La Jolla Shores Park to the north) separated by a paved parking lot located immediately east of a boardwalk (La Vereda pedestrian path) and sandy beach area to the west. Each of the park areas includes public restrooms and showers near the southwest corners of the parks. The parking lot provides approximately 378 vehicle parking spaces, including three lifeguard parking spaces, eight ADA accessible parking spaces, and five parking spaces for "Authorized Vehicles Only." The La Jolla Shores Lifeguard Station, a permanent lifeguard facility, is located in the southwest corner of the parking lot.

The La Vereda pedestrian path separates the sandy beach to the west and the parks and parking lot to the east. Along the western border of the pedestrian path is a 2-foot-tall seawall, and concrete benches line the eastern border of the pedestrian path. The site is bordered to the east by residential development and to the west by the open waters of the Pacific Ocean.

The La Jolla Shores project site is subject to the La Jolla Community Plan and Local Coastal Program (LCP) Land Use Plan (La Jolla Community Plan) (refer to Section 4.8.3.2, La Jolla Community Plan and Local Coastal Program Land Use Plan). The land use designations of the La Jolla Shores project site are as follows:

- General Plan designation: Neighborhood Park
- La Jolla Community Plan designation: Parks, Open Space

5.8.1.3 Pacific Beach – Tourmaline Surf Park

The approximately 3.66-acre Pacific Beach – Tourmaline Surf Park project site is located at the end of Tourmaline Street. The project site contains open space beach and shoreline, a developed parking lot, and stormwater infrastructure (refer to Figure 2-7, Pacific Beach – Tourmaline Surf Park Project Site). This site is bordered to the north, south, and east by residential development and to the west by the open waters of the Pacific Ocean. The project site consists of the portion of Tourmaline Street west of La Jolla Boulevard, including the vegetated area immediately north of this roadway, the Tourmaline Beach parking lot, and ramp entrance to the beach below. The culvert and bluff north of the fencing along the north side of Tourmaline Street are not included on the project site. Two small grass recreational areas are located on either side (north and south) of the

parking lot entrance along Tourmaline Street. The parking lot is at a lower elevation than its surroundings and is bordered to the north and south by steep vegetated slopes. The parking lot provides approximately 100 vehicle spaces, including three ADA accessible parking spaces. There is also a public restroom at the southwestern end of the parking lot and a lifeguard driveway access at the northwestern end of the parking lot, which also provides a paved entrance to the beach. Tourmaline Beach includes a cobble berm and riprap near the beach entrance (inland) and a winter berm program. Several informal trails and accessways to the beach are provided along the slopes south of the site.

The Pacific Beach – Tourmaline Surf Park project site is subject to the Pacific Beach Community Plan and LCP Land Use Plan (Pacific Beach Community Plan) (refer to Section 4.8.3.3, Pacific Beach Community Plan and Local Coastal Program Land Use Plan). The land use designations of the Pacific Beach – Tourmaline Surf Park project site are as follows:

- General Plan designation: Neighborhood Park
- La Jolla Community Plan designation: Parks, Open Space

5.8.1.4 Mission Beach

Mission Beach is an approximately 2.18-mile-long west-facing beach that runs from Pacific Beach to the north to the entrance channel to Mission Bay to the south. The beach is bounded by the Pacific Ocean to the west and Ocean Front Walk (the Mission Beach Boardwalk) to the east (refer to Figure 2-9, Mission Beach Project Site).

The approximately 8.92-acre Mission Beach project site consists of an approximately 0.3-mile stretch of Mission Beach bounded by Ventura Place to the north and San Fernando Place to the south. The project site consists primarily of the sandy beach area west of Ocean Front Walk. The Mission Beach Lifeguard Station, a permanent lifeguard facility, is located on the west side of the northern Belmont Park parking lot. The land east of the project site across Ocean Front Walk includes commercial and recreational uses, such as Belmont Park, associated parking lots to the north and south of Belmont Park, and Mission Beach Park at the southern end. Public restrooms are located south of Belmont Park and west of the southern parking lot. The northern parking lot provides approximately 250 parking spaces, including three spaces reserved for delivery vehicles and seven ADA accessible parking spaces. The southern parking lot provides approximately 453 parking spaces, including 12 ADA accessible parking spaces.

A 3-foot seawall provides a border on the west side of Ocean Front Walk. There are eight beach access points along the seawall on the project site, including three with ADA accessible ramps.

The Mission Beach project site is subject to the Mission Beach Precise Plan and LCP (Mission Beach Precise Plan) and Mission Bay Park Master Plan (MBPMP) (refer to Section 4.8.3.4,

Mission Beach Precise Plan and Local Coastal Program Addendum, and Section 4.8.3.5, Mission Bay Park Master Plan). The land use designations of the Mission Beach project site are as follows:

- General Plan designation: Resource Based Parks
- Mission Beach Community Plan designation: Open Space

5.8.1.5 Ocean Beach – Pier

The Ocean Beach – Pier project site is immediately adjacent to and south of the Ocean Beach – Dog Beach site (refer to Figure 2-11, Ocean Beach – Pier). The approximately 11.9-acre project site consists of open space beach and shoreline, a developed parking lot, and a small portion of commercial development along the southeastern edge. To the north of the project site is the Ocean Beach – Dog Beach project site. The site extends from the groin at the south end of the Ocean Beach – Dog Beach project site to the Ocean Beach Pier. The Ocean Beach – Pier project site primarily consists of sandy beach between small single-family residences to the east and the Pacific Ocean to the west. The beach is wide at the northern end and becomes narrower and tapers off to the south as it reaches the Ocean Beach Pier.

The northeastern part of the beach supports 14 volleyball courts, 10 permanent and four temporary, that are used by beach volleyballers. South of the volleyball courts are two grassy areas (Saratoga Park to the north and Ocean Beach Veterans Plaza to the south) separated by a small, paved public parking lot that provides approximately 69 vehicle spaces, including three ADA accessible parking spaces. Public restrooms are provided at the southern end of the parking lot. A permanent lifeguard facility (Ocean Beach Lifeguard Station) is located at the southern edge of the parking lot adjacent to the public restrooms. The Ocean Beach Veterans Plaza is often used by art vendors and for community events, such as silent discos, drum circles, yoga classes, etc. South of the Veterans Plaza and north of the pier is another paved public parking lot, which provides approximately 84 vehicle spaces and four motorcycle spaces.

An existing rock revetment protects the northern parking lot area, lifeguard station, and most of Ocean Beach Veterans Plaza from coastal impacts. Additionally, an approximately 2-foot-tall seawall lines the eastern border of the beach adjacent to a pedestrian path between the southern portion of the Veteran's Plaza and the tidepools south of the pier. One gap in the seawall providing beach access is located near the intersection of Abbot Street and Newport Avenue.

The Ocean Beach – Pier project site is subject to the Ocean Beach Community Plan (refer to Section 4.8.3.6, Ocean Beach Community Plan and Local Coastal Program). The land use designations of the Ocean Beach – Pier project site are as follows:

- General Plan designation: Open Space
- Ocean Beach Community Plan designation: Resource Based Park

5.8.1.6 Sunset Cliffs

The Sunset Cliffs project site is approximately 0.29 acre and encompasses Sunset Cliffs Boulevard and all areas seaward (west) of the roadway, from Adair Street at the northern boundary to Ladera Street at the southern boundary (refer to Figure 2-13, Sunset Cliffs Project Site). Sunset Cliffs includes an approximately 1.17-mile-long stretch of open space shoreline and coastal trail adjacent to the Pacific Ocean to the west and Sunset Cliffs Boulevard to the east. To the east of Sunset Cliffs Boulevard are single-family residential homes.

A number of informal trails break off from the main Sunset Cliffs coastal trail and lead toward lookout points along the cliffside. An informal beach access path leads down to No Surf Beach, and a formal accessway with stairs is provided at the southern boundary (the intersection of Sunset Cliffs Boulevard and Ladera Street). The area immediately south of this project site (Sunset Cliffs Natural Park – Hillside Park) is in the MHPA of the MSCP Subarea Plan.

Four small parking lots that provide approximately 65 total vehicle spaces for Sunset Cliffs are located west of Sunset Cliffs Boulevard and north of Froude Street. South of Hill Street, there are dispersed areas with space for parallel parking on the west side of Sunset Cliffs Boulevard from Luscomb's Point to Ladera Street.

The Sunset Cliffs project site is subject to the Peninsula Community Plan and LCP Land Use Plan (Peninsula Community Plan) and Sunset Cliffs Natural Park Master Plan (refer to Section 4.8.3.7, Peninsula Community Plan and Local Coastal Program Land Use Plan, and Section 4.8.3.8, Sunset Cliffs Natural Park Master Plan). The land use designations of the Sunset Cliffs project site are as follows:

- General Plan designation: Open Space
- Peninsula Community Plan designation: Park

5.8.2 Significance Determination Thresholds

The determination of significance regarding inconsistency with development regulations or plan policies is evaluated in terms of the potential for the inconsistency to result in environmental impacts considered significant under CEQA. Thresholds used to evaluate potential impacts related to land use and planning are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (City of San Diego 2023b). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Physically divide an established community;
- b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; or
- c. Require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment.

5.8.3 Impact Analysis

5.8.3.1 Issue 1: Physical Division of Established Community

Would the proposed CRMP Phase 1 physically divide an established community?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. The Pilot Project could additionally include relocation of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

Development of the Pilot Project would be contained within the Ocean Beach – Dog Beach project site. The proposed elevated sand dune and multi-use path would run along the back of the beach, adjacent to the existing parking lot, which could limit access to the beach from certain areas within the parking lot. However, this change would be minimal compared to existing conditions because the proposed elevated sand dune and multi-use path have been designed to maintain public access and emergency access to the beach. Under current conditions, the concrete k-rails line the northern and western borders of the parking lot, which limit access to the beach aside from a couple areas where there are breaks in the barriers. However, some beach users may climb over the temporary barriers to access the beach. With implementation of the Pilot Project, there would be several points of formal pedestrian access through the sand dune and multi-use path, which would maintain public and emergency access to the beach. Formal accessways would be provided at the existing entrance to Dog Beach (north of the parking lot), as well as several locations along the western border of the parking lot (refer to Figures 3-3 and 3-4). Additionally, the proposed multi-use path would provide a formal connection between the Dog Beach and San Diego River Bikeway to the north and areas south of the project site, including the Ocean Beach commercial area and eventually to the Ocean Beach Pier (in combination with the Ocean Beach - Pier project). With implementation of the formal accessways through the sand dune and multi-use path, the Pilot Project would not introduce new land uses or new features (e.g., roads) that would physically divide or interrupt the connection between surrounding land uses. Therefore, impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla

Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park with one long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

Development of the La Jolla Shores project would be contained within La Jolla Shores Park, the existing parking lot, and Kellogg Park. The proposed earthen dike(s) and terraced seatwall under the Amphitheater Design Option would extend along the inland (east) side of the La Vereda pedestrian path, which could limit access to the beach from certain areas of parks and parking lot. However, these features have been designed to be permeable to public movement. For example, under the Amphitheater Design Option, there would be dedicated pedestrian access points between the earthen dikes and the terraced seatwall, on both sides of the parking lot, similar to existing conditions, which would maintain public and emergency access to the beach (refer to Figure 3-5). Under the Reconfigured Park Design Option, the waterfront would not preclude access to the La Vereda pedestrian path. If a linear earthen dike is implemented with this design option, dedicated accessways would be incorporated into the earthen dike for lifeguards, maintenance, and emergency service vehicles. With implementation of the formal accessways through the proposed coastal flood infrastructure under both design options, the La Jolla Shores project would not introduce new land uses or new features (e.g., roads) that would physically divide or interrupt the connection between surrounding land uses. Existing pedestrian, ADA, and emergency access to the beach would not be impacted. Therefore, impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach - Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Development of the Pacific Beach – Tourmaline Surf Park project would be contained within the Pacific Beach – Tourmaline Surf Park project site. The proposed sand and cobble dune would run along the back of the beach, adjacent to the existing access ramp, consistent with the existing cobble riprap. The footprint of the proposed sand and cobble dune (0.2 acre) would be slightly larger than the existing shoreline protection feature (0.16 acre) and would not impede public and emergency access to the beach. Formal pedestrian accessways to the beach would be provided immediately south of the access ramp as well as south of the proposed sand and cobble dune (refer to Figure 3-6). The optional pedestrian walkway along the existing drainage culvert could provide another pedestrian accessway directly from the parking lot. With implementation of the formal accessways through and around the sand and cobble dune, the Pacific Beach – Tourmaline Surf Park project would not introduce new land uses or new features (e.g., roads) that would physically divide or interrupt the connection between surrounding land uses. Therefore, impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north-south along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

Development of the Mission Beach project would be contained along the beach within the Mission Beach project site. The proposed elevated sand dune would run along the back of the beach, adjacent to Ocean Front Walk. The sand dune would not physically divide or interrupt the connection between the beach and surrounding land uses (e.g., Ocean Front Walk, Mission Beach Park, Belmont Park) because it has been designed to include pedestrian accessways that align with the existing access points through the seawall. The eight existing breaks in the seawall would be accessible with formal pedestrian access through the sand dune (refer to Figure 3-8), which would maintain public, ADA access, and emergency access to the beach. Similarly, the realigned seawall and Ocean Front Walk under the Perched Beach Design Option would maintain public, ADA access, and emergency access to the beach. With implementation of the formal accessways through the sand dune and potential realigned seawall, the Mission Beach project would not introduce new land uses or new features that would physically divide or interrupt the connection between surrounding land uses. Therefore, no impact would occur, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

Development of the Ocean Beach – Pier project would be contained within the Ocean Beach – Pier project site. The proposed elevated sand dune and multi-use path would run along the back of the beach. However, the proposed elevated sand dune and multi-use path have been designed to be permeable to public movement. For example, the Ocean Beach – Pier project proposes points of formal pedestrian access through the sand dune and multi-use path at Saratoga Park, the northern parking lot and Ocean Beach Lifeguard Station, Ocean Beach Veterans Plaza, and the existing seawall break at the intersection of Abbott Street and Newport Avenue (refer to Figure 3-8). These accessways would maintain public, ADA, and emergency access to the beach. Additionally, the proposed multi-use path would provide a formal connection between the Dog Beach and San Diego River Bikeway to the north and the Ocean Beach Pier (in combination with the Pilot Project). With implementation of the formal accessways through the sand dune and multi-use path, the Ocean Beach – Pier project would not introduce new land uses or new features (e.g., roads) that would physically divide or interrupt the connection between surrounding land uses. Therefore, no impact would occur, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would be initially piloted to monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs Natural Park – Linear Park (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures, where feasible. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

Development of the Sunset Cliffs project would be contained within the Sunset Cliffs project site. The proposed road reconfiguration program would be implemented along the southern 0.64-mile portion of the project site between the intersection of Sunset Cliffs Boulevard, Guizot Street, and Cordona Street in the north to the intersection of Sunset Cliffs Boulevard and Ladera in the south. While the road reconfiguration program would trial one-way vehicular access along this portion of the site, vehicular access would be maintained along Sunset Cliffs Boulevard and pedestrian and bike access would be improved with separated bicycle and pedestrian routes (refer to Figure 3-9). The proposed interpretative signage, drainage improvements, habitat enhancement, and optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures would not result in a physical division or disruption of uses. The proposed trail enhancement would be designed to maintain and enhance public movement across the project site. The Pilot Project would not introduce new land uses or new features (e.g., roads) that would physically divide or interrupt the connection between surrounding land uses. Therefore, impacts would be less than significant, and no mitigation is required.

5.8.3.2 Issue 2: Conflict with Applicable Land Use Plans, Policies, and Regulations

Would the proposed CRMP Phase 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?

The following analysis focuses on the potential conflicts of the proposed CRMP Phase 1 with applicable plans, goals, and policies adopted for the purpose of avoiding or mitigating an environmental effect, and if conflicts exist, whether any such inconsistency would result in a significant effect on the environment. Only the applicable requirements and provisions have been included in the analysis. For example, development standards for parcels zoned as residential, commercial, or industrial by the City of San Diego have not been identified given none of the project sites are designated as such.

It is important to note that the determinations of the consistency for the proposed CRMP Phase 1 are provided for CEQA purposes to determine the potential for physical environmental impacts. Unrelated to CEQA, plan, policy and regulatory consistency would be determined as part of the review and approval process with City decision makers during consideration of discretionary approvals for the CRMP Phase 1.

Pilot Project: Ocean Beach – Dog Beach

Development under the Pilot Project would be subject to the requirements of the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, Climate Resilient SD, the MSCP Subarea Plan, the San Diego River Master Plan, and Ocean Beach Community Plan. The consistency of the Pilot Project with the applicable goals and policies of these plans are analyzed in Appendix E. The Pilot Project would not conflict with any of the applicable goals and policies and would not cause a significant environmental impact. Therefore, impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Development of the La Jolla Shores project would be subject to the requirements of the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, Climate Resilient SD, the MSCP Subarea Plan, and La Jolla Community Plan. The consistency of the La Jolla Shores project with the applicable goals and policies of these plans are analyzed in Appendix E. The La Jolla Shores project would not conflict with any of the applicable goals and policies and would not cause a significant environmental impact. Therefore, impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Development of the Pacific Beach – Tourmaline Surf Park project would be subject to the requirements of the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, Climate Resilient SD, the MSCP Subarea Plan, and Pacific Beach Community Plan. The consistency of the Pacific Beach – Tourmaline Surf Park project with the applicable goals and policies of these plans are analyzed in Appendix E. The Pacific Beach – Tourmaline Surf Park project would not conflict with any of the applicable goals and policies and would not cause a significant environmental impact. Therefore, impacts would be less than significant, and no mitigation is required.

Mission Beach

Development of the Mission Beach project would be subject to the requirements of the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, Climate Resilient SD, the MSCP Subarea Plan, and Mission Beach Precise Plan and LCP and MBPMP. The consistency of the Mission Beach project with the applicable goals and policies of these plans are analyzed in Appendix E. The Mission Beach project would not conflict with any of the applicable goals and policies and would not cause a significant environmental impact. Therefore, impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Development of the Ocean Beach – Pier project would be subject to the requirements of the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, Climate Resilient SD, the MSCP Subarea Plan, and Ocean Beach Community Plan. The consistency of the Ocean Beach – Pier project with the applicable goals and policies of these plans are analyzed in Appendix E. The Ocean Beach – Pier project would not conflict with any of the applicable goals and policies and would not cause a significant environmental impact. Therefore, impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

Development of the Sunset Cliffs project would be subject to the requirements of the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, Climate Resilient SD, the MSCP Subarea Plan, Peninsula Community Plan, and Sunset Cliffs Natural Park Master Plan. The consistency of the Sunset Cliffs project with the applicable goals and policies of these plans are analyzed in Appendix E. The Sunset Cliffs project would not conflict with any of the applicable goals and policies and would not cause a significant environmental impact. Therefore, impacts would be less than significant, and no mitigation is required.

5.8.3.3 Issue 3: Deviation or Variance

Would the proposed CRMP Phase 1 require a deviation or variance, and the deviation or variance would in turn result in a physical impact on the environment?

Pilot Project: Ocean Beach – Dog Beach

The Ocean Beach – Dog Beach project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Park and Public Ownership in the Ocean Beach Community Plan. No zoning is designated for the site. The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. The Pilot Project could additionally include relocation of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Therefore, the Pilot Project at the Ocean Beach – Dog Beach – Dog Beach project site would not require a deviation or variance and would be consistent with the Park, Open Space, & Recreation and Park and Public Ownership land use designations for the site.

The Pilot Project at the Ocean Beach – Dog Beach project site would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Dedicated Open Space Park in the La Jolla Community Plan. Zoning for the site is also identified as Park, Open Space, & Recreation. The proposed La Jolla Shores project would construct either two separate earthen dikes along the western edge of La Jolla Shores and Kellogg parks separated by a terraced seatwall along the western edge of the existing parking lot or would reconfigure the grassy recreational areas and parking lot to create one continuous

waterfront park that could include a long linear earthen dike along the western edge of the park. As such, the La Jolla Shores project would not require a deviation or variance and would be consistent with the Park, Open Space, & Recreation and as Dedicated Open Space Park land use designations for the site.

The La Jolla Shores project would not require a deviation or variance that would in turn result in a physical impact on the environment. Therefore, no impact would occur, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site does not have a land use designation in the City's General Plan and is designated as Parks/Open Space in the Pacific Beach Community Plan. No zoning is identified for the site. The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. As such, the Pacific Beach – Tourmaline Surf Park project would not require a deviation or variance and would be consistent with the Parks/Open Space land use designation for the site.

The Pacific Beach – Tourmaline Surf Park project would not require a deviation or variance that would in turn result in a physical impact on the environment. Therefore, no impact would occur, and no mitigation is required.

Mission Beach

The Mission Beach project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Beach in the Mission Beach Precise Plan. The Mission Beach project would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place. Under the Perched Beach Design Option, in addition to the elevated sand dune along the back of the beach, a portion of the grassy recreational space at Mission Beach Park would be converted to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. As such, the Mission Beach project would not require a deviation or variance and would be consistent with the Park, Open Space, & Recreation and Beach land use designations for the site.

The Mission Beach project would not require a deviation or variance that would in turn result in a physical impact on the environment. Therefore, no impact would occur, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Park and Public Ownership in the Ocean Beach Community Plan. No zoning is designated for the site. The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. As such, the Ocean Beach – Pier project would not require a deviation or variance and would be consistent with the Park, Open Space, & Recreation and Park and Public Ownership land use designations for the site.

The Ocean Beach – Pier project would not require a deviation or variance that would in turn result in a physical impact on the environment. Therefore, no impact would occur, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project site is designated as Park, Open Space, & Recreation in the City's General Plan and as Public, Semi-Public: Park in the Peninsula Community Plan. Zoning for the site is also identified as Park, Open Space, & Recreation. The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail. The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. As such, the Sunset Cliffs project would not require a deviation or variance and would be consistent with the Park, Open Space, & Recreation and Public, Semi-Public: Park land use designations and zoning for the site.

The Sunset Cliffs project would not require a deviation or variance that would in turn result in a physical impact on the environment. Therefore, no impact would occur, and no mitigation is required.

5.8.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project at the Ocean Beach – Dog Beach project site would not physically divide an established community or 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. The Pilot Project at the

Ocean Beach – Dog Beach project site would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would not physically divide an established community or 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. The La Jolla Shores project would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not physically divide an established community or 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. The Pacific Beach – Tourmaline Surf Park project would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would not physically divide an established community or 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. The Mission Beach project would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not physically divide an established community or 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. The Ocean Beach – Pier project would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would not physically divide an established community or 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. The Sunset Cliffs project would not require a deviation or variance that would in turn result in a physical impact on the environment. No impact would occur, and no mitigation is required.

5.8.5 Mitigation Framework

Impacts to land use and planning would be less than significant; therefore, no mitigation is required.

5.9 Noise

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing conditions related to noise in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and analyzes the potential impacts related to noise that could result from the implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the City of San Diego's (City's) Noise Abatement and Control Ordinance (City Municipal Code, Section 59.5.0101 et seq.; City of San Diego 2022), the City's General Plan Noise Element (City of San Diego 2023a), and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023b).

5.9.1 Existing Conditions

5.9.1.1 Fundamentals of Noise

The following is a brief discussion of fundamental noise concepts and terminology.

Sound, Noise, and Acoustics

Sound is a process that consists of three components: sound source, sound path, and sound receiver. All three components must be present for sound to exist. Without a source to produce sound, there is no sound. Similarly, without a medium to transmit sound pressure waves, there is no sound. Finally, sound must be received; a hearing organ, sensor, or object must be present to perceive, register, or be affected by sound or noise. In most situations, there are many different sound sources, paths, and receptors rather than just one of each. Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired.

Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. Loudness of sound increases with increasing amplitude. Sound pressure amplitude is measured in units of micronewtons per square meter, also called micropascals. One micropascal is approximately 100-billionth (0.00000000001) of normal atmospheric pressure. The pressure of a very loud sound may be 200 million micropascals, or 10 million times the pressure of the weakest audible sound. Because expressing sound levels in terms of micropascal would be very cumbersome, sound pressure levels in logarithmic units are used instead to describe the ratio of actual sound pressure to a reference pressure squared. These units are called bels. To provide a finer resolution, a bel is subdivided into 10 decibels (dB).

A-Weighted Decibels

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness, or human response, is determined by the characteristics of the human ear. To approximate the frequency response of the human ear, a series of sound level adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency-dependent.

The A-scale weighting network approximates the frequency response of the average young ear when listening to ordinary sounds. Noise levels are typically reported in terms of A-weighted sound levels. All absolute sound levels discussed in this PEIR are in A-weighted decibel (dBA); dB is used for changes in level.

Human Response to Changes in Noise Levels

Under controlled conditions in an acoustics laboratory, the trained, healthy human ear can discern changes in sound levels of 1 dB when exposed to steady, single-frequency signals in the mid-frequency range. Outside such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise. It is widely accepted that the average healthy ear, however, can barely perceive noise level changes of 3 dB. A change of 5 dB is readily perceptible, and a change of 10 dB is perceived as twice or half as loud. A doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g., doubling the volume of traffic on a road) would result in a barely perceptible change in sound level.

Noise Descriptors

The equivalent sound level (L_{eq}) is also referred to as the time-averaged sound level. It is the equivalent steady-state sound level that in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. The 1-hour A-weighted equivalent sound level, $L_{eq}(1-hr)$, is the energy average of the A-weighted sound levels occurring during a 1-hour period and is the basis for the City's Noise Ordinance criteria.

People are generally more sensitive to and annoyed by noise occurring during the evening and nighttime hours. Thus, another noise descriptor used in community noise assessments—the community noise equivalent level (CNEL)—was introduced. The CNEL scale represents a time-weighted, 24-hour average noise level based on the A-weighted sound level. The CNEL accounts for the increased noise sensitivity during the evening hours (7:00 p.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.) by adding 5 dB and 10 dB, respectively, to the average sound levels occurring during the evening and nighttime hours.

Sound Propagation

Sound propagation (i.e., the passage of sound from a noise source to a receiver) is influenced by geometric spreading, ground absorption, atmospheric effects, and shielding by natural and/or built features.

Sound levels attenuate (or diminish) at a rate of approximately 6 dB per doubling of distance from an outdoor point source due to the geometric spreading of the sound waves. Atmospheric conditions such as humidity, temperature, and wind gradients can also temporarily either increase or decrease sound levels. In general, the greater the distance the receiver is from the source, the greater the potential for variation in sound levels due to atmospheric effects. Additional sound attenuation can result from built features, such as intervening walls and buildings, and from natural features, such as hills and dense woods.

5.9.1.2 Existing Noise Environment

Noise-sensitive receptors are land uses for which the associated primary activities, whether indoor or outdoor, are susceptible to disruption by loud noise events. The most common noise-sensitive uses include residences, hospitals, nursing facilities, intermediate care facilities, educational facilities, libraries, museums, places of worship, childcare facilities, and certain types of passive recreational parks and open space. Existing noise sources in the CRMP Phase 1 area include motor vehicle, aircraft, and stationary sources, as described below. Stationary noise sources include ocean waves, birds, human conversations, and leaves rustling. The CRMP Phase 1 area currently supports active recreation areas that generate noise.

Vehicle Traffic Noise

Vehicular traffic noise is directly related to the traffic volume, speed, and mix of vehicle types. The CRMP Phase 1 area is far enough from any freeways that no freeway noise reaches any of the project sites. Main streets, such as La Jolla Boulevard, Mission Boulevard, and Sunset Cliffs Boulevard, represent the loudest sources of vehicle traffic noise within and surrounding the CRMP Phase 1 area.

Aircraft Noise

The nearest airports are the San Diego International Airport (SDIA) and Montgomery–Gibbs Executive Airport. The SDIA is located nearest to (approximately 2.8 miles from) the Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites, while Montgomery–Gibbs Executive Airport is located nearest to (approximately 6.5 miles from) the Pacific Beach – Tourmaline Surf Park project site.

Aircraft noise is evaluated based on the noise contours developed by the San Diego County Regional Airport Authority and provided in the Airport Land Use Compatibility Plan for the SDIA and the Montgomery–Gibbs Executive Airport. The Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites are within the SDIA's Airport Influence Area, in Review Area 2 (the combination of the airspace protection and overflight boundaries beyond Review Area 1). The Ocean Beach – Dog Beach and Ocean Beach – Pier project sites are within the 60 dB CNEL noise contour (SDCRAA 2014). All project sites are outside Montgomery–Gibbs Executive Airport's Airport Influence Area and 60 dB CNEL noise contour (SDCRAA 2010). The projected aircraft noise contours provided in the SDIA Airport Land Use Compatibility Plan are based on year 2030 forecasted noise exposure. Aircraft noise contours for 2035 are expected to be identical to those shown in the SDIA Airport Land Use Compatibility Plan, provided that no major changes occur with respect to aircraft types using the SDIA, terminal capacities, or Federal Aviation Administration flight paths and patterns.

Stationary Noise

Stationary sources of noise near the CRMP Phase 1 area are characterized by specific land uses. For example, residential areas experience noise sources from typical residential building sound sources and activities such as landscaping; operating heating, ventilation, and air conditioning units; children playing; dogs barking; and/or operating entertainment systems with loudspeakers. Stationary noise sources in the CRMP Phase 1 area may include the sound of waves crashing along the shore, human conversations and yelling, birds chirping, and leaves rustling. These existing stationary noise contributors are considered typical for recreational/open space, residential, and commercial environments and are not generally considered significant sources of noise.

Noise Sources on the Project Sites

La Jolla Shores

The existing noise environment on the La Jolla Shores project site consists of vehicle traffic, waves crashing along the shore, and human conversation. Vehicle noise is generated primarily by traffic along Camino Del Oro and cars within the on-site parking lot. Children playing along the beach and at Kellogg Park and La Jolla Shores Park contribute to the noise environment. Additionally, noise is generated by conversations of people at the beach, along La Vereda, and at the parks. The sound of the ocean waves is a constant noise source on the project site.

Pacific Beach – Tourmaline Surf Park

Noise sources on the Pacific Beach – Tourmaline Surf Park project site are primarily limited to the sound of waves crashing along the shore and vehicle traffic along La Jolla Boulevard adjacent to the site, Tourmaline Street. Some noise occurs from human conversation on the project site and at the beach adjacent to the site; however, noise from conversation is minimal on this site relative to the other project sites given that this site is generally uncrowded. For example, the La Jolla Shores project site is heavily trafficked by locals and visitors, while the Pacific Beach – Tourmaline Surf Park project site primarily supports surfers.

Mission Beach

The Mission Beach project site is immediately adjacent to Belmont Park, an oceanfront historic amusement park that features a roller coaster, other rides, a mini golf course, a swimming pool, restaurants, and shops. Therefore, the primary noise sources on the Mission Beach project site are associated with Belmont Park, including vehicle traffic on Mission Boulevard, Ventura Place and the adjacent parking lots, conversations and screaming on the rides, and the noise of the ride operations. Noise on the project site also consists of pedestrians, bikers, and skaters along Ocean Front Walk as well as human conversations at the beach and waves crashing along the shore. Commercial businesses near the project site include sports bars, restaurants, and clothing stores along Ventura Place and hotels and vacation homes along San Fernando Place.

Additionally, the Mission Beach project site is adjacent to but outside the 60 dB CNEL noise contour for the SDIA. Therefore, some intermittent noise from passing planes occurs on the project site but is less noticeable than the noise from people and the rides at Belmont Park as well as people on the beach and walking along Ocean Front Walk.

Ocean Beach – Dog Beach

The Ocean Beach – Dog Beach project site includes a segment of the San Diego River Bikeway, a portion of the Ocean Beach Dog Beach, a portion of Ocean Beach, Brighton Park, and the parking lot that supports their users. Noise sources at the project site include vehicle noise from cars navigating the parking lot, pedestrians and bikers along the San Diego River Bikeway, beachgoers, and dogs barking. Noise from the ocean also occurs on the project site. Additionally, noise from volleyball games, often including amplified music, occurs at the volleyball courts at the southern end of the project site. The Ocean Beach – Dog Beach project site is also within the 60 dB CNEL noise contour for the SDIA. Therefore, intermittent noise from passing airplanes taking off occurs on the project site.

Ocean Beach – Pier

Similar to the Ocean Beach – Dog Beach project site, the Ocean Beach – Pier project site is within the 60 dB CNEL noise contour for the SDIA and experiences intermittent noise from passing planes taking off from SDIA. Other noise sources on the project site include vehicle noise from the surrounding streets, particularly Abbott Street and Newport Avenue, and the two parking lots on site. As described for the other beach project sites, noise is generated by beachgoers, pedestrians along the walking path, and users of the Ocean Beach Veterans Plaza. Noise occurs from the adjacent commercial uses across Abbott Street, including hotels, restaurants, bars, and clothing stores.

Sunset Cliffs

The Sunset Cliffs project site is a linear site in between Sunset Cliffs Boulevard to the east and the Pacific Ocean to the west. Therefore, the most notable noise sources along the project site consist of vehicle traffic along Sunset Cliffs Boulevard and waves crashing along the shore and bluffs of Sunset

Cliffs. Vehicle speed limits along Sunset Cliffs Boulevard vary between 15 and 25 miles per hour; however, given the lack of stop signs and stoplights along the street, some vehicles travel at faster speeds, which generates more noise. The Sunset Cliffs coastal trail is also regularly trafficked by joggers, locals, and tourists. Given the safety issues associated with bluff erosion at Sunset Cliffs, occasional noise from helicopters can be heard on the project site during rescue missions.

5.9.1.3 Vibration

Groundborne vibration is a small, rapidly fluctuating motion transmitted through the ground. The strength of groundborne vibration attenuates fairly rapidly over distance. Some soil types transmit vibration quite efficiently; other types (primarily sandy soils) do not. Several basic measurement units are commonly used to describe the intensity of ground vibration. The descriptors used by the Federal Transit Administration are peak particle velocity (PPV), in units of inches per second, and vibration decibel (VdB). The velocity parameter (instead of acceleration or displacement) best correlates with human perception of vibration. Thus, the response of humans, buildings, and sensitive equipment to vibration is described in this section in terms of the root-mean square velocity level in VdB units relative to 1 micro-inch per second. As a point of reference, the average person can just barely perceive vibration velocity levels below 70 VdB (typically in the vertical direction). Typical background vibration levels are between 50 and 60 VdB, and the level for minor cosmetic damage to fragile buildings or blasting generally begins at 100 VdB.

5.9.1.4 Noise-Sensitive Land Uses

Similar to sensitive receptors for air emissions, noise-sensitive land uses include but are not limited to residential uses, hospitals, nursing facilities, intermediate care facilities, child educational facilities, libraries, museums, and childcare facilities (City of San Diego 2023a). Refer to Table 5.2-3, Sensitive Receptors in Proximity to the Project Sites, for a summary of the nearest residential and other sensitive receptors to each of the project sites.

5.9.2 Significance Determination Thresholds

Thresholds used to evaluate potential noise impacts are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), the City's CEQA Significance Determination Thresholds (City of San Diego 2023b), the City's General Plan Noise Element (City of San Diego 2023a), and the City's Noise Abatement and Control Ordinance (City Municipal Code, Section 59.5.0101 et seq.; City of San Diego 2022). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- b. Generate excessive groundborne vibration or groundborne noise levels.
No local adopted threshold is available for groundborne noise and vibration; however, the Federal Transit Administration and the California Department of Transportation provide relevant guidance for this analysis related to transportation and construction projects. A significant vibration impact would occur where structures or human receivers would be exposed to the respective damage and annoyance thresholds, measured in PPV (inches per second) or VdB. Continuous vibrations with a PPV of approximately 0.10 inch per second begin to annoy people (Caltrans 2004). The threshold of perception is 70 VdB, and the damage threshold for fragile structures is 0.20 inch per second (FTA 2018).

5.9.3 Impact Analysis

5.9.3.1 Issue 1: Exceedance of Noise Standards

Would the proposed CRMP Phase 1 generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the CRMP Phase 1 in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The multi-use pathway would ultimately extend through the Ocean Beach – Pier project site. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway, which may improve the aesthetic of the dune compared to the existing condition. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

The primary source of noise from the Pilot Project would be temporary construction noise. The Pilot Project would be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators), and construction would occur during daytime hours. The City of San Diego Noise Ordinance, San Diego Municipal Code (SDMC), Section 59.5.0404, limits construction activities to daytime hours (7:00 a.m. to 7:00 a.m.) from Monday to Saturday, and average noise levels to no more than 75 dB during the 12–hour period from 7:00 a.m. to 7:00 p.m. Typical construction operations generally result in noise levels of 86 dBA or less at 50 feet from the construction area (Caltrans 2013). Given that noise level limit of 75 dBA at a distance of 180 feet from the active construction equipment. As such, noise related to construction of the Pilot Project could exceed the SDMC noise level limit of 75 dBA at the nearest sensitive receptors.

Sensitive receptors in the area include residences, hotels, and other visitor accommodations. Hotels and other visitor accommodations are typically only considered sensitive during nighttime hours. Construction would occur during the daytime; therefore, construction would not result in a significant impact to visitor accommodations. Residences are located within 180 feet from the construction area, particularly south of Brighton Avenue. Construction of the Pilot Project would be linear, such that an individual receptor would only be exposed to construction noise for a limited duration when construction activities are occurring in the adjacent area. However, construction noise could temporarily exceed the SDMC noise level limit of 75 dBA at these residences during construction of the Pilot Project. This impact would be potentially significant, and mitigation measure MM NOI-1 would require best management practices (BMPs) for construction of the Pilot Project (e.g., appropriately-sized intake and/or exhaust mufflers, locating noise-generating equipment as far as possible from adjacent residential receivers, temporary noise barriers). Implementation of MM NOI-1 would ensure that construction noise levels at nearby sensitive receptors remain below the SDMC noise level limit of 75 dBA. Therefore, construction-related noise impacts would be less than significant with mitigation.

Following construction, implementation of the Pilot Project would not result in generation of substantial operational noise. Noise from pedestrians and cyclists along the multi-use path, and the optional restroom and express shuttle stop, would generally be limited to normal conversation levels, similar to existing use of the San Diego River Bikeway and the Ocean Beach – Dog Beach project site. The proposed elevated dune and restored dune areas would be passive and would not generate noise. The Pilot Project would not generate new vehicle trips and would not result in a permanent increase in traffic noise levels. Maintenance of the sand dune and multi-use path would result in occasional noise from operation of maintenance equipment. However, noise would be limited to days that maintenance would occur, and would be similar to existing beach and recreation area maintenance efforts, such as implementation of the winter berm program. Impacts would be less than significant during operation, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

Similar to the Pilot Project, the La Jolla Shores project would be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and construction would occur during daytime hours. Sensitive receptors in the vicinity of the La Jolla Shores project site include visitor accommodations and residences. Like the Pilot Project, construction would occur during daytime hours and would not result in a significant impact to visitor accommodations. However, residences on Camino Del Oro and El Paseo Grande are potentially located within 180 feet from the construction area. As such, noise related to construction of the La Jolla Shores project could exceed the SDMC noise level limit of 75 dBA at the nearest sensitive receptors. Construction of the La Jolla Shores project would be linear, such that an individual receptor would only be exposed to construction noise for a limited duration when construction activities are occurring in the adjacent area. However, construction noise could temporarily exceed the SDMC noise level limit of 75 dBA at these residences during construction of the La Jolla Shores project. This impact would be potentially significant, and mitigation measure MM NOI-1 would require BMPs for construction of the La Jolla Shores project. Implementation of MM NOI-1 would ensure that construction noise levels at nearby sensitive receptors remain below the SDMC noise level limit of 75 dBA. Therefore, construction-related noise impacts would be less than significant with mitigation.

Following construction, noise from use of the terraced seatwall under the Amphitheater Design Option would generally be limited to normal conversation levels, and use of the waterfront park and parking lot areas under the Reconfigured Park Design Option would be the same as existing conditions. The new earthen dikes would be passive and would not generate noise. The La Jolla Shores project would not generate new vehicle trips and would not result in a permanent increase in traffic noise levels. Maintenance of the earthen dikes would result in occasional noise from operation of maintenance equipment. However, noise would be limited to days that maintenance would occur, and would be similar to existing beach and recreation area maintenance efforts. Impacts would be less than significant during operation, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Similar to the Pilot Project, the Pacific Beach – Tourmaline Surf Park project would be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and construction would occur during daytime hours. The project is located in a residential area, and residences south

of the existing parking lot are located within 180 feet from the construction area. As such, noise related to construction of the Pacific Beach – Tourmaline Surf Park project could exceed the SDMC noise level limit of 75 dBA at the nearest sensitive receptors. Construction of the Pacific Beach – Tourmaline Surf Park project would be linear, such that an individual receptor would only be exposed to construction noise for a limited duration when construction activities are occurring in the adjacent area. However, construction noise could temporarily exceed the SDMC noise level limit of 75 dBA at these residences during construction of the Pacific Beach – Tourmaline Surf Park project. This impact would be potentially significant, and mitigation measure MM NOI-1 would require BMPs for construction of the Pacific Beach – Tourmaline Surf Park project. Implementation of MM NOI-1 would ensure that construction noise levels at nearby sensitive receptors remain below the SDMC noise level limit of 75 dBA. Therefore, construction-related noise impacts would be less than significant with mitigation.

Following construction, the elevated sand dune and restored dune area would be passive and would not generate noise. Noise from the optional pedestrian pathway would be limited to normal conversation levels, similar to existing noise from beachgoers. The Pacific Beach – Tourmaline Surf Park project would not generate new vehicle trips and would not result in a permanent increase in traffic noise levels. Maintenance of the dune would result in occasional noise from operation of maintenance equipment. However, noise would be limited to days that maintenance would occur, and would be similar to existing beach and recreation area maintenance effort. Impacts would be less than significant during operation, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north—south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

Similar to the Pilot Project, the Mission Beach project would be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and construction would occur during daytime hours. Sensitive receptors in the CRMP Phase 1 area include visitor accommodations and residences. Like the Pilot Project, construction would occur during daytime hours and would not result in a significant impact to visitor accommodations. However, residences south of Island Court and south of San Fernando Place are potentially located within 180 feet from the construction area.

As such, noise related to construction of the Mission Beach project could exceed the SDMC noise level limit of 75 dBA at the nearest sensitive receptors. Construction of the Mission Beach project would be linear, such that an individual receptor would only be exposed to construction noise for a limited duration when construction activities are occurring in the adjacent area. However, construction noise could temporarily exceed the SDMC noise level limit of 75 dBA at these residences during construction of the Mission Beach project. This impact would be potentially significant, and mitigation measure MM NOI-1 would require BMPs for construction of the Mission Beach project. Implementation of MM NOI-1 would ensure that construction noise levels at nearby sensitive receptors remain below the SDMC noise level limit of 75 dBA. Therefore, construction-related noise impacts would be less than significant with mitigation.

Following construction, the elevated sand dune would be passive and would not generate noise. Noise from the potential perched beach would be the same as existing conditions. The Mission Beach project would not generate new vehicle trips and would not result in a permanent increase in traffic noise levels. Maintenance of the dune would result in occasional noise from operation of maintenance equipment. However, noise would be limited to days that maintenance would occur, and would be similar to existing beach and recreational area maintenance effort. Impacts would be less than significant during operation, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

Similar to the Pilot Project, the Ocean Beach – Pier project would be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) and construction would occur during daytime hours. Sensitive receptors in the CRMP Phase 1 area include visitor accommodations and residences. Like the Pilot Project, construction would occur during daytime hours and would not result in a significant impact to visitor accommodations. However, residences, particularly west of Abbott Street, are potentially located within 180 feet from the construction area. As such, noise related to construction of the Ocean Beach – Pier project could exceed the SDMC noise level limit of 75 dBA at the nearest sensitive receptors. Construction of the Ocean Beach – Pier project would be linear, such that an individual receptor would only be exposed to construction noise for a limited duration when construction activities are occurring in the adjacent area. However, construction noise could temporarily exceed the SDMC noise level limit of 75 dBA at these residences during construction of the Ocean Beach – Pier project. This impact would be potentially significant, and mitigation measure MM NOI-1 would require BMPs for construction of the Ocean Beach – Pier project.

ensure that construction noise levels at nearby sensitive receptors remain below the SDMC noise level limit of 75 dBA. Therefore, construction-related noise impacts would be less than significant with mitigation.

Following construction, the Ocean Beach – Pier project would not result in generation of substantial operational noise. Noise from pedestrians and cyclists along the multi-use path would generally be limited to normal conversation levels, similar to noise from existing pedestrians and beachgoers. The proposed elevated sand dune would be passive would not generate noise. The Ocean Beach – Pier project would not generate new vehicle trips and would not result in a permanent increase in traffic noise levels. Maintenance of the sand dune and multi-use path would result in occasional noise from operation of maintenance equipment. However, noise would be limited to days that maintenance would occur, and would be similar to existing beach and recreation area maintenance efforts. Impacts would be less than significant during operation, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

The Sunset Cliffs project would not require the use of heavy construction equipment for implementation of the road reconfiguration program or trail enhancement and habitat restoration. As such, these components would not result in significant noise impacts. However, the Sunset Cliffs project may include use of conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) for implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, and construction would occur during daytime hours. The Sunset Cliffs project is located in a residential area, and residences on Sunset Cliffs Boulevard are potentially located within 180 feet from construction equipment operation. As such, noise related to construction of the Sunset Cliffs project could exceed the SDMC noise level limit of 75 dBA at the nearest sensitive receptors. Individual receptors would only be exposed to construction noise for a limited duration when construction activities are occurring in the adjacent area. However,

construction noise could temporarily exceed the SDMC noise level limit of 75 dBA at these residences during construction of the Sunset Cliffs project. This impact would be potentially significant, and mitigation measure MM NOI-1 would require BMPs for construction of the Sunset Cliffs project. Implementation of mitigation measure MM NOI-1 would ensure that construction noise levels at nearby sensitive receptors remain below the SDMC noise level limit of 75 dBA. Therefore, construction-related noise impacts would be less than significant with mitigation.

The Sunset Cliffs project would reconfigure traffic flow on Sunset Cliffs Boulevard, but would not generate new vehicle trips and would not increase traffic noise levels following construction. Noise from trail use would generally be limited to normal conversation levels, similar to noise from existing trail use. Drainage improvements would be passive and would not generate noise. Improved safety in this area may reduce noise by reducing the number of necessary rescues, resulting in reduced helicopter noise. Maintenance of the proposed trail and drainage improvements would be limited to days that maintenance would occur, and would be similar to existing trail maintenance efforts. Impacts would be less than significant during operation, and no mitigation is required.

5.9.3.2 Issue 2: Excessive Groundborne Vibration or Noise

Would the proposed CRMP Phase 1 generate excessive groundborne vibration or groundborne noise levels?

Pilot Project: Ocean Beach – Dog Beach

Construction activities can generate groundborne vibration from operation of heavy equipment. As described above, construction of the Pilot Project would include use of conventional earthwork equipment (e.g., loaders, dozers, tracked excavators). No pile driving or blasting would be required for construction of the Pilot Project. Reference vibration levels for anticipated construction equipment for construction of the sand dune and multi-use path are provided in Table 5.9-1, Project Construction Equipment Vibration Levels. Continuous vibrations with a PPV of approximately 0.10 inch per second begin to annoy people (Caltrans 2004), and the damage threshold for fragile structures is 0.20 inch per second (FTA 2018). As shown in Table 5.9-1, none of the equipment required for construction of the Pilot Project would exceed the most conservative standard of 0.1 PPV at 25 feet from equipment operation. Additionally, due to the linear nature of the Pilot Project, operation of an individual piece of equipment in one location would only occur for a short period of time, so that exposure of an individual receptor to vibration would be limited. Existing receptors are generally setback from the Ocean Beach – Dog Beach project site construction areas by more than 25 feet due to existing sidewalks, roadways, landscaping, and parking lots. Therefore, temporary impacts from construction of the Pilot Project would be less than significant, and no mitigation is required.

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Equipment Type ¹	PPV at 25 Feet	VdB at 25 Feet		
Excavator, Loaders, Grader	0.089	87		
Water Trucks	0.076	86		
Concrete Pump Trucks	0.076	86		
Paving machine	0.089	87		

 Table 5.9-1. Project Construction Equipment Vibration Levels

Sources: FTA 2018 (reference vibration levels).

Following construction, the Pilot Project would not include any components that would generate vibration. Occasional use of heavy equipment for maintenance would be similar to existing conditions for the annual winter berm program, and would not be expected to exceed the vibration levels identified in Table 5.9-1 for construction. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project would also include use of conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) for construction. No pile driving or blasting would be required. As shown in Table 5.9-1, none of the equipment required for construction of the La Jolla Shores project would exceed the most conservative applicable standard of 0.1 PPV at 25 feet from equipment operation. Due to the linear nature of the La Jolla Shores project, exposure of an individual receptor to vibration would be limited. Additionally, existing receptors are generally setback from the La Jolla Shores project construction area by more than 25 feet due to existing sidewalks, roadways, landscaping, and parking lots. Therefore, temporary impacts from construction of the La Jolla Shores project would be less than significant, and no mitigation is required.

Following construction, the La Jolla Shores project would not include any components that would generate vibration. Occasional use of heavy equipment for maintenance would be similar to existing conditions for the annual winter berm program, and would not be expected to exceed the vibration levels identified in Table 5.9-1 for construction. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would also include use of conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) for construction. No pile driving or blasting would be required. As shown in Table 5.9-1, none of the equipment required for construction of the Pacific Beach – Tourmaline Surf Park project would exceed the most conservative applicable standard of 0.1 PPV at 25 feet from equipment operation. Due to the linear nature of the Pacific Beach – Tourmaline Surf Park project, exposure of an individual receptor to vibration would be limited. Additionally, existing receptors are generally setback from the Pacific Beach – Tourmaline Surf Park project are generally setback from the Pacific Beach – Tourmaline Surf Park project are generally setback from the Pacific Beach – Tourmaline Surf Park project are generally setback from the Pacific Beach – Tourmaline Surf Park project construction area by more than 25 feet due to existing sidewalks, roadways,

landscaping, and parking lots. Therefore, temporary impacts from construction of the Pacific Beach – Tourmaline Surf Park project would be less than significant, and no mitigation is required.

Following construction, the Pacific Beach – Tourmaline Surf Park project would not include any components that would generate vibration. Occasional use of heavy equipment for maintenance would be similar to existing conditions for the annual winter berm program, and would not be expected to exceed the vibration levels identified in Table 5.9-1 for construction. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project would also include use of conventional earthwork equipment (e.g., loaders, dozers, tracked excavators). No pile driving or blasting would be required for construction. As shown in Table 5.9-1, none of the equipment required for construction of the Mission Beach project would exceed the most conservative applicable standard of 0.1 PPV at 25 feet from equipment operation. Due to the linear nature of the Mission Beach project, exposure of an individual receptor to vibration would be limited. Additionally, existing receptors are generally setback from the Mission Beach project construction area by more than 25 feet due to existing sidewalks, roadways, landscaping, commercial development, and parking lots. Therefore, temporary impacts from construction of the Mission Beach project would be less than significant, and no mitigation is required.

Following construction, the Mission Beach project would not include any components that would generate vibration. Occasional use of heavy equipment for maintenance would be similar to existing conditions for the annual winter berm program, and would not be expected to exceed the vibration levels identified in Table 5.9-1 for construction. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would also include use of conventional earthwork equipment (e.g., loaders, dozers, tracked excavators). No pile driving or blasting would be required for construction. As shown in Table 5.9-1, none of the equipment required for construction of the Ocean Beach – Pier project would exceed the most conservative applicable standard of 0.1 PPV at 25 feet from equipment operation. Due to the linear nature of the Ocean Beach – Pier project, exposure of an individual receptor to vibration would be limited. Additionally, existing receptors are generally setback from the Ocean Beach – Pier project construction area by more than 25 feet due to existing sidewalks and roadways, landscaping, and parking lots. Therefore, temporary impacts from construction of the Ocean Beach – Pier project would be less than significant, and no mitigation is required.

Following construction, the Ocean Beach - Pier Project would not include any components that would generate vibration. Occasional use of heavy equipment for maintenance would be similar to existing conditions for the annual winter berm program, and would not be expected to exceed the vibration levels identified in Table 5.9-1 for construction. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would not require heavy construction equipment for implementation of the road reconfiguration program. As such, these components would not result in significant vibration. However, conventional earthwork equipment (e.g., loaders, dozers, tracked excavators) may be required for implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures. No pile driving or blasting would be required for construction. As shown in Table 5.9-1, none of the equipment required for construction would exceed the most conservative applicable standard of 0.1 PPV at 25 feet from equipment operation. Due to the linear nature of the Sunset Cliffs project, exposure of an individual receptor to vibration would be limited. Additionally, existing receptors are generally setback from the cliffs, where proposed improvements are anticipated to occur, by more than 25 feet due to the existing trail, roadway, landscaping, and parking areas. Therefore, temporary impacts from construction of the Sunset Cliffs project would be less than significant, and no mitigation is required.

Following construction, the Sunset Cliffs project would not include any components that would generate vibration. Occasional use of heavy equipment for maintenance would be similar to existing conditions for the existing recreational facilities, and would not be expected to exceed the vibration levels identified in Table 5.9-1 for construction. Impacts would be less than significant, and no mitigation is required.

5.9.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project would have the potential to result in construction noise levels that would exceed the SDMC noise level limit of 75 dBA. However, with implementation of MM NOI-1, this impact would be less than significant with mitigation. Following construction, the Pilot Project would not result in a permanent operational noise impact and this impact would be less than significant. Vibration impacts would be less than significant during construction and operation, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would have the potential to result in construction noise levels that would exceed the SMDC noise level limit of 75 dBA. However, with implementation of

MM NOI-1, this impact would be less than significant with mitigation. Following construction, the La Jolla Shores project would not result in a permanent operational noise impact, and this impact would be less than significant. Vibration impacts would be less than significant during construction and operation, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would have the potential to result in construction noise levels that would exceed the SMDC noise level limit of 75 dBA. However, with implementation of MM NOI-1, this impact would be less than significant with mitigation. Following construction, the Pacific Beach – Tourmaline Surf Park project would not result in a permanent operational noise impact and this impact would be less than significant. Vibration impacts would be less than significant during construction and operation, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would have the potential to result in construction noise levels that would exceed the SMDC noise level limit of 75 dBA. However, with implementation of MM NOI-1, this impact would be less than significant with mitigation. Following construction, the Mission Beach project would not result in a permanent operational noise impact and this impact would be less than significant. Vibration impacts would be less than significant during construction and operation, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would have the potential to result in construction noise levels that would exceed the SMDC noise level limit of 75 dBA. However, with implementation of MM NOI-1, this impact would be less than significant with mitigation. Following construction, the Ocean Beach – Pier project would not result in a permanent operational noise impact and this impact would be less than significant. Vibration impacts would be less than significant during construction and operation, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would have the potential to result in construction noise levels that would exceed the SMDC noise level limit of 75 dBA. However, with implementation of MM NOI-1, this impact would be less than significant with mitigation. Following construction, the Sunset Cliffs project would not result in a permanent operational noise impact and this impact would be less than significant. Vibration impacts would be less than significant during construction and operation, and no mitigation is required.

5.9.5 Mitigation Framework

Mitigation measure MM NOI-1 would require implementation of construction BMPs to reduce noise levels at surrounding residences in compliance with the SDMC.

- **MM NOI-1:** Construction Best Management Practices. Construction within 180 feet of an occupied residence will be required to incorporate feasible mitigation measures to reduce noise levels in compliance with San Diego Municipal Code (SDMC) Section 59.5.0404. Best management practices (BMPs), including but not limited to those listed below, shall be implemented to the extent required to reduce the 12-hour average noise level at the nearest residence to below 75 A-weighted decibels (dBA).
 - Construction activities shall be limited to the hours between 7:00 a.m. and 7:00 p.m. Construction is not allowed on legal holidays as specified in SDMC Section 21.04, with the exception of Columbus Day and Washington's Birthday, or on Sundays (consistent with SDMC Section 59.5.0404).
 - Equip all internal combustion engine-driven equipment with appropriately-sized intake and/or exhaust mufflers that are properly operating and maintained consistent with manufacturer's standards.
 - Stationary noise-generating equipment (e.g., compressors or generators) shall be located as far as possible from adjacent residential receivers and oriented so that emitted noise is directed away from sensitive receptors, whenever feasible.
 - If levels are expected to potentially exceed SDMC thresholds, temporary noise barriers with a minimum height of 8 feet shall be located around pertinent active construction equipment or entire work areas to shield nearby sensitive receivers.
 - Utilize "quiet" air compressors, generators, and other stationary noise sources where technology exists.
 - Potentially affected residences shall be notified at least 2 weeks prior to the start of construction. The notice shall include the anticipated schedule and identify a "disturbance coordinator" who would be responsible for receiving and responding to any complaints about construction noise or vibration. If contacted, the disturbance coordinator will determine the cause of the noise complaint and, if identified as a sound generated by construction area activities, will require that reasonable measures be implemented to correct the problem.

5.10 Public Services and Recreation

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing public services within the City of San Diego (City) and analyzes the potential for the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) to affect existing service ratios, response times, or other performance objectives. The impact analysis provided in this section addresses the potential physical impacts associated with new or physically altered facilities necessary to maintain these performance objectives.

Existing public services provided by the City include but are not limited to fire protection, police protection, public schools, parks and recreational facilities, and libraries. For information regarding public utilities, including potable water, wastewater, and solid waste, see Section 5.13, Utilities and Service Systems.

The analysis in this section is based on review of available plans and technical information, including the City of San Diego Municipal Code (City of San Diego 2022a), City of San Diego General Plan Public Facilities, Services, and Safety Element (City of San Diego 2024), and adopted City budgets for police and fire-rescue services (City of San Diego 2022b, 2023a).

5.10.1 Existing Conditions

This section focuses on the potential impacts related to the need for new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police services (Section 5.10.1.1, Police Services) and fire-rescue services (Section 5.10.1.2, Fire-Rescue Services). Brief descriptions of the City's services related to schools, libraries, and parks and recreational facilities are provided in Sections 5.10.1.3 through 5.10.1.5, respectively.

5.10.1.1 Police Services

The City provided police services primarily from a centralized facility until the 1980s, when they decentralized police functions. The City implemented a 20-year facilities plan that resulted in the construction of new area police stations. The San Diego Police Department has divided the City's neighborhoods into nine divisions: Central, Northern, Northeastern, Northwestern, Southern, Southeastern, Eastern, Western, and Mid-City.

The police stations that serve the CRMP Phase 1 area include the Northern Division Station at 4275 Eastgate Mall (La Jolla Shores, Pacific Beach – Tourmaline Surf Park, and Mission Beach project sites) and the Western Division Station at 5215 Gaines Street (Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites).

Average response times for the San Diego Police Department vary greatly depending on the priority of the call. The San Diego Police Department is still meeting its emergency response goals for life-threatening emergency (i.e., Priority 0) calls for service; however, responses times to lower priority calls for service have been rising exponentially and failing to meet public safety expectations (Table 5.10-1, San Diego Police Department Emergency Response Times).

Dispatch Priority System		Average Response Time (Minutes)	
Levels	Target (Minutes)	Fiscal Year 2021	Fiscal Year 2022
Priority 0 calls	7	6.8	6.6
Priority 1 calls	14	33.4	36.8
Priority 2 calls	27	102.4	128.3
Priority 3 calls	80	155.6	209.1
Priority 4 calls	90	84.7	93.8

Table 5.10-1. San Diego Police Department Emergency Response Times

Source: City of San Diego 2023a.

Notes: The Dispatch Priority System has six levels:

Priority 0: Dispatch Immediately. Priority 0 calls involve an imminent threat to life. Examples include officer or person down, no detail accidents, and attempted suicide.

Priority 1: Dispatch Immediately. Priority 1 calls involve serious crimes in progress or a threat to life. Examples include missing children, child abuse, domestic violence, disturbances involving weapons/violence, and bomb threats.

Priority 2: Dispatch as quickly as possible. Priority 2 calls involve complaints regarding less serious crimes in which there is no threat to life. Examples include prowlers who have left, preserve the peace, crime reports for residents standing by at an inconvenient location, blocked driveway when the caller is waiting to leave, injured animals, and loud parties with mitigating circumstances.

Priority 3: Dispatch as quickly as possible. Priority 3 calls involve minor crimes or requests for service which are not urgent. Examples include investigating a cold crime and loud parties involving noise only.

Priority 4: Dispatch when no higher priority calls are waiting. Priority 4 calls involve minor requests for police service. Examples include found property and most parking violations.

5.10.1.2 Fire-Rescue Services

The City's Fire-Rescue Department includes all fire, emergency medical, lifeguard and emergency management services. This includes 9-1-1 services, fire inspections, permits, and community education. There are 49 fire stations, 10 permanent lifeguard stations, and 35 seasonal lifeguard towers throughout the City to provide emergency service coverage for all communities. In addition, the City relies on automatic aid agreements with other jurisdictions adjoining the City to ensure that the closest engine company responds to a given incident regardless of which jurisdiction they represent. Mutual aid agreements with county, state, and federal government agencies further allow the City, and any other participating agency, to request additional resources depending on the incident. During Fiscal Years 2020 and 2021 (the most recent years with available data), the City's Fire-Rescue Department emergency response time was within 10.5 minutes 84 percent of the time, while the department's target is 90 percent of the time. The department's inability to meet response time goals is heavily influenced by an insufficient number of geographically distributed resources to reach all communities within the desired response time goals. A comprehensive assessment of the Fire-Rescue Department's Standards of Response Coverage Deployment was conducted in 2011 and updated in 2017, which identified communities where additional resources are needed to achieve compliance (City of San Diego 2022b).

The fire stations that serve the CRMP Phase 1 area include Station 9 at 7870 Ardath Lane (La Jolla Shores project site), Station 21 at 750 Grand Avenue (Pacific Beach – Tourmaline Surf Park and Mission Beach project sites), Station 15 at 4711 Voltaire Street (Ocean Beach – Dog Beach and Ocean Beach – Pier project sites), and Station 22 at 1055 Catalina Boulevard (Sunset Cliffs project site). Additionally, several of the project sites encompass seasonal lifeguard towers.

While previously part of the San Diego Police and Parks and Recreation Departments, the San Diego Lifeguard Services (San Diego Lifeguards) are now a division of the San Diego Fire-Rescue Department. San Diego Lifeguards is a 24-hour rescue agency whose service area covers approximately 24 miles of coastline from the tip of Point Loma to Torrey Pines and Mission Bay. San Diego Lifeguards employ approximately 300 lifeguards, including full-time year-round lifeguards, supervisors, and seasonal lifeguards who work primarily in the summer. Lifeguard responsibilities include water rescue, boat rescue, marine fire suppression up to 3 miles offshore, coastal cliff rescue, underwater search and recovery, swift water and flood search and rescue, and emergency medical response on and around beach, bay, and ocean areas. Additionally, all full-time lifeguards are classified as peace officers, and seasonal lifeguards are classified as public officers, both with the power of arrest. Most enforcement activity, however, is related to local ordinances concerning beach and water use (City of San Diego 2023b).

Most beach and coastal lifeguarding is conducted out of the City's nine ocean front stations that are open year-round. Harbor patrol and ocean rescue services for boaters are handled by the San Diego Lifeguards Boating Safety Unit operating out of Quivira Basin on Mission Bay. Boating Safety Unit personnel also staff the Lifeguard Communications Center 24 hours a day. The dispatch center handles incoming 9-1-1 calls, Very High Frequency radio distress calls from boaters, and fire and police referrals and maintains observation of boating traffic traveling in and out of Mission Bay. In addition, San Diego Lifeguards have two special rescue teams. The River Rescue Team handles rescues of persons or animals throughout the City during periods of flooding. The Dive Rescue Team conducts underwater search and recovery in ocean and bay waters and underwater criminal investigations in conjunction with the San Diego Police Department (City of San Diego 2023b).

Year-round ocean front lifeguard stations within the CRMP Phase 1 area include the La Jolla Shores Lifeguard Station, the Mission Beach Lifeguard Station, and the Ocean Beach Lifeguard Station.

5.10.1.3 Schools

The San Diego Unified School District (SDUSD) is a pre-kindergarten to 12th grade school district that provides educational services to approximately 80 percent of the City. In addition to the SDUSD, Poway Unified School District, and 15 other districts including elementary and secondary levels service the more northern and southern areas of the City.

5.10.1.4 Libraries

The City's existing library system comprises the Central Library and 35 branch libraries. The Central Library, located downtown, serves as the headquarters for the library system and supplements the limited collections that branch libraries can offer. The library system conducts regular evaluations of services to adapt to service demands, take advantage of constantly evolving technology, and provide for facility construction and maintenance costs. Such assessments contribute to the provision of adequate collections that are responsive to community needs.

5.10.1.5 Parks and Recreational Facilities

The City has over 36,300 acres of existing developed and undeveloped park and open space lands that offer a diverse range of recreational opportunities. The City's parks, open space, trails, and recreation facilities annually serve millions of residents and visitors and play an important role in the physical, mental, social, and environmental health of residents and visitors. The park and recreation system includes population-based, resource-based, open space, and joint use parks, as well as various urban and open space trails.

Public parks and trails within the CRMP Phase 1 area include Kellogg Park and La Jolla Shores Park on the La Jolla Shores project site, Brighton Park on the Ocean Beach – Dog Beach project site, Saratoga Park and the Ocean Beach Veterans Plaza on the Ocean Beach – Pier project site, and the Sunset Cliffs public trails on the Sunset Cliffs project site.

5.10.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to public services and facilities, including recreational facilities, are based on applicable criteria in the Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (2023c). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, including:
 - i. fire protection,
 - ii. police protection,
 - iii. schools, and
 - iv. libraries.

- b. 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; or
- c. Include recreational facilities or require the construction or expansion of recreational facilities which would have an adverse physical effect on the environment.

5.10.3 Impact Analysis

5.10.3.1 Issue 1: Fire Protection, Police Protection, Schools, and Libraries

Would the proposed CRMP Phase 1 result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, including fire protection, police protection, schools, and libraries?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

The police station that serves the Ocean Beach – Dog Beach project site is San Diego Police Department Western Division. Construction of the Pilot Project is not anticipated to result in temporary interruption or delays for law enforcement response times. The elevated sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. Similar to the winter berm program, partial access to the beach would be maintained throughout the duration of construction. Construction activities at the Ocean Beach – Dog Beach project site would be short-term and temporary. Neither construction nor operation of the Pilot Project would increase demand for law enforcement, and no new facilities (i.e., police stations) would be required. Therefore, implementation of the Pilot Project would have no impact on police protection.

The fire station that serves the Ocean Beach – Dog Beach project site is Station 15 at 4711 Voltaire Street, located approximately 0.6 mile driving distance (3 minutes) from the site. Additionally, the Ocean Beach – Dog Beach project site encompasses several seasonal lifeguard towers (e.g., Temporary Lifeguard Towers 3, 4, and 5) (refer to Figure 2-3, Ocean Beach – Dog Beach Project Site).

During construction, emergency access to the Ocean Beach – Dog Beach project site would be maintained along roadways and no lane closures are anticipated to occur. Additionally, construction of the Pilot Project would be subject to City requirements associated with water availability and accessibility to fire suppression materials. Following the completion of construction-related activities, the Pilot Project would not result in a change in land use at the site. Nor would the Pilot Project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. Additionally, the Pilot Project would not change the existing vehicular access to the project site. The Pilot Project has also been designed in coordination with the City's Lifeguard Services and Fire-Rescue Department to ensure adequate emergency access to the beach area. In addition, the multi-use path and optional shuttle would provide enhanced opportunities for people with access and functional needs (e.g., low income and transportation disadvantaged) to evacuate the Ocean Beach – Dog Beach project site in event of an emergency. Therefore, there would be no impact related to fire protection services.

No new residential units would be constructed as a part of the Pilot Project, and the Pilot Project would not result in new permanent populations that would require school or library facilities. As such, the Pilot Project would not increase demand on local schools or libraries. Therefore, there would be no impact related to schools or libraries.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

The police station that serves the La Jolla Shores project site is San Diego Police Department Northern Division. Construction of the La Jolla Shores project is not anticipated to result in temporary interruption or delays for law enforcement response times. The proposed earthen dikes and terraced seatwall under the Amphitheater Design Option would include access points through the seatwall at key points with staired terraces and ADA-compliant access ramps. The reconfigured park and parking lot under the Reconfigured Park Design Option would enhance accessibility for emergency services through the addition of dedicated accessways for lifeguards and emergency service vehicles. Construction activities at the La Jolla Shores project site would be short-term and temporary in both scenarios. Neither construction nor operation of the La Jolla Shores project would increase demand for law enforcement, and no new facilities (i.e., police stations) would be required. Therefore, implementation of the La Jolla Shores project would have no impact on police protection.

The fire station that serves the La Jolla Shores project site is Station 9 at 7870 Ardath Lane, located approximately 0.9 mile driving distance (4 minutes) from the site. Additionally, the La Jolla Shores project site encompasses the La Jolla Shores Lifeguard Station and several seasonal lifeguard towers (e.g., Temporary Lifeguard Towers 31, 32, and 33) (refer to Figure 2-5, La Jolla Shores Project Site).

During construction, emergency access to the La Jolla Shores project site would be maintained along roadways, and no lane closures are anticipated. Additionally, construction of the Jolla Shores project would be subject to City requirements associated with water availability and accessibility to fire suppression materials. Following the completion of construction-related activities, the project would not result in a change in land use at the site. Nor would the La Jolla Shores project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. The proposed earthen dikes and terraced seatwall and the waterfront park would include additional pedestrian and emergency access points along the project site to maintain public access, as well as emergency and lifeguard access to the beach area. Therefore, there would be no impact related to fire protection services.

No new residential units would be constructed as a part of the La Jolla Shores project, and the La Jolla Shores project would not result in new permanent populations that would require school or library facilities. As such, the La Jolla Shores project would not increase demand on local schools or libraries. Therefore, there would be no impact related to schools or libraries.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

The police station that serves the Pacific Beach – Tourmaline Surf Park project site is San Diego Police Department Northern Division. Construction of the Pacific Beach – Tourmaline Surf Park

project is not anticipated to result in temporary interruption or delays for law enforcement response times. The proposed sand and cobble dune would be constructed similarly to the annual winter berm that is constructed adjacent to the project site every fall and maintained through the winter season. Construction activities at the Pacific Beach – Tourmaline Surf Park project site would be short-term and temporary. Neither construction nor operation of the Pacific Beach – Tourmaline Surf Park project would increase demand for law enforcement and no new facilities (i.e., police stations) would be required. Therefore, implementation of the Pacific Beach – Tourmaline Surf Park project would have no impact on police protection.

The fire station that serves the Pacific Beach – Tourmaline Surf Park project site is Station 21 at 750 Grand Avenue, located approximately 0.9 mile driving distance (4 minutes) from the site. During construction, emergency access to the Pacific Beach – Tourmaline Surf Park project site would be maintained along roadways, and no lane closures are anticipated. Additionally, construction of the Pacific Beach – Tourmaline Surf Park project would be subject to City requirements associated with water availability and accessibility to fire suppression materials. Following the completion of construction-related activities, the Pacific Beach – Tourmaline Surf Park project would not result in a change in land use at the site. Nor would the Pacific Beach – Tourmaline Surf Park project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. The proposed sand and cobble dune would provide protection for the existing access ramp which provides access for the public and emergency vehicles (i.e., lifeguards). Therefore, there would be no impact related to fire protection services.

No new residential units would be constructed as a part of the Pacific Beach – Tourmaline Surf Park project, and the Pacific Beach – Tourmaline Surf Park project would not result in new permanent populations that would require school or library facilities. As such, the Pacific Beach – Tourmaline Surf Park project would not increase demand on local schools or libraries. Therefore, there would be no impact related to schools or libraries.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north-south along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

The police station that serves the Mission Beach project site is San Diego Police Department Northern Division. Construction of the Mission Beach project is not anticipated to result in temporary interruption or delays for law enforcement response times. The elevated sand dune and potential perched beach would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. Construction activities at the Mission Beach project site would be short-term and temporary. Neither construction nor operation of the Mission Beach project would increase demand for law enforcement, and no new facilities (i.e., police stations) would be required. Therefore, implementation of the Mission Beach project would have no impact on police protection.

The fire station that serves the Mission Beach project site is Station 21 at 750 Grand Avenue, located approximately 1.7 miles driving distance (7 minutes) from the site. Additionally, the Mission Beach project site is adjacent to the Mission Beach Lifeguard Station and encompasses several seasonal lifeguard towers (e.g., Temporary Lifeguard Towers 14 and 15) (refer to Figure 2-9, Mission Beach Project Site).

During construction, emergency access to the Mission Beach project site would be maintained along roadways and no lane closures are anticipated. Additionally, construction of the Mission Beach project would be subject to City requirements associated with water availability and accessibility to fire suppression materials. Following the completion of construction-related activities, the Mission Beach project would not result in a change in land use at the site. Nor would the Mission Beach project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. The proposed elevated sand dune and potential realigned section of the seawall would include appropriate openings and passageways to allow public access to the beach. Existing emergency access points would be maintained. Therefore, there would be no impact related to fire protection services.

No new residential units would be constructed as a part of the Mission Beach project, and the Mission Beach project would not result in new permanent populations that would require school or library facilities. As such, the Mission Beach project would not increase demand on local schools or libraries. Therefore, there would be no impact related to schools or libraries.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach - Pier project.

The police station that serves the Ocean Beach – Pier project site is San Diego Police Department Western Division. Construction of the Ocean Beach – Pier project is not anticipated to result in temporary interruption or delays for law enforcement response times. The elevated sand dune would be constructed similarly to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. Construction activities at the Ocean Beach – Pier project site would be short-term and temporary. Neither construction nor operation of the Ocean Beach – Pier project would increase demand for law enforcement, and no new facilities (i.e., police stations) would be required. Therefore, implementation of the Ocean Beach – Pier project would have no impact on police protection.

The fire station that serves the Ocean Beach – Pier project site is Station 15 at 4711 Voltaire Street, located approximately 0.9 mile driving distance (4 minutes) from the site. Additionally, the Ocean Beach – Pier project site encompasses the Ocean Beach Lifeguard Station and two seasonal lifeguard towers (e.g., Temporary Lifeguard Towers 2 and 3) (refer to Figure 2-11, Ocean Beach – Pier Project Site).

During construction, emergency access to the Ocean Beach – Pier project site would be maintained along roadways, and no lane closures are anticipated. Additionally, construction of the Ocean Beach – Pier project would be subject to City requirements associated with water availability and accessibility to fire suppression materials. Following the completion of construction-related activities, the Ocean Beach – Pier project would not result in a change in land use at the site. Nor would the Ocean Beach – Pier project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. The proposed multi-use path and sand dune would include pedestrian and emergency access points along the project site to maintain public access, as well as emergency and lifeguard access to the beach area. Therefore, there would be no impact related to fire protection services.

No new residential units would be constructed as a part of the Ocean Beach – Pier project, and the Ocean Beach – Pier project would not result in new permanent populations that would require school or library facilities. As such, the Ocean Beach – Pier project would not increase demand on local schools or libraries. Therefore, there would be no impact related to schools or libraries.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The Sunset Cliff project also includes conversion of the roadway into a one-lane one-way southbound vehicular travel lane with a separated multi-use path for pedestrians and bicyclists. The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road

reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trails (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, would not include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Appropriate construction equipment staging areas would be identified during project-specific analysis in the review phase of the Sunset Cliffs project once future site-specific project designs are finalized. Vehicle access would be maintained along Sunset Cliffs Boulevard during construction and operation of the Sunset Cliffs project. Thus, construction of the Sunset Cliffs project is not anticipated to result in temporary interruption or delays for law enforcement. Neither construction nor operation of the Sunset Cliffs project would increase demand for law enforcement, and no new facilities (i.e., police stations) would be required. Therefore, implementation of the Sunset Cliffs project would have no impact on police protection.

The fire station that serves the Sunset Cliffs project site is Station 22 at 1055 Catalina Boulevard, located approximately 0.8 mile driving distance (3 minutes) from the site. Emergency access to the Sunset Cliffs project site would be maintained along Sunset Cliffs Boulevard and intersecting streets. The Sunset Cliffs project would not result in a change in land use at the site. Nor would the Sunset Cliffs project induce growth or substantially increase, either directly or indirectly, the need for fire protection services over existing conditions. Therefore, there would be no impact related to fire protection services.

No new residential units would be constructed as a part of the Sunset Cliffs project, and the Sunset Cliffs project would not result in new permanent populations that would require school or library facilities. As such, the Sunset Cliffs project would not increase demand on local schools or libraries. Therefore, there would be no impact related to schools or libraries.

5.10.3.2 Issue 2: Parks

Would the proposed CRMP Phase 1 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?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

The Pilot Project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. Brighton Park, the grassy landscaped area adjacent to the parking lot would not be substantially affected by the Pilot Project. The relocation or reconstruction of the existing restroom could occur within Brighton Park, which would improve the park's amenities and may increase use of the park. Additionally, the proposed multi-use path and optional express shuttle stop would provide greater accessibility to the Ocean Beach – Dog Beach project site, which could increase use of the park. However, use of Brighton Park would not increase such that substantial physical deterioration of the park facility would occur or be accelerated. Therefore, implementation of the Pilot Project would have a less than significant impact on parks, and no mitigation is required.

Operation of the Pilot Project would also benefit parks in the vicinity of the Ocean Beach – Dog Beach project site by increasing their resiliency. The proposed elevated sand dune along the back of the beach would provide protection from sea-level rise and coastal flooding at Brighton Park, which would maintain use of the park during future heavy winter storms. In addition, the proposed multi-use path would provide greater accessibility and connectivity between parks in the CRMP Phase 1 area, including Brighton Park, Saratoga Park, and Ocean Beach Veterans Plaza.

Impacts to recreational facilities are discussed in Section 5.10.3.3, Issue 3: Recreational Facilities.

La Jolla Shores

The proposed La Jolla Shores project would either construct two elevated earthen dikes along the western edge of La Jolla Shores and Kellogg Park separated by a terraced seatwall along the western edge of the existing parking lot under the Amphitheater Design Option or would reconfigure the grassy recreational areas and parking lot to create one continuous waterfront park that could include a long linear earthen dike along the western edge of the park under the Reconfigured Park Design Option.

The La Jolla Shores project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. The La Jolla Shores project site includes La Jolla Shores Park and Kellogg Park, each located on the north and south sides of the parking lot, respectively. Under the Reconfigured Park Design Option, La Jolla Shores Park and Kellogg Park would be reconfigured to be one continuous waterfront park along the seaward side of the parking lot. However, the footprint of the proposed recreational areas would remain the same, at a total of approximately 181,900 square feet. Additionally, both proposed design options could include elevated earthen dikes on the western sides of La Jolla Shores Park and Kellogg Park or the potential waterfront park, which would be terraced in an amphitheater style and would provide enhanced viewing and passive recreational opportunities. These improvements would provide additional seating opportunities and greater accessibility to the La Jolla Shores project site, which may increase use of the parks. However, use of the parks would not increase such that substantial physical deterioration of the facilities would occur or be accelerated. Therefore, impacts to parks would be less than significant, and no mitigation is required.

Operation of the La Jolla Shores project would also benefit parks in the vicinity of the La Jolla Shores project site by increasing their resiliency. The proposed earthen dikes along the western borders of La Jolla Shores Park and Kellogg Park or the potential waterfront park would provide protection from sea-level rise and coastal flooding, which would maintain use of the parks during future heavy winter storms.

Impacts to recreational facilities are discussed in Section 5.10.3.3, Issue 3: Recreational Facilities.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment.

The Pacific Beach – Tourmaline Surf Park project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. The proposed sand and cobble dune and potential shower drainage improvements would improve accessibility to the beach along the access ramp, particularly following heavy storms. Use of the Pacific Beach – Tourmaline Surf Park would not increase such that substantial physical deterioration of the facilities would occur or be accelerated.

Additionally, the optional pedestrian walkway would provide greater accessibility between the beach, parking lot, and picnic area east of the parking lot, which may increase use of the picnic area. However, use of the picnic area would not increase such that substantial physical deterioration of the facilities would occur or be accelerated. Therefore, impacts to parks would be less than significant, and no mitigation is required.

Impacts to recreational facilities, such as the picnic areas east of the parking lot and north of Tourmaline Street, are discussed in Section 5.10.3.3, Issue 3: Recreational Facilities.

Mission Beach

The Dune Design Option would construct an elevated sand dune seaward (west) of the existing seawall and Ocean Front Walk. The proposed sand dunes would be vegetated with native plantings, which would provide ecological benefits. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. The Mission Beach project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. Under the Perched Beach Design Option, a portion of Mission Beach Park would be converted to sandy beach; however, the majority of Mission Beach Park would remain the same as existing conditions. Further, the perched beach would continue to allow for recreational uses. In addition, Mission Beach Park would be enhanced due to additional coastal flood protection from the proposed sand dune and perched beach at the Mission Beach project site. Additional protection from the sand dune and potential perched beach would increase access to the Mission Beach project site and Mission Beach Park year-round and may increase use of the park. However, use of Mission Beach Park would not increase such that substantial physical deterioration of the park would occur or be accelerated. Therefore, implementation of the Mission Beach project would have a less than significant impact on parks, and no mitigation is required.

Impacts to recreational facilities are discussed in Section 5.10.3.3, Issue 3: Recreational Facilities.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier.

The Ocean Beach – Pier project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. Saratoga Park and Ocean Beach Veterans Plaza, the grassy landscaped areas adjacent to the project site, would be enhanced due to the additional coastal flood protection from the proposed sand dune. Additional coastal flood protection and the proposed multi-use path would enhance access to the Ocean Beach – Pier project site and connectivity between the parks year-round, which may increase use of the parks. However, use of Saratoga Park and Ocean Beach Veterans Plaza would not increase such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, implementation of the Ocean Beach – Pier project would have a less than significant impact on parks, and no mitigation is required.

Impacts to recreational facilities are discussed in Section 5.10.3.3, Issue 3: Recreational Facilities.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The Sunset Cliff project also includes conversion of the roadway into a one-lane one-way southbound vehicular travel lane with a separated multi-use path for pedestrians and bicyclists. The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration configuration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trails. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. The Sunset Cliffs project does not include development of any residential uses and would not generate any new permanent residents that would increase the demand on local parks. The Sunset Cliffs project site is within Sunset Cliffs Linear Park and provides various trails, paths, and gathering spaces. These features of Sunset Cliffs Linear Park would not be adversely affected by the Sunset Cliffs project. For example, the Sunset Cliffs Linear Park would be enhanced due to the additional safety measures from the proposed road reconfiguration, which would lessen erosion impacts on the Sunset Cliffs project site, but are not anticipated to increase use of the Sunset Cliffs Linear Park coastal trails. Additionally, the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, would enhance existing trails, habitat, and views within Sunset Cliffs Linear Park, but would not increase use of the park such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, implementation of the Sunset Cliffs project would have a less than significant impact on parks, and no mitigation is required.

Impacts to recreational facilities are discussed in Section 5.10.3.3, Issue 3: Recreational Facilities.

5.10.3.3 Issue 3: Recreational Facilities

Would the proposed CRMP Phase 1 include recreational facilities or require the construction or expansion of recreational facilities which would have an adverse physical effect on the environment?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

Implementation of the Pilot Project would protect and enhance existing recreational and public open space areas at the Ocean Beach – Dog Beach project site. For example, the proposed elevated sand dune would address existing and projected sea-level rise and coastal flooding impacts that disturb recreational activities at the Ocean Beach – Dog Beach project site, particularly during heavy winter storms. Therefore, with implementation of the proposed improvements, recreational activities at the Ocean Beach – Dog Beach project site matched for year-round recreation.

Construction of the elevated sand dune and multi-use path would be located along the back of the beach and therefore, would affect the alignment of existing volleyball courts on the beach between Brighton Avenue and Cape May Place. Limited volleyball court infrastructure (i.e., poles) would need to be relocated farther west on Ocean Beach – Dog Beach or north of the parking lot to allow for construction of the elevated sand dune and multi-use path. However, there would be no net loss of volleyball courts at the Ocean Beach – Dog Beach project site. Therefore, impacts to recreational facilities would be less than significant, and no mitigation is required.

Impacts to bicycle paths, pedestrian connectivity, and parking are discussed in Section 5.11, Transportation.

La Jolla Shores

The proposed La Jolla Shores project would either construct two elevated earthen dikes along the western edge of La Jolla Shores and Kellogg Park separated by a terraced seatwall along the western edge of the existing parking lot under the Amphitheater Design Option or would reconfigure the grassy recreational areas and parking lot to create one continuous waterfront park that could include a long linear earthen dike along the western edge of the park under the Reconfigured Park Design Option. Implementation of the La Jolla Shores project would protect and enhance existing recreational and public open space areas at the La Jolla Shores project site. For example, the proposed elevated earthen dikes and terraced seatwall under the Amphitheater Design Option would provide protection from existing and projected sea-level rise and coastal flooding impacts that disturb recreational facilities (e.g., picnic areas) at the La Jolla Shores project site, particularly during heavy winter storms. Additionally, the waterfront park under the Reconfigured Park Design Option would be designed to accommodate coastal flooding and would protect the reconfigured parking lot from flooding. Both of these design options would be designed to provide protection from existing and projected flooding impacts associated with sea-level rise. Therefore, with implementation of the proposed improvements, recreational facilities at the La Jolla Shores project site would be enhanced for year-round recreation. However, it should be noted that the proposed earthen dike at Kellogg Park would be aligned landward of the existing playground structure at the southwest corner of the park. Therefore, implementation of the La Jolla Shores project would not result in beneficial impacts related to coastal flood protection for this playground facility. Nevertheless, impacts to recreational facilities would be less than significant, and no mitigation is required.

Impacts to bicycle paths, pedestrian connectivity, and parking are discussed in Section 5.11.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment.

Implementation of the Pacific Beach – Tourmaline Surf Park project would protect and enhance existing recreational surfing areas at the Pacific Beach – Tourmaline Surf Park project site. For example, the proposed sand and cobble dune would improve existing shoreline protection and address existing and projected coastal flooding impacts that disturb recreational surfing activities at the Pacific Beach – Tourmaline Surf Park project site, particularly during heavy winter storms. Therefore, with implementation of the proposed improvements, recreational activities at the Pacific Beach – Tourmaline Surf Park project site would be enhanced for year-round recreation.

Construction of the sand and cobble dune would replace existing the shoreline protection feature on the beach. The footprint of the dune would be slightly larger than the existing shoreline protection feature at 8,750 square feet (an increase of approximately 1,750 square feet). Therefore, the proposed sand and cobble dune would occupy a larger space than the existing shoreline protection feature. However, the increase in the dune's footprint would be minimal, and the dune would maintain a similar size to the existing shoreline protection feature. Access to the beach and underutilized picnic areas would be enhanced through the restoration of the existing access ramp and optional addition of a pedestrian walkway. Furthermore, the project would add access and new non-planted seating areas on top of the proposed dune, adding recreational space where there is currently cobble riprap. Therefore, there would be no net loss of recreational space on the Pacific Beach – Tourmaline Surf Park project site. Impacts to recreational facilities would be less than significant, and no mitigation is required.

In addition, implementation of the optional pedestrian pathway along the existing drainage culvert north of the parking lot would provide connectivity between the beach, parking lot, and the underutilized picnic areas east of the parking lot and north of Tourmaline Street. As such, the optional pedestrian pathway would result in beneficial impacts related to enhancing accessibility and use of the existing picnic areas.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run north-south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. The elevated sandy beach under this design option would continue to provide recreational opportunities in this area. The proposed sand dunes would be vegetated with native plantings, which would provide ecological benefits. Implementation of the Mission Beach project would protect and enhance existing recreational and public open space areas at the Mission Beach project site. The proposed elevated sand dune and potential perched beach would address existing and projected sea-level rise and coastal flooding impacts that disturb recreational activities at the Mission Beach project site and public access along Ocean Front Walk, particularly during heavy winter storms. Therefore, with implementation of the proposed improvements, recreational activities at the Mission Beach project site would be enhanced for year-round recreation.

The elevated sand dune would be located along the back of the beach (west of Ocean Front Walk) and would extend approximately 20 to 30 feet seaward from the existing seawall. The proposed sand dune would mimic the existing winter berm that is built along the beach annually and would provide a permanent fixture at the Mission Beach project site. Therefore, the proposed sand dune would permanently and incrementally narrow the existing recreational space on the beach. However, existing recreational facilities on the Mission Beach project site, including benches, picnic areas, and volleyball courts, would be maintained, and recreational facilities landward (east) of the sand dune would be permanently protected from coastal storms and wave runup. Additionally, the Perched Beach Design Option would provide approximately 31,500 square feet (0.72 acre) of additional sandy beach area on the project site. Compared to seasonal changes as a result of the City's winter berm program on the Mission Beach project site and given that the

proposed sand dune and perched beach would protect recreational uses from coastal flooding and sea-level rise, the net loss of beach area due to the sand dune at the Mission Beach project site would be negligible. Therefore, impacts to recreational facilities would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier.

Implementation of the Ocean Beach – Pier project would protect and enhance existing recreational and public open space areas at the Ocean Beach – Dog Beach project site. For example, the proposed elevated sand dune would address existing and projected sea-level rise and coastal flooding impacts that disturb recreational activities at the Ocean Beach – Pier project site, particularly during heavy winter storms. Therefore, with implementation of the proposed improvements, recreational activities at the Ocean Beach – Pier project site would be enhanced for year-round recreation.

The elevated sand dune would be located along the back of the beach and would be approximately 20 to 40 feet wide. The proposed sand dune would mimic the existing winter berm that is built along the beach annually and would provide a permanent fixture at the Ocean Beach – Pier project site. Therefore, the proposed sand dune would narrow existing recreational space along the beach. However, existing recreational facilities on the Ocean Beach – Pier project site (i.e., Saratoga Park, Ocean Beach Veterans Plaza) would be maintained and permanently protected from coastal storms and wave runup due to their location landward (east) of the proposed sand dune. Compared to existing seasonal changes as a result of the City's winter berm program on the Ocean Beach – Pier project site and given that the proposed sand dune would protect recreational uses from coastal flooding and sea-level rise, the net loss of beach area due to the sand dune at the Ocean Beach – Pier project site would be negligible. Therefore, impacts to recreational facilities would be less than significant, and no mitigation is required.

Impacts to bicycle paths, pedestrian connectivity, and parking are discussed in Section 5.11.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The Sunset Cliff project also includes conversion of the southern 0.64-mile portion of the roadway into a one-lane one-way southbound vehicular travel lane with a separated multi-use path for pedestrians and bicyclists. The program would monitor traffic flow and incorporate lessons learned

back into the project design before designing a more permanent road reconfiguration configuration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures.

Implementation of the Sunset Cliffs project would protect and enhance existing recreational and public open space areas at the Sunset Cliffs project site. For example, the conversion of Sunset Cliffs Boulevard to a one-way travel lane would lessen vehicular traffic, thereby minimizing existing and projected erosion impacts that disturb recreational activities at the Sunset Cliffs project site, particularly during heavy winter storms. With implementation of the proposed improvements, recreational activities at the Sunset Cliffs project site would be enhanced for year-round recreation.

Additionally, the Sunset Cliffs project would include trail and habitat enhancement, which would improve the existing recreational spaces along Sunset Cliffs trail. The Sunset Cliffs project components would enhance the existing resources without compromising the structural integrity of the cliff or current infrastructure. There would also be no net loss of recreational land uses at the Sunset Cliffs project site. In fact, the optional component to reconfigure the parking from the existing parking lots along the northern portion of the project site could provide more space for recreational opportunities along Sunset Cliffs Linear Park. Therefore, the Sunset Cliffs project would result in beneficial impacts to recreational facilities.

Impacts to bicycle paths, pedestrian connectivity, and parking are discussed in Section 5.11.

5.10.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project at the Ocean Beach – Dog Beach project site would have no impact on police protection, fire protection (including lifeguard services), schools, or libraries. Implementation of the Pilot Project at Ocean Beach - Dog Beach would have a less than significant impact on parks and recreational facilities, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project site would have no impact on police protection, fire protection (including lifeguard services), schools, or libraries. Implementation of the La Jolla Shores project would have a less than significant impact on parks and recreational facilities, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would have no impact on police protection, fire protection (including lifeguard services), schools, or libraries. Implementation of the Pacific Beach – Tourmaline Surf Park project would have a less than significant impact on parks and recreational facilities, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would have no impact on police protection, fire protection (including lifeguard services), schools, or libraries. Implementation of the Mission Beach project would have a less than significant impact on parks and recreational facilities, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would have no impact on police protection, fire protection (including lifeguard services), schools, or libraries. Implementation of the Ocean Beach – Pier project would have a less than significant impact on parks and recreational facilities, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would have no impact on police protection, fire protection (including lifeguard services), schools, or libraries. Additionally, implementation of the Sunset Cliffs project would have a beneficial impact on existing recreational facilities. Implementation of the Sunset Cliffs project would have a less than significant impact on the use of parks, and no mitigation is required.

5.10.5 Mitigation Framework

Impacts to public services and recreation would be less than significant; therefore, no mitigation is required.

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5.11 Transportation

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing transportation conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to transportation that could result from implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the San Diego Association of Governments (SANDAG) San Diego Regional Bike Map (SANDAG 2023), the San Diego Metropolitan Transportation System (MTS) Regional Transit Map (MTS 2023), the City of San Diego's (City's) Transportation Study Manual (City of San Diego 2020), the City's General Plan Community Plans that encompass the CRMP Phase 1 area, and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023).

5.11.1 Existing Conditions

The following sections provide a description of the existing transportation facilities serving the San Diego region as well as the six project sites. Local streets and bicycle, transit, and pedestrian facilities serve to provide local access and connections to the regional network.

5.11.1.1 Regional Transportation System

The CRMP Phase 1 area spans the coastal jurisdictional boundaries of the City of San Diego in six coastal locations. Major transportation corridors that provide regional access to the project sites are the Pacific Highway (north to south), Interstate (I-) 5 (north to south), I-8 (east to west), I-805 (north to south), and State Route (SR-) 52 (east to west).

Roadway Classifications

In the City of San Diego, roadways are categorized into the following street classifications and functions:

- **Freeway:** A street that is designed to carry through traffic and is fully access controlled by grade separations, interchanges, and ramp connections. Freeways are normally maintained by the California State Department of Transportation (Caltrans) and constructed to state criteria, and vary in width from four to eight or more lanes.
- **Prime Arterial:** A street that primarily provides a network connecting vehicles and transit to other primary arterials and to the freeway system. Prime arterials carry heavy vehicular movement while providing low pedestrian movement and moderate bicycle and transit movements. They have a raised center median, bicycle lanes, street trees, traffic safety street lighting, sidewalks, and no access from abutting property. They may include underground utilities.

- **Major Arterial:** A street that primarily provides a network connecting vehicles and transit to other major arterials and primary arterials, and to the freeway system and secondarily providing access to abutting commercial and industrial property. Major arterials carry moderate-to-heavy vehicular movement, low-to-high pedestrian and bicycle movements, and moderate-to-high transit movement. They generally have a raised center median, street trees, traffic safety, street lighting, and sidewalks, and may include landscaping, pedestrian-scale lighting, underground utilities, on-street parking, and/or bike lanes.
- **Collector Street:** A street that primarily provides movement between local/collector streets and streets of higher classification and, secondarily, provides access to abutting property. Collector streets carry low- to moderate-vehicular movement, low- to heavy-pedestrian movement, moderate- to heavy bicycle movement, and low- to moderate-transit movement. They generally have on-street parking, street trees, traffic safety street lighting, and sidewalks. They may also include landscaping, pedestrian-scale lighting, and underground utilities.
- Local Street: A street that provides, primarily, direct access to abutting property. Local streets carry low vehicular movement, low- to heavy-pedestrian movement, and low to moderate bicycle movement. They usually have on-street parking, street trees, traffic safety street lighting, and sidewalks. They may also include landscaping, pedestrian-scale lighting, and underground utilities.

Bicycle Facilities

The City of San Diego has a citywide system of bikeways with the long-range goal of linking all of the communities within the City. Development and maintenance of the bicycle network within the City are guided by the City's Bicycle Master Plan (City of San Diego 2013). The City's Bicycle Master Plan contains detailed policies, action items, and network maps. It addresses issues such as bikeway planning, community involvement, facility design, bikeway classifications, multi-modal integration, safety and education, and support facilities. Figure 5.11-1, Existing Transportation Network – Index, and Figures 5.11-1a through 5.11-1g, illustrate the existing and proposed bikeways in the vicinity of the project sites. In addition to the City's Bicycle Master Plan, the City's various community plans provide mobility elements that include a bicycle network within the community plan areas.

Five bikeway facility types are used in the City's Bicycle Master Plan. The three classifications from the California Highway Design Manual are Class I (bike paths), Class II (bike lanes), and Class III (bike routes); and two non-classified bike facilities: bicycle boulevards and cycle tracks.

• **Class I bike paths**, also termed shared-use or multi-use paths, are paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic.
- **Class II bike lanes** (typically located on major streets) are defined by pavement striping and signage used to allocate a portion of a roadway nearest to the curb for exclusive or preferential bicycle travel.
- **Class III bike routes** (typically located on neighborhood streets) provide shared use with motor vehicle traffic within the same travel lane designated by signs only. With Class III facilities, bicycle traffic shares the roadway with motor vehicles.
- **Bicycle boulevards** are local roads or residential streets that have been enhanced with traffic calming and other treatments to facilitate safe and convenient bicycle travel. Bicycle boulevards accommodate bicyclists and motorists in the same travel lanes, without specific vehicle or bicycle lane delineation. These roadway designations prioritize bicycle travel above vehicular travel. Bicycle boulevard treatments include signage, pavement markings, intersection treatments, and traffic calming measures; they can also include traffic diversions. Bicycle boulevards are not defined as bikeways by the Caltrans Highway Design Manual; however, the basic design features of bicycle boulevards comply with Caltrans standards.
- **Cycle tracks** are hybrid-type bicycle facilities that combine the experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are bikeways located in roadway right-of-way but separated from vehicle lanes by physical barriers or buffers. Cycle tracks provide for one-way bicycle travel in each direction adjacent to vehicular travel lanes and are exclusively for bicycle use. Cycle tracks are not recognized by the Caltrans Highway Design Manual as a bikeway facility.

Public Transit

Public transit services are provided both for trips within the City and region and for trips between San Diego and adjacent areas. The current public transit network includes local and express bus, light-rail (trolley), and Coaster commuter rail services. The City works with the San Diego MTS and the North County Transit District to provide public transportation, including bus (including Rapid Bus), light-rail lines, and commuter rail services.

5.11.1.2 Access and Circulation on the Project Sites

Pilot Project: Ocean Beach – Dog Beach

Vehicular Access and Parking

The Ocean Beach – Dog Beach project site is regionally accessed by I-8. Local access to the project site is provided by Sunset Cliffs Boulevard and West Point Loma Boulevard, and direct vehicular access to the project site is provided via Chamberlain Street, Voltaire Street, Spray Street, Long Branch Avenue, and Brighton Avenue, which are all local streets (refer to Figure 5.11-1a, Existing Transportation Network at the Ocean Beach – Dog Beach Project Site; City of San Diego 2015). West Point Loma Boulevard is an east–west running two-lane collector street from Lotus Street to

Sunset Cliffs Boulevard and a two-lane major street from Sunset Cliffs Boulevard to Nimitz Boulevard. West Point Loma Boulevard becomes Spray Street before the intersection with Long Branch Avenue. Voltaire Street and Brighton Avenue connect to the parking lot serving the Ocean Beach – Dog Beach project site. While Voltaire Street west of Abbott Street is a local street, it is a two-lane collector street east of Abbott Street.

The parking lot on site is L-shaped and provides approximately 307 vehicle parking spaces, including nine Americans with Disabilities Act (ADA) accessible parking spaces (refer to Figure 5.11-2, L-Shaped Parking Lot on the Ocean Beach – Dog Beach Project Site). The parking lot is a one-way flow lot that serves Dog Beach proper, as well as Ocean Beach, and therefore, is often congested with drivers attempting to find parking. Free parallel street parking is provided on both sides of the surrounding streets.

Bicycle Facilities

Bicycle access to the Ocean Beach – Dog Beach project site is provided by the existing Class I San Diego River Bikeway that runs east–west from its western terminus on the project site to its eastern terminus at Hotel Circle Place in Mission Valley (refer to Figure 5.11-3, San Diego River Bikeway). On the project site, the San Diego River Bikeway is near the northern boundary. Bike facilities on West Point Loma Boulevard/Spray Street and Voltaire Street also provide direct access to the Ocean Beach – Dog Beach project site. Spray Street provides a Class II bike lane that continues along West Point Loma Boulevard from Brighton Avenue to the south to Bacon Street to the east, and continues along West Point Loma Boulevard as a Class III bike route from Bacon Street to Sunset Cliffs Boulevard, and again as a Class II bike lane from Sunset Cliffs Boulevard to Nimitz Boulevard. Voltaire Street also provides a Class III bike route that connects to other Class III bike routes on Bacon Street and Ebers Street (refer to Figure 5.11-1a; SANDAG 2023).

Pedestrian Facilities

Pedestrian access to the Ocean Beach – Dog Beach project site is provided by Chamberlain Street, Voltaire Street, Spray Street, and Brighton Avenue. Sidewalks exist on the eastern side of Chamberlain Street and Voltaire Street and along both sides of Spray Street and Brighton Avenue. The nearest official crosswalks are the four-way ladder-style marked crosswalks at the West Point Loma Boulevard and Bacon Street roundabout intersection approximately 370 feet east of Chamberlain Street. There are no other nearby delineated crosswalks; however, the stop-controlled intersections surrounding the project site provide unofficial pedestrian crossings.

Public Transportation

The Ocean Beach – Dog Beach project site is served by MTS Bus Routes 35 (Ocean Beach – Old Town Transit Center) and 923 (Ocean Beach – Downtown San Diego). Route 35 near the project

site traverses West Point Loma Boulevard between Nimitz Boulevard and Cable Street and runs along Cable Street between West Point Loma Boulevard and Narragansett Avenue. Bus Route 923 near the project site traverses along Cable Street between Orchard Avenue and along Voltaire Street between Cable Street and Chatsworth Boulevard (refer to Figure 5.11-1a).

La Jolla Shores

Vehicular Access and Parking

Freeway access within the vicinity of the La Jolla Shores project site is provided via I-5, which is a north–south route. The primary access to the La Jolla Shores project site is provided via El Paseo Grande that generally runs north–south and Camino Del Oro that runs east–west from La Jolla Shores Drive to El Paseo Grande, then north–south from El Paseo Grande to Calle Frescota, Vallecitos, and Avenida De La Playa, which run east–west (refer to Figure 5.11-1b, Existing Transportation Network at the La Jolla Shores Project Site). The La Jolla Community Plan and Local Coastal Program Land Use Plan (La Jolla Community Plan) classifies La Jolla Shores Drive as a two-lane modified collector; Camino Del Oro, Calle Del Oro, and Avenida De La Playa, all near the La Jolla Shores project site, as two-lane collectors providing one lane in each direction; and other streets as local streets (City of San Diego 2014).

The parking lot on the project site provides approximately 378 vehicle parking spaces, including three lifeguard parking spaces, eight ADA accessible parking spaces, and five parking spaces for "Authorized Vehicles Only." Parallel street parking is also available along several of the roads surrounding the project site.

Bicycle Facilities

La Jolla's bicycle system consists of a regional network of signed bike routes that connect La Jolla to adjacent communities and a local network that provides access within the community on selected neighborhood streets and through La Jolla to the beach and shoreline areas. Bicycle access to the La Jolla Shores project site is provided by the existing Class III bike route along La Jolla Shores Drive that extends from North Torrey Pines Road to the north to Torrey Pines Road to the south (see Figure 5.11-1b; City of San Diego 2013, 2024; SANDAG 2023). There is a planned Class III bike route along Camino Del Oro parallel to the project site. Although not identified as a designed bike path in the City's Bicycle Master Plan, La Vereda pedestrian path is accessible to bikes (refer to Figure 5.11-4, La Vereda Multi-Use Pedestrian and Bicycle Path on the La Jolla Shores Project Site).

Pedestrian Facilities

The same network of streets that serve bicycles also serve pedestrians in the community. Sidewalks for pedestrian are provided along all of the streets surrounding the La Jolla Shores project site, including El Paseo Grande, Camino Del Oro, Calle Frescota, Vallecitos, and Avenida De La Playa.

Three-way crosswalk is located at the "T" intersection of El Paseo Grande and Camino Del Oro; two-way crosswalks are located at the intersection of Camino Del Oro and Calle Frescota/parking lot driveway; and four-way striped crosswalks are located at the intersection of Camino Del Oro and Vallecitos. These crosswalks are all unsignalized and have ladder-style stripe markings. Additionally, La Vereda pedestrian path provides a pedestrian path through the project site between the sandy beach areas to the west and Kellogg Park, the parking lot, and La Jolla Shores Park to the east. While a seawall borders La Vereda pedestrian path to the west, several beach access points are provided to allow pedestrian access to the beach.

Public Transportation

The La Jolla Shores project site is served by MTS Bus Route 30 (Old Town Transit Center – UTC Transit Center). Bus stops serving both directions of travel near La Jolla Shores are along La Jolla Shores Drive at its intersections with Camino Del Collado, Calle Del Oro, Calle Frescota, and Vallecitos (see Figure 5.11-1b).

Pacific Beach – Tourmaline Surf Park

Vehicular Access and Parking

Freeway access to the Pacific Beach – Tourmaline Surf Park project site is provided via I-5, which is a north–south route. Primary vehicular access to the project site is provided by La Jolla Boulevard, a four-lane major arterial that generally runs in a north–south direction, and Tourmaline Street, an east–west local street that leads directly to the Tourmaline Beach parking lot (refer to Figure 5.11-1c, Existing Transportation Network at the Pacific Beach – Tourmaline Surf Park Project Site, and Figure 5.11-5, Tourmaline Street Near La Jolla Boulevard Facing West). The parking lot provides approximately 100 vehicle spaces, including three ADA accessible parking spaces, and parallel street parking is provided along the south side of Tourmaline Street, west of La Jolla Boulevard. Additionally, parallel street parking is available along both sides of La Jolla Boulevard and Tourmaline Street, east of La Jolla Boulevard.

Bicycle Facilities

Bicycle access to the Pacific Beach – Tourmaline Surf Park project site is provided by the existing Class II bike lane along La Jolla Boulevard that extends from Turquoise Street (Class III bike route) to the north to Loring Street (Class III bike route) to the south (see Figure 5.11-1c; SANDAG 2023).

Pedestrian Facilities

Sidewalks are located along all of the streets in the vicinity of this project site, including both sides of La Jolla Boulevard, Tourmaline Street, and Loring Street. An unsignalized and ladderstyle striped crosswalk is located at the intersection of La Jolla Boulevard and Tourmaline Street, a signalized three-way crosswalk is located at the intersection of Mission Boulevard and Loring Street, and an unsignalized ladder-style marked crosswalk is located at the intersection of La Jolla Boulevard and Loring Street. A lifeguard access driveway provides pedestrian access from the project site parking lot to the beach area below.

Public Transportation

The Pacific Beach – Tourmaline Surf Park project site is served by MTS Bus Route 30 (Old Town Transit Center – UTC Transit Center) that runs along La Jolla Boulevard (north–south) and Mission Boulevard (north–south) with connection by Turquoise Street (east–west). Bus stops serving both directions of travel near the Pacific Beach – Tourmaline Surf Park project site are along Turquoise Street at its intersection with La Jolla Boulevard and along Mission Boulevard at its intersections with Sapphire Street, Opal Street, and Loring Street (see Figure 5.11-1c).

Mission Beach

Vehicular Access and Parking

Freeway access to the Mission Beach project site is provided by I-8 to the south and I-5 to the east. The Mission Beach vehicular circulation system consists of one main street, Mission Boulevard, a north–south, four-lane major roadway traversing the length of the community with two lanes in each direction. Mission Boulevard provides north–west access to Belmont Park directly east of the project site, with two driveways along Mission Boulevard connecting to the southern parking lot that serves the Mission Beach project site. West Mission Bay Drive/Ventura Place and San Fernando Place provide direct east–west vehicular access to the Mission Beach project site (refer to Figure 5.11-1d, Existing Transportation Network at the Mission Beach Project Site).

Four parking lots are located in the vicinity and serve the project site and surrounding uses, such as Belmont Park and Bonita Cove (refer to Figure 5.11-1d). A parking lot is located on either side (north and south) of Belmont Park, directly east of the project site. The northern parking lot is accessible via Ventura Place, and the southern parking lot is accessible via Mission Boulevard. Additionally, two more parking lots are located on either side (northeast and south) of Bonita Cove Park, east of Mission Boulevard. The northern parking lot is accessible via West Mission Bay Drive and provides approximately 250 parking spaces, including three spaces reserved for delivery vehicles and seven ADA accessible parking spaces. The southern parking lot is accessible via Mission Boulevard and provides approximately 453 parking spaces, including 12 ADA accessible parking spaces.

Bicycle Facilities

Mission Beach is a compact community that supports high bicycle usage by both residents and visitors for many intra-community trips. Traffic congestion and lack of parking make bicycles a more convenient mode of transportation. Bicycle access to the Mission Beach project site is provided by the Class I bike path along Ocean Front Walk, an approximately 3-mile, north–south

concrete bicycle and pedestrian path that extends from Law Street in Pacific Beach to the south end of Mission Beach (refer to Figure 5.11-1d; SANDAG 2023). Ocean Front Walk is a full 27foot-wide multi-use path adjacent to the Belmont Park area along the length of the Mission Beach project site (refer to Figure 5.11-6, Ocean Front Walk Facing Southwest). According to the City's Bicycle Master Plan, other bicycle facilities within the vicinity include a Class I bike path along Bayside Walk and a Class II bike lane along West Mission Bay Drive from Mission Boulevard to Dana Landing Road and Quivira Road (City of San Diego 2013).

Pedestrian Facilities

Pedestrian access to the Mission Beach project site is provided directly by Ocean Front Walk, a north–south corridor, which borders the project site to the east. Ocean Front Walk is a multi-use path providing access to both bicycles, pedestrians, and roller skaters. A seawall borders the west side of Ocean Front Walk; however, eight beach access points are provided to allow pedestrian access to the beach.

Pedestrian access to Ocean Front Walk from Mission Boulevard is provided by Ventura Place, San Fernando Place, and through the parking lots to north and south of Belmont Park. There are sidewalks along both sides of Mission Boulevard and Ventura Place, and on the north side of San Fernando Place. There are signalized, three-way ladder-style crosswalks at the intersection of Mission Boulevard and Ventura Place/Mission Bay Drive, on the north, south, and west sides. A signalized crosswalk provides pedestrian access from the parking lot on the east side of Mission Boulevard to the west side. An unsignalized crosswalk is on the south side of the Mission Boulevard and San Fernando Place intersection.

Public Transportation

The Mission Beach project site is served by MTS Bus Route 8 (Old Town – Balboa Avenue Transit Center) that runs north–south along Mission Boulevard from Grand Avenue to West Mission Bay Drive, and east–west along West Mission Bay Drive to Rosecrans Street. The nearest bus stops to the project site serve both directions of travel and are located along West Mission Bay Drive near its intersection with Mission Boulevard and along Mission Boulevard at its intersection with Santa Barbara Place (refer to Figure 5.11-1d).

Ocean Beach – Pier

Vehicular Access and Parking

Freeway access to Ocean Beach – Pier project site is provided via I-8, as described for the Ocean Beach – Dog Beach project site. Cape May Avenue, Saratoga Avenue, Santa Monica Avenue, and Newport Avenue, which run in a northwest–southeast direction, provide direct access to the site and are connected by Abbott Street (refer to Figure 5.11-1e, Existing Transportation Network at

the Ocean Beach – Pier Project Site). Abbott Street is a two-lane collector, and all roadways providing direct access to the site are local streets.

Santa Monica Avenue and Newport Avenue provide access to two parking lots serving the Ocean Beach – Pier project site. The northern parking lot provides approximately 69 vehicle spaces, including three ADA accessible parking spaces, and the southern parking lot provides approximately 84 vehicle spaces and four motorcycle spaces. Additionally, free parallel street parking is provided on both sides of Cape May Avenue, Saratoga Avenue, and Abbott Street, and free diagonal street parking is available on Santa Monica Avenue and Newport Avenue.

Bicycle Facilities

Bicycle access to the Ocean Beach – Pier project site is provided by all existing bicycle facilities described above for Ocean Beach – Dog Beach project site, as Ocean Beach – Pier project site's northern boundary is connected to the Ocean Beach – Dog Beach project site. The nearest bike facilities are the existing Class II bike lane on Spray Street and the Class III bike route on Bacon Street (refer to Figure 5.11-1e; SANDAG 2023; City of San Diego 2013).

Pedestrian Facilities

Pedestrian access to the Ocean Beach – Pier project site is provided by Cape May Place, Saratoga Avenue, Santa Monica Avenue, and Newport Avenue where there are sidewalks on both sides of the streets. Abbott Street connects these streets and runs parallel to the southeastern border of the project site, providing additional pedestrian access with sidewalks on both sides of the street. There is a three-way crosswalk at the "T" intersection of Abbott Street and Santa Monica Avenue and a crosswalk on Abbott Street at its intersection with Newport Avenue. Additionally, a pedestrian path runs through the southern portion of the Ocean Beach – Pier project site between the sandy beach to the west and the southern parking lot and Ocean Beach Veterans Plaza to the east (refer to Figure 5.11-7, Pedestrian Path at Ocean Beach – Pier Project Site Facing Northwest).

Public Transportation

The Ocean Beach – Pier project site's northern boundary is adjoined by the Dog Beach; therefore, MTS Bus Routes 35 and 923 described for the Ocean Beach – Dog Beach project site above also serve the Ocean Beach – Pier project site (refer to Figure 5.11-1e).

Sunset Cliffs

Vehicular Access and Parking

The unique geographic position of the Peninsula Community Plan Peninsula Community Plan and Local Coastal Program Land Use Plan (Peninsula Community Plan) area characterized by the narrow width and the ridgeline extending along the center of the community from north to south provide limited access to the Peninsula Community, in which the Sunset Cliffs project site is situated. Regional access to the Sunset Cliffs project site is provided by I-8 near the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites to the north. The Sunset Cliffs project site reach follows the Sunset Cliffs coastal trail adjacent to the west of Sunset Cliffs Boulevard, from Adair Street at the northern boundary to Ladera Street at the southern boundary. Therefore, access to the site reach is provided via Sunset Cliffs Boulevard as well as the cross streets including Adair Street, Osprey Street, Froude Street, Guizot Street, Cordova Street, Hill Street, Monaco Street, Carmelo Street, and Ladera Street (refer to Figures 5.11-1f and 5.11-1g). Sunset Cliffs Boulevard is identified as a two-lane collector street south of Point Loma Avenue and a major street north of Point Loma Avenue.

Four parking lots on the west side of Sunset Cliffs Boulevard provide approximately 65 total vehicle spaces (refer to Figure 5.11-8, Parking Lot Along Sunset Cliffs Boulevard). Two are located between Adaire Street and Osprey Street, and the other two are between Osprey Street and Froude Street. Sunset Cliffs Boulevard provides free parallel street parking on the west side of the street at its southern end from Carmelo Street to Ladera Street. Additionally, Adair Street, Osprey Street, Froude Street, Guizot Street, Cordova Street, Hill Street, Monaco Street, Carmelo Street, and Ladera Street provide free parallel street parking on both sides of the streets.

Bicycle Facilities

Sunset Cliffs Boulevard supports a Class II bike lane from Adair Street to Froude Street and a Class III bike route from Froude Street to Ladera Street (SANDAG 2023). The Class II bike lane on Sunset Cliffs Boulevard connects with a Class II bike lane on Point Loma Avenue and Class III bike routes in Ocean Beach along Bacon Street and Ebers Street as shown on Figure 5.11-1e for the Ocean Beach – Pier project site (refer to Figures 5.11-1f and 5.11-1g).

Pedestrian Facilities

Pedestrian access to the Sunset Cliffs project site is provided by the informal coastal trail along the west side of Sunset Cliffs Boulevard. Sidewalks are also provided on the east side of Sunset Cliffs Boulevard and both sides of Adair Street, Osprey Street, Froude Street, Guizot Street, Cordova Street, Hill Street, Monaco Street, Carmelo Street, and Ladera Street.

An official point of arrival for pedestrians is located at the intersection of Sunset Cliffs Boulevard and Adair Street. A four-way ladder-style marked crosswalk is provided at the intersection of Sunset Cliffs Boulevard and Point Loma Avenue, one block north of Adair Street. A number of informal trails break off from the main Sunset Cliffs coastal trail and lead toward lookout points along the cliffside. Some segments of the Sunset Cliffs coastal trail are paved due to eroding cliffsides, while other segments of the trail remain natural (refer to Figure 5.11-9, Sunset Cliffs Coastal Trail). An informal beach access path leads down to No Surf Beach and Luscomb's Point near Hill Street, and other informal beach access opportunities are provided where there are more gradual slopes along the trail. A formal accessway with stairs is provided at the southern boundary, at the intersection of Sunset Cliffs Boulevard and Ladera Street.

Public Transportation

The northern portion of the Sunset Cliffs project site is served by MTS Bus Route 923, which is the same route that serves the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites. The nearest bus stop is located at the intersection of Point Loma Avenue and Sunset Cliffs Boulevard, serving as the starting and ending point for eastbound and westbound Bus Route 923, respectively (refer to Figures 5.11-1f and 5.11-1g).

5.11.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to transportation are based on applicable criteria in the Appendix G of the CEQA Guidelines and the City's CEQA Significance Determination Thresholds (City of San Diego 2023). A significant impact could occur if implementation of the CRMP Phase 1 would:

- a. Conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities;
- b. Result in vehicle miles traveled (VMT) exceeding thresholds identified in the City of San Diego Transportation Study Manual;
- c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- d. Result in inadequate emergency access.

5.11.3 Impact Analysis

5.11.3.1 Issue 1: Transportation System Performance

Would the proposed CRMP Phase 1 conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities?

This issue focuses on whether each project on the six priority sites would conflict with an adopted program, plan, ordinance, or policy related to the transportation system. For this analysis, a significant transportation impact could occur if each project would conflict with adopted transportation programs, plans, ordinances, or policies.

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would construct a 14-foot-wide, 1,200-foot-long multi-use path for cyclists and pedestrians fronted by elevated sand dunes along the beach on the Ocean Beach – Dog Beach project site (refer to Figures 3-3 and 3-4). The proposed multi-use path would be constructed as a Class I bike path and connect with the existing terminus of the San Diego River Bikeway to the

north, which is also a Class I bike path, and the proposed multi-use path on the Ocean Beach – Pier project site to the south. The proposed multi-use path on the Ocean Beach – Pier project site would connect to the existing paved pedestrian path adjacent to Ocean Beach Veteran's Plaza. A Class I bike path is a paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic to reduce risk of collisions. A concrete header curb would line the entire length of the eastern edge of the multi-use path to separate the path from the landside facilities, particularly vehicles in parking lots and park spaces. The western edge of the path is anticipated to be stabilized via a low concrete seatwall header that would prevent blowing sand from the beach and proposed sand dune from covering the proposed multi-use path.

As described, the Pilot Project would improve bicycle and pedestrian connectivity with the existing bicycle and pedestrian facilities and would not involve changes to any existing transit or roadway facilities. The Pilot Project's consistency with applicable transportation plans is discussed below.

General Plan Mobility Element

The Pilot Project is consistent with the City's General Plan Mobility Element policies and programs. The purpose of the Mobility Element is to improve mobility through development of a balanced, multi-modal transportation network. As described previously, the Pilot Project would support the City's General Plan Mobility Element goals by improving bicycle and pedestrian connectivity with the existing transportation network and encouraging the use of non-vehicular modes of transportation.

Bicycle Master Plan

The goals of the City's Bicycle Master Plan are to create (1) a city where bicycling is a viable travel choice, particularly for trips that are less than 5 miles; (2) a safe and comprehensive local and regional bikeway network; and (3) environmental quality, public health, recreation, and mobility benefits through increased bicycling. As described previously, the Pilot Project would support the City's Bicycle Master Plan goals by improving bicycle and pedestrian connectivity with the existing transportation network and encouraging the use of non-vehicular modes of transportation.

Ocean Beach Community Plan and Local Coastal Program Land Use Plan

The Ocean Beach Community Plan and Local Coastal Program Land Use Plan (Ocean Beach Community Plan) Mobility Element include the following goals applicable to the Pilot Project:

- Enhancing the street system for bicycles and pedestrians to improve local mobility;
- Reduce vehicular traffic demand placed on the street network by encouraging the use of alternative modes of transportation, including public transit, bicycles, and walking;

- Maintain and enhance the pedestrian and bicycle interface with beach and commercial areas and the neighborhoods by ensuring that vehicular access to such areas does not compromise pedestrian and bicycle safety; and
- Implement a network of bicycle facilities to connect the neighborhoods and major activity centers and attractions within and outside the community.

The Pilot Project would directly enhance Class I bike path connectivity to improve local mobility choices and encourage bicycle use and walking.

SANDAG Riding to 2050: San Diego Regional Bike Plan and 2021 Regional Plan

The Pilot Project would not conflict with SANDAG's Riding to 2050: San Diego Regional Bike Plan (Regional Bike Plan). The Pilot Project would meet the Regional Bike Plan's goals of increasing levels of bicycling, improving bicycling safety, encouraging complete streets, and supporting reductions in emissions through the provision of a new Class I bike path that connects with the existing Class I bike path. By supporting the Regional Bike Plan, the Pilot Project would also be consistent with implementation of the 2021 Regional Plan, calling for more transportation choices and a balanced regional transportation system. Furthermore, the proposed Class I bike path would be consistent with the City's Climate Action Plan (CAP) strategy to increase non-automobile commuter travel modes share. The City's CAP helps achieve the legislative intent of Senate Bill (SB) 743 to reduce greenhouse gas emissions through VMT.

Conclusion

The Pilot Project would benefit the area's transportation system and would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The terraced seatwall would primarily support existing users of the area and would not increase demands for existing multi-modal transportation network. Therefore, this option would not modify any on- or off-site transportation network, including transit, roadways, bicycle, and pedestrian facilities. Impacts during construction would be temporary and would not conflict with the adopted program, plan, ordinance, or policy addressing the transportation system. Therefore, plan, ordinance, or policy addressing the transportation system.

The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). This option would align the parking lot farther from coastal flood hazards, thereby creating a safer environment for users of the parking lot. Although specific design details of the reconfigured parking lot are not available at this time, the parking lot and associated access driveways would be designed and constructed to meet City's standards. The purpose of various transportation and mobility-related plans and programs and goals contained therein are intended to create a balanced, multi-modal transportation network and reduce vehicular traffic demand placed on the street network by enhancing mobility choices, including public transit, bicycle, and walking in alignment with SB 743 to reduce greenhouse gas emissions. Therefore, this option would not impact the existing mobility network other than to reconfigure the existing parks and parking areas on the La Jolla Shores project site to support the existing passive recreational uses. No net decrease in total parking areas would result from La Jolla Shores project implementation. The waterfront park would replace the existing La Jolla Shores and Kellogg Parks and therefore, would not substantially increase the amount of vehicular or nonvehicular traffic compared to current conditions on roadway facilities. Therefore, the La Jolla Shores project would have a less than significant impact on an adopted program, plan, ordinance, or policy addressing the transportation system. Impacts during construction would be temporary and would not conflict with any of the adopted program, plan, ordinance, or policy addressing the transportation system. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project provides a hybrid nature-based solution that includes an elevated sand dune, a restored dune area, and optional pedestrian access (refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings). The elevated dune and restoration of the existing dune area would not increase any vehicular or non-vehicular traffic to the site and would not impact an adopted program, plan, ordinance, or policy addressing the transportation system.

The optional pedestrian access component of the Pacific Beach – Tourmaline Surf Park project includes covering or undergrounding the existing drainage culvert along the northern border of the Pacific Beach – Tourmaline Surf Park project site to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. This optional component of the Pacific Beach – Tourmaline Surf Park project would not generate additional non-vehicular traffic to the Pacific Beach – Tourmaline Surf Park project site but would improve pedestrian safety from the parking lot to the beach. Tourmaline Street provides a 5-foot sidewalk on both sides of the street, which terminate at the parking lot. A dedicated access across the parking lot would be consistent with the

City's General Plan Mobility Element goal to improve mobility through development of a balanced, multi-modal transportation network. The optional pedestrian access component of the Pacific Beach – Tourmaline Surf Park project would support the existing pedestrian network from Tourmaline Street to the beach. This optional component would also be consistent with the Pacific Beach Community Plan and Local Coastal Program Land Use Plan (Pacific Beach Community Plan) Circulation Element goals to create safe, pleasant, and useful pedestrian and bicycle pathways to connect the residential neighborhood of Pacific Beach and to remove barriers that impede pedestrian, bicycle, and disabled access (City of San Diego 1995). The Pacific Beach – Tourmaline Surf Park project would have no impact on the City's Bicycle Master Plan or SANDAG's Regional Bike Plan because it would not affect existing or future bicycle facilities. Because the Pacific Beach – Tourmaline Surf Park project would be consistent with the City's General Plan Mobility Element and Pacific Beach Community Plan Circulation Element, the Pacific Beach – Tourmaline Surf Park project would be consistent with SANDAG's 2021 Regional Plan calling for more transportation choices and a balanced regional transportation system. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north-south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching northsouth along the project site, similar to the Dune Design Option. This proposed sand dune is designed to mimic the elevation of the existing winter berm built along the beach annually, and appropriate openings and passageways would be provided into the dune structure to ensure public access to the beach. The elevated sand dune would be constructed similar to the existing annual winter berm on the Mission Beach project site, and the Mission Beach project would make this seasonal feature a permanent feature for better flood protection. The Mission Beach project would be constructed along Ocean Front Walk, designated as a Class I bike path by the City's Bicycle Master Plan. The Dune Design Option would not modify this existing bicycle facility. The Perched Beach Design Option would realign a 350-foot section of this existing bicycle facility; however, bicycle and pedestrian access would be maintained. Therefore, the Mission Beach project would not conflict with the City's General Plan Mobility Element, Bicycle Master Plan, and Mission Beach Precise Plan and Local Coastal Program Land Use Plan (Mission Beach Precise Plan) or SANDAG's Regional Bike Plan and 2021 Regional Plan. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would construct a new 1,200-foot multi-use path for cyclists and pedestrians fronted by an elevated vegetated sand dune. The multi-use path would be 14-feet-wide at the northern end of the Ocean Beach – Pier project site where it would connect to the Ocean Beach – Dog Beach project site and would slowly transition to a 10-foot width where it would connect with the existing paved pedestrian path adjacent to Ocean Beach Veterans Plaza. As with the proposed multi-use path on the Ocean Beach – Dog Beach project site, a concrete header curb and low concrete seatwall header would be provided along the entire length of the eastern and western edges of the multi-use path, respectively. Additionally, the multi-use path and the sand dune structure would provide openings and pathways for emergency vehicle and public access to the beach. The existing parking lot would be maintained (refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings).

Because this Class I bike path would continue from the Class I bike path along the Ocean Beach – Dog Beach project site, this project would have similar beneficial impacts as the Pilot Project and would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system—namely, the City's General Plan Mobility Element, Bicycle Master Plan, and Ocean Beach Community Plan Mobility Element or SANDAG's Regional Bike Plan and 2021 Regional Plan. Refer to the discussion in the Pilot Project: Ocean Beach – Dog Beach section above. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project site is within the Sunset Cliffs Natural Park - Linear Park, an approximately 1.2-mile-long trail adjacent to Sunset Cliffs Boulevard to the east and along a cliff to the west. The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled jersey barriers) that are easily moved and modified. The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). No formal bike lanes exist under the existing conditions, and due to the generally narrow space between guardrail and cliff edge, pedestrians must walk along/in the road for certain segments. Therefore, the Sunset Cliffs project would provide better and safer mobility and access for bicycles. The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures along the northern portion of the project site. The optional parking lot reconfiguration would convert and reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard. Specific parking layout opportunities would be evaluated to consider the space available, optimize the space gained and flow of traffic, and reduce conflicts with bicyclists. The

goal of this optional component would be to maintain and/or increase the existing number of parking spaces provided in these four parking lots. This reconfiguration would have multiple benefits, including aligning the parking lot areas further inland and away from coastal erosion hazards, serving as a traffic calming measure, and providing more space for recreational opportunities along Sunset Cliffs Natural Park – Linear Park. Therefore, the Sunset Cliffs project would provide better and safer mobility and access for vehicles, bicycles, and pedestrians. The Sunset Cliffs project's consistency with applicable transportation plans is discussed below.

General Plan Mobility Element

The Sunset Cliffs project is consistent with the City's General Plan Mobility Element policies and programs. The purpose of the Mobility Element is to improve mobility through development of a balanced, multi-modal transportation network. The Sunset Cliffs project would support the City's General Plan Mobility Element goals by creating a separated multi-use path, improving bicycle and pedestrian safety, and encouraging the use of non-vehicular modes of transportation. The Sunset Cliffs project could result in impacts to vehicular circulation due to transitioning the roadway to a one-lane vehicular travel, putting increased pressure on other nearby roadways, such as Cordova Street, Cornish Drive, Amiford Drive, and Hill Street, for vehicles to exit the area. However, the Sunset Cliffs project would initially be implemented through temporary pilot (trial) phases to monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration for the best design approach and to minimize congestion. The Sunset Cliffs project would also require one or more traffic studies to better inform the roadway design and identify potential impacts and mitigation strategies. Although vehicular circulation would be redistributed, the Sunset Cliffs project itself would not create additional trips and would improve non-vehicular accessibility (i.e., bicycle circulation and pedestrian circulation) due to improving safety for bicyclists and pedestrians through the separated multi-use path for bicyclists and pedestrians. Additionally, although traffic delays may occur in certain intersections and roadways due to redistribution of vehicular traffic, automobile delays do not constitute a significant environmental impact under CEQA or the City's Significance Thresholds. The Sunset Cliffs project would be reconfigured to maximize recreational benefits and safety of vehicular and non-vehicular modes of transportation and would not conflict with the City's General Plan Mobility Element.

Bicycle Master Plan

The goals of the City's Bicycle Master Plan are to create (1) a city where bicycling is a viable travel choice, particularly for trips that are less than 5 miles; (2) a safe and comprehensive local and regional bikeway network; and (3) environmental quality, public health, recreation, and mobility benefits through increased bicycling. The Sunset Cliffs project would support the City's Bicycle Master Plan goals by creating a separated multi-use path, improving bicycle and pedestrian safety, and encouraging the use of non-vehicular modes of transportation.

Peninsula Community Plan and Local Coastal Program Land Use Plan

The Peninsula Community Plan Transportation and Shoreline Access Element includes the following objectives applicable to mobility of the community plan area:

- Vehicular Circulation
 - Provide increased access from Peninsula residential areas to major commercial areas, employment centers and regional activity centers.
 - Relieve bottlenecks which limit access to the Peninsula community.
 - Improve accessibility for the elderly, handicapped, children and other Peninsula residents who lack access to automobiles.
- Bicycle Circulation
 - Develop and maintain a system of bikeways which connects the neighborhoods within the Peninsula community and provides efficient access to the larger San Diego region.
- Pedestrian Circulation and Shoreline Access
 - Complete the system of public sidewalks, paths and stairways to provide safe and efficient pedestrian access to the residential, commercial and recreational areas of the Peninsula community.
 - Public access to the bay and ocean should be provided to the maximum extent feasible consistent with resource protection, protection of private property rights, public safety and size of beaches.

The Sunset Cliffs project could result in impacts to vehicular circulation due to transitioning the roadway to a one-lane vehicular travel, putting increased pressure on other nearby roadways, such as Cordova Street, Cornish Drive, Amiford Drive, and Hill Street, for vehicles to exit the area. However, the Sunset Cliffs project would be implemented through temporary pilot (trial) phases to monitor the program and understand traffic flow for the best design approach and to minimize congestion. The Sunset Cliffs project would also require one or more traffic studies to better inform the roadway design and identify potential impacts and mitigation strategies. Although vehicular circulation would be redistributed, the Sunset Cliffs project itself would not create additional trips and would improve non-vehicular accessibility (i.e., bicycle circulation and pedestrian circulation) due to improving safety for bicyclists and pedestrians through the separated multi-use path for bicyclists and pedestrians. Additionally, although traffic delays may occur in certain intersections and roadways due to redistribution vehicular traffic, automobile delays do not constitute a significant environmental impact under CEQA or the City's Significance Thresholds. The Sunset Cliffs project includes an optional component to reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard. However, the goal of this optional component would be to maintain and/or increase the existing number of parking spaces provided in these four parking lots and to align the parking lot areas further inland and away from coastal erosion hazards. There is no public transit along the project site. The Sunset Cliffs project would be reconfigured to maximize recreational benefits and safety of vehicular and non-vehicular modes of transportation and would not conflict with the objectives of the Peninsula Community Plan Transportation and Shoreline Access Element.

SANDAG Riding to 2050: San Diego Regional Bike Plan and 2021 Regional Plan

The Sunset Cliffs project would not conflict with SANDAG's Regional Bike Plan. The Sunset Cliffs project would meet the Regional Bike Plan's goals of increasing levels of bicycling, improving bicycling safety, encouraging complete streets, and supporting reductions in emissions through providing the separated multi-use path for bicyclists and pedestrians. By supporting the Regional Bike Plan, the Sunset Cliffs project would also be consistent with implementation of SANDAG's 2021 Regional Plan, calling for more transportation choices and a balanced regional transportation system. Furthermore, the proposed multi-use path for pedestrian and bicycle transportation would be consistent with the City's CAP strategy to increase non-auto commuter travel modes share. The City's CAP helps achieve the legislative intent of SB 743 to reduce greenhouse gas emissions through VMT.

Conclusion

The Sunset Cliffs project would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system. Impacts would be less than significant, and no mitigation is required.

5.11.3.2 Issue 2: Vehicle Miles Traveled

Would the proposed CRMP Phase 1 result in vehicle miles traveled (VMT) exceeding thresholds identified in the City of San Diego Transportation Study Manual?

The City's Transportation Study Manual requires a project to determine if it would cause an increase in regional VMT. The Transportation Study Manual provides screening criteria where a project is presumed to have a less than significant VMT impact due to project characteristics and location. These screening criteria include development located in a VMT efficient area, small projects (generating less than 300 daily trips), locally serving facilities, affordable housing, mixed-use projects, and redevelopment projects (City of San Diego 2020). Given the nature of the development proposed under CRMP Phase 1 (e.g., nature-based solutions, multi-modal improvements, drainage improvements, habitat enhancements, and parking reconfigurations), these screening criteria are not appropriate to apply to the CRMP Phase 1. Instead, the City has determined that a qualitative discussion pursuant to CEQA Guidelines, Section 15064.3(b)(3), is most suitable to demonstrate that the proposed CRMP Phase 1's VMT impacts would be less than significant.

Pilot Project: Ocean Beach - Dog Beach

The Pilot Project on the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north to south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1, Site Conditions and Constraints, for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

Construction activities associated with the Pilot Project would be short-term and temporary. For example, the air quality modeling conducted for the Pilot Project using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.23, estimated that the Pilot Project would generate a maximum of 53 daily trips during grading and excavation activities. Other phases of construction would generate fewer vehicle trips. The CalEEMod conservatively estimated construction of the Pilot Project would occur over a period of approximately 140 days. Once construction activities for the Pilot Project are completed, construction-related vehicle trips to and from the project site would cease.

Operationally, the Pilot Project would not change the existing land use of the project site and would not likely attract or generate more than a negligible amount of new vehicle trips to the project site. Additionally, the proposed multi-use path would have a beneficial impact on VMT by improving Class I bike path connectivity and pedestrian access along the Ocean Beach coast. Further, the optional express shuttle stop within the parking lot would improve regional access to the coast and reduce regional VMT associated with vehicle trips to the project site. Therefore, the Pilot Project would have a less than significant VMT impact and would not require further VMT analysis. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer

to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1, La Jolla Shores, for a complete description of the La Jolla Shores project.

Construction activities associated with the La Jolla Shores project would be short term and temporary. For example, the air quality modeling conducted for the Pilot Project using the CalEEMod, Version 2022.1.1.23, estimated that the La Jolla Shores project would generate a maximum of 42 daily trips during grading and excavation activities. Other phases of construction would generate fewer vehicle trips. The CalEEMod conservatively estimated construction of the La Jolla Shores project would occur over a period of approximately 140 days. Once construction activities for the La Jolla Shores project are completed, construction-related vehicle trips to and from the project site would cease.

Operationally, the La Jolla Shores project would not change the existing land use of the project site and would not likely attract or generate more than a negligible amount of new vehicle trips to the project site. Consequently, the La Jolla Shores project would have a less than significant VMT impact and would not require further VMT analysis. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into a sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the northern edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2, Pacific Beach – Tourmaline Surf Park, for a complete description of the Pacific Beach – Tourmaline Surf Park project.

Construction activities associated with the Pacific Beach – Tourmaline Surf Park project would be short-term and temporary. For example, the air quality modeling conducted for the Pacific Beach – Tourmaline Surf Park project using the CalEEMod, Version 2022.1.1.23, estimated that the Pacific Beach – Tourmaline Surf Park project would generate a maximum of 37 daily trips during grading and excavation activities. Other phases of construction would generate fewer vehicle trips. The CalEEMod conservatively estimated construction of the Pacific Beach – Tourmaline Surf Park project would occur over a period of approximately 140 days. Once construction activities for the Pacific Beach – Tourmaline Surf Park project are completed, construction-related vehicle trips to and from the project site would cease.

Operationally, the Pacific Beach – Tourmaline Surf Park project would not change the existing land use of the project site and would not likely attract or generate more than a negligible amount of new vehicle trips to the project site. Consequently, the Pacific Beach – Tourmaline Surf Park project would have a less than significant VMT impact and would not require further VMT analysis. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3, Mission Beach, for a complete description of the Mission Beach project.

Construction activities associated with the Mission Beach project would be short term and temporary. For example, the air quality modeling conducted for the Mission Beach project using the CalEEMod, Version 2022.1.1.23, estimated that the Mission Beach project would generate a maximum of 50 daily trips during grading and excavation activities. Other phases of construction would generate fewer vehicle trips. The CalEEMod conservatively estimated construction of the Mission Beach project would occur over a period of approximately 140 days. Once construction activities for the Mission Beach project are completed, construction-related vehicle trips to and from the project site would cease.

Operationally, the Mission Beach project would not change the existing land use of the project site and would not likely attract or generate more than a negligible amount of new vehicle trips to the project site. Additionally, the proposed sand dunes would improve Class I bike path connectivity and pedestrian accessibility along Ocean Front Walk during and following heavy storms. Consequently, the Mission Beach project would have a less than significant VMT impact and would not require further VMT analysis. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4, Ocean Beach – Pier, for a complete description of the Ocean Beach – Pier project.

Construction activities associated with the Ocean Beach – Pier project would be short term and temporary. For example, the air quality modeling conducted for the Pilot Project using the CalEEMod, Version 2022.1.1.23, estimated that the Ocean Beach – Pier project would generate a maximum of 42 daily trips during grading and excavation activities. Other phases of construction would generate fewer vehicle trips. The CalEEMod conservatively estimated construction of the Ocean Beach – Pier project would occur over a period of approximately 140 days. Once construction activities for the Ocean Beach – Pier project are completed, construction-related vehicle trips to and from the project site would cease.

Operationally, the Ocean Beach – Pier project would not change the existing land use of the project site and would not likely attract or generate more than a negligible amount of new vehicle trips to the project site. Additionally, the proposed multi-use path would have a beneficial impact on VMT by improving Class I bike path connectivity and pedestrian access along the Ocean Beach coast. Consequently, the Ocean Beach – Pier project would have a less than significant VMT impact and would not require further VMT analysis. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measure. Refer to Section 3.4.4.5, Sunset Cliffs, for a complete description of the Sunset Cliffs project.

Construction activities associated with the Sunset Cliffs project would be short term and temporary. For example, the air quality modeling conducted for the Pilot Project using the CalEEMod, Version 2022.1.1.23, estimated that the Sunset Cliffs project would generate a maximum of 51 daily trips during demolition of the concrete parking lots on the northern portion of the project site. Other phases of construction would generate fewer vehicle trips. The CalEEMod conservatively estimated construction of the Sunset Cliffs project would occur over a period of approximately 113 days. Once construction activities for the Sunset Cliffs project are completed, construction-related vehicle trips to and from the project site would cease.

Operationally, the Sunset Cliffs project would not change the existing land use of the project site and would not likely attract or generate more than a negligible amount of new vehicle trips to the project site. Additionally, the proposed road reconfiguration would likely have a beneficial impact on VMT by improving bike connectivity, pedestrian access, and trail connectivity along Sunset Cliffs Boulevard and Sunset Cliffs Natural Park – Linear Park. Consequently, the Sunset Cliffs project would have a less than significant VMT impact and would not require further VMT analysis. Impacts would be less than significant, and no mitigation is required.

5.11.3.3 Issue 3: Hazardous Design Features

Would the proposed CRMP Phase 1 substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project on the Ocean Beach – Dog Beach project site includes a multi-use path, an elevated sand dune, restoration of existing dune habitat, and optional restroom relocation and express shuttle stop; therefore, the Pilot Project does not propose any uses that would result in incompatible roadway use, such as the operation of farm equipment or other special equipment. Additionally, the Pilot Project would not modify design features of any vehicular access to the CRMP Phase 1 area that could create sharp curves or dangerous intersections. The proposed multi-use path would be a Class I bike path, physically separated from vehicular traffic, and the optional express shuttle stop would improve access to the beach and reduce parking lot congestion and vehicle trips to the Ocean Beach – Dog Beach project site. Therefore, implementation of the Pilot Project would not result in increased hazards due to a design feature or incompatible uses. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Both design options of the La Jolla Shores project do not propose uses that would result in incompatible roadway use, such as the operation of farm equipment or other special equipment. Vehicular access to the La Jolla Shores project site would continue to be provided from Camino Del Oro, the La Vereda pedestrian path, and Vallecitos. Under the Amphitheater Design Option, no changes to the on- or off-site roadways and/or driveways would occur. Therefore, this option would not result in increased hazards due to a design feature.

Under the Reconfigured Park Design Option, the reconfigured parking lot would include new access features such as new driveways and crosswalks. Design details and the exact placement of any new driveways and crosswalks are not available. However, the reconfigured parking lot would be provided on the La Jolla Shores project site, and the project site does not include any sharp curves or dangerous intersection that could create safety hazards. Improvements would be constructed in accordance with the standards in the San Diego Municipal Code, Standard Drawings

(Appendix H of the City's Land Development Manual) (City of San Diego 2021), and Street Design Manual (Appendix I of the City's Land Development Manual) (City of San Diego 2017) as appropriate. Therefore, implementation of the La Jolla Shores project would not result in increased hazards due to a design feature or incompatible uses. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project provides a hybrid nature-based solution that includes an elevated sand dune, a restored dune area, and optional pedestrian access and underground stormwater vault. The components of the Pacific Beach – Tourmaline Surf Park project would not result in incompatible roadway use, such as the operation of farm equipment or other special equipment, or modify design features of any vehicular access to the Pacific Beach – Tourmaline Surf Park project site to increase hazards. Instead, the optional pedestrian access within the existing parking lot would improve pedestrian safety to the beach and would also provide better connectivity to the two underutilized picnic areas. Therefore, implementation of the Pacific Beach – Tourmaline Surf Park project would not result in increased hazards due to a design feature or incompatible uses. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project would construct an elevated sand dune, which would mimic the existing winter berm program and make this seasonal feature a permanent fixture on the site. In addition, the Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland. The Mission Beach project does not propose any use that would result in incompatible roadway use, such as operation of farm equipment or other special equipment or modify design features of any vehicular access to the CRMP Phase 1 area to increase hazards. The Mission Beach project site is along the existing Class I bike path, Ocean Front Walk (boardwalk), and the boardwalk is backed by a seawall with seven gaps, which provide access between the beach and Ocean Front Walk. The Mission Beach project would not block or obstruct existing breaks to the beach from the boardwalk and would be designed to provide adequate public and emergency access. The Perched Beach Design Option would realign a 350-foot section of this existing bicycle facility; however, bicycle and pedestrian access would be maintained along this realigned section. Therefore, implementation of the Mission Beach project would not result in increased hazards due to a design feature or incompatible uses. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

As with the Pilot Project, the Ocean Beach – Pier project does not propose any uses that would result in incompatible roadway use, such as the operation of farm equipment or other special equipment,

and would not modify design features of any vehicular access to the CRMP Phase 1 area that could create sharp curves or dangerous intersections. The proposed multi-use path would be a Class I bike path, physically separated from vehicular traffic, and the optional express shuttle stop on the Ocean Beach – Dog Beach project site would improve access to the beach and reduce parking lot congestion and vehicle trips to the Ocean Beach – Pier project site. Therefore, implementation of the Ocean Beach – Pier project would not result in increased hazards due to a design feature or incompatible uses. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project involves a road reconfiguration program on a 0.64-mile portion of the existing roadway. The Sunset Cliffs project does not propose any use that would result in incompatible roadway use, such as operation of farm equipment. The Sunset Cliffs project site currently has no formal bike lanes and only sharrow designations for the roadway. Due to the generally narrow space between guardrail and cliff edge, pedestrians must walk along/in the road for certain segments. Therefore, implementation of the Sunset Cliffs project would improve safety by converting the roadway into a one-way, southbound vehicular travel lane and providing a separate bidirectional multi-use (i.e., bicycle and pedestrian) path from the one-way vehicular travel lane. The roadway improvements would be provided without compromising the structural integrity of the cliff or current infrastructure. Furthermore, the project would initially be implemented through temporary pilot phases where lessons learned could be iterated back into the project design. This means that the road reconfiguration and separated multi-use path could be simulated through cones, signage, and other temporary traffic calming devices (e.g., water filled Jersey barriers) that are easily moved and modified.

The road reconfiguration could be implemented on a single- or multiple-weekday or weekend basis coupled with a substantial public outreach and engagement effort to better inform the design of a more permanent solution. Therefore, the Sunset Cliffs project would be able to provide optimal design that improves safety, usability, mobility, and access for all roadway users. Implementation of the Sunset Cliffs project through pilot phases would ensure that design features of the Sunset Cliffs project do not increase safety hazards in the area.

The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures along the northern portion of the project site. The optional parking lot reconfiguration would convert and reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard. Specific parking layout opportunities would be evaluated to consider the space available, optimize the space gained and flow of traffic, and reduce conflicts with bicyclists. Therefore, realignment of the existing parking would not increase safety hazards in the area. Impacts would be less than significant, and no mitigation is required.

5.11.3.4 Issue 4: Emergency Access

Would the proposed CRMP Phase 1 result in inadequate emergency access?

Inadequate emergency access and egress can occur as a result of an incomplete or not fully interconnected roadway network, such as inadequate roadway widths, turning radii, dead-end or gated roads, one-way roads, single ingress and egress routes, or other factors.

Pilot Project: Ocean Beach – Dog Beach

Vehicular access to the Ocean Beach – Dog Beach project site would continue to be provided from existing roadways, namely Voltaire Street, Brighton Avenue, and West Point Loma Boulevard/Spray Street. No modifications to the existing vehicular access are proposed. The proposed multi-use path and dune structures would include emergency access points to the beach to ensure emergency vehicles are not hindered and appropriate public access is maintained. The optional express shuttle stop that may run from an appropriate transportation center to the Ocean Beach – Dog Beach project site could reduce parking lot congestion to improve emergency access, as direct access to the project site is provided through the parking lot. Therefore, the Pilot Project would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Under the Amphitheater Design Option, there would be no changes to the existing on- and off-site vehicular and/or pedestrian access network. Therefore, the La Jolla Shores project would not result in inadequate emergency access.

Under the Reconfigured Park Design Option, the reconfigured parking lot would include new access features such as new driveways and crosswalks. Design details and the exact placement of any new driveways and crosswalks are not available. However, the reconfigured parking lot and access features would be designed to meet the City's engineering standards, including providing adequate emergency vehicle access to meet the California Fire Code, Section 503, which includes requirements for emergency access. The La Jolla Shores project site would continue to be accessed from Camino Del Oro, the La Vereda pedestrian path, and Vallecitos. The La Jolla Shores project would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Vehicular access to the Pacific Beach – Tourmaline Surf Park project site would continue to be provided from Tourmaline Street, and no changes to Tourmaline Street or other roadway network would occur. Additionally, the Pacific Beach – Tourmaline Surf Park project would not increase vehicular or non-vehicular traffic to the Pacific Beach – Tourmaline Surf Park project site.

Therefore, it would have no impact to on or off-site emergency access. Any impacts during construction would be temporary and would not result in a permanent impact. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project would not modify or impact any of the off-site vehicular access design to the Mission Beach project site or increase vehicular or non-vehicular traffic to the project site. Project site access would continue to be provided from Mission Bay Drive/Ventura Place and San Fernando Place, at the northern and southern terminus of the Mission Beach project site, and from the existing parking lots. Furthermore, as discussed under Section 5.11.3.3, Issue 3: Hazardous Design Features, the Mission Beach project would not block or obstruct existing breaks to the beach from the boardwalk and would be designed to provide adequate public and emergency access. The Perched Beach Design Option would realign a 350-foot section of this existing bicycle facility; however, bicycle, pedestrian, and emergency access would be maintained along this realigned section. Therefore, the Mission Beach project would not result in inadequate emergency access. Any impacts during construction would be temporary and would not result in a permanent impact. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project site would be accessible through existing roadways, namely Cape May Avenue, Saratoga Avenue, Santa Monica Avenue, and Newport Avenue, which run in a northwest–southeast direction, all of which are connected by Abbott Street. No modifications to existing vehicular access are proposed. The proposed multi-use path and dune structures would include emergency access points to the beach to ensure emergency vehicles are not hindered and appropriate public access is maintained. Therefore, the Ocean Beach – Pier project would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would convert an approximately 0.64-mile portion of two-lane, bidirectional vehicular travel along Sunset Cliffs Boulevard into one lane of southbound vehicular travel with a separate bidirectional multi-use (i.e., bicycle and pedestrian) path. This road reconfiguration would occur from the intersection of Sunset Cliffs Boulevard, Guizot Street, and Cordona Street to the north to the intersection of Sunset Cliffs Boulevard and Ladera Street to the south. The one-way traffic flow would continue along Ladera Street from its intersection with Sunset Cliffs Boulevard to its intersection with Cordova Street. Although the Sunset Cliffs project would convert a north–south bidirectional vehicular roadway into a southbound one-way roadway, there are three intersections (Sunset Cliffs Boulevard at Hill Street, Monaco Street, and Carmelo Street) on the Sunset Cliffs project site that vehicles can exit from the one-way roadway to travel to the opposite direction via other north–south directional streets such as Cordova Street, Cornish

Drive, and Amiford Drive. Therefore, emergency response vehicles would be able to reach sections of Sunset Cliffs Boulevard, and the Sunset Cliffs project would not result in inadequate emergency access.

The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures along the northern portion of the project site. The optional parking lot reconfiguration would convert and reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard. Specific parking layout opportunities would be evaluated to consider the space available, optimize the space gained and flow of traffic, and reduce conflicts with bicyclists. Additionally, the realigned parking would be designed to meet the City's engineering standards, including providing adequate emergency vehicle access to meet the California Fire Code, Section 503, which includes requirements for emergency access. Therefore, realignment of the existing parking would not result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

5.11.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project on the Ocean Beach – Dog Beach project site would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. The Pilot Project is presumed to have a less than significant VMT impact and would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual (City of San Diego 2020). Implementation of the Pilot Project would not substantially increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. The La Jolla Shores project is presumed to have a less than significant VMT impact and would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual (City of San Diego 2020). Implementation of the La Jolla Shores project would not substantially increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit,

roadways, bicycle, and pedestrian facilities. The Pacific Beach – Tourmaline Surf Park project is presumed to have a less than significant VMT impact and would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual (City of San Diego 2020). Implementation of the Pacific Beach – Tourmaline Surf Park project would not substantially increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. The Mission Beach project is presumed to have a less than significant VMT impact and would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual (City of San Diego 2020). Implementation of the Mission Beach project would not substantially increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. The Ocean Beach – Pier project is presumed to have a less than significant VMT impact and would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual (City of San Diego 2020). Implementation of the Ocean Beach – Pier project would not substantially increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would not conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. The Sunset Cliffs project is presumed to have a less than significant VMT impact and would not result in VMT exceeding thresholds identified in the City's Transportation Study Manual (City of San Diego 2020). Implementation of the Sunset Cliffs project would not substantially increase hazards due to a design feature or incompatible uses or result in inadequate emergency access. Impacts would be less than significant, and no mitigation is required.

5.11.5 Mitigation Framework

Impacts to transportation would be less than significant; therefore, no mitigation is required.





Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots








Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots



Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots



Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots



Figure 5.11-2. L-Shaped Parking Lot on the Ocean Beach – Dog Beach Project Site



Figure 5.11-3. San Diego River Bikeway



Figure 5.11-4. La Vereda Multi-Use Pedestrian and Bicycle Path on the La Jolla Shores Project Site



Figure 5.11-5. Tourmaline Street Near La Jolla Boulevard Facing West



Figure 5.11-6. Ocean Front Walk Facing Southwest



Figure 5.11-7. Pedestrian Path at Ocean Beach – Pier Project Site Facing Northwest



Figure 5.11-8. Parking Lot Along Sunset Cliffs Boulevard



Figure 5.11-9. Sunset Cliffs Coastal Trail

5.12 Tribal Cultural Resources

This section of the Programmatic Environmental Impact Report (PEIR) describes the Tribal cultural setting and existing conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to Tribal Cultural Resources that could result from implementation of the proposed CRMP Phase 1.

The analysis in this section is based on review of available plans and technical information, including the City of San Diego's (City's) General Plan Historic Preservation Element (2023a), the Cultural Resources Technical Report (CRTR) prepared by Harris & Associates (2024) (Appendix D) for the CRMP Phase 1, and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023b).

5.12.1 Existing Conditions

5.12.1.1 Tribal Cultural Setting

Paleoindian Period (Pre-5,500 BC)

Several terms are used for the early occupation of the San Diego region and include Paleoindian Period, Early Archaic Period, Initial Period, and Scraper Maker Period (Moratto 1984). This period dates from 9,000 to 5,500 BC (Chartkoff and Chartkoff 1984; Moratto 1984; Rogers 1966; Taylor and Meighan 1978; Warren and True 1961). Early humans have been characterized as an early nomadic, hunting culture whose settlements were located on mesas and ridge tops and in deserts (Erlandson and Colton 1991; Rogers 1966; Wallace 1978; Warren et al. 1961). During this period, inhabitants relied on large game for subsistence (Rogers 1966; Warren et al. 1961) and produced "finely worked blades, spear points, choppers, and scrapers out of fine-grained volcanics" (Carrico 1977). In addition, leaf-shaped knives, foliate to ovoid bifaces, foliate to short-bladed shoulder points, crescents, engraving tools, core hammers, pebble hammers, and cores were part of the tool assemblage (Moratto 1984; Wahoff and Dolan 2000). Pottery and milling stones were missing from the assemblage, confirming the assumption that hunting was an economic focus for the culture (Moriarty 1967; Warren and True 1961). Because the tool assemblage was similar to desert cultures of the Mojave Desert, it is believed that this culture migrated west from the desert into California (Gallegos 1995; Rogers 1939). However, no single hypothesis is universally accepted. Other hypotheses identify the movement of people into California from the south and north down the coast (Taylor and Meighan 1978; Chartkoff and Chartkoff 1984).

Archaic (8,000 BC-AD 500)

According to Hale et al. (2018), "the more than 1,500-year overlap between the presumed age of Paleoindian occupations and the Archaic Period highlights the difficulty in defining a cultural chronology in the San Diego region." The Archaic Period contains assemblages from the La Jolla

complex, Millingstone Horizon, and Encinitas Tradition. This period is characterized by the presence of dart points, milling equipment, scattered hearths, shell middens, and flexed burials (Carrico 1977). Subsistence strategies placed an emphasis on gathering, possibly as a result of environmental change (Wahoff and Dolan 2000; Wallace 1978). The assemblage was composed of milling implements and cobble/core-based tools. Mortuary goods included shell beads and ornaments, points, and milling implements. Wallace (1978) interpreted archaeological sites of this period as an indication of an increase in population and permanence. Site types included coastal shell habitation bases, quarries, resource exploitation, and milling (Gallegos 1995). The sites are typified by an abundance of shellfish remains and are situated near sloughs and lagoons and on the open coast (Carrico 1977; Masters and Gallegos 1997; Moratto 1984; Wallace 1978). An inland manifestation identified as the Pauma complex is known to have existed (True 1958). Unlike the coastal people, this complex occupied "transverse valleys and sheltered canyons of inland San Diego County, ha[d] an emphasis on hunting and gathering, had a greater diversity of tool types, and lacked shellfish remains" (Masters and Gallegos 1997:12).

Similar to the Paleoindian Period, controversy surrounds the origins of the Archaic Period. Several hypotheses have been postulated. Kaldenberg (1976) and Moriarty (1967) proposed that the transition from the Paleoindian to the Archaic Period was an in-situ adaptation. In contrast, Warren et al. (1961) viewed this transition as a migration from the desert to the coast due to the adverse environmental condition of the Altithermal. Taylor and Meighan (1978:36) did not take a single position regarding the transition to the Archaic Period but, rather, incorporated all of the hypotheses as identified below:

The artifact inventory and cultural activities argue strongly that this stage began in the desert inland and spread toward the Pacific Coast, reaching it about 8,500 years ago. There is no evidence to show whether the Milling Stone Stage involved movement of the people or a conquest of earlier residents; perhaps the early hunters simply adopted this way of life as game animals became scarce.

The population of this period focused on lagoonal resources and moved up and down the river valleys exploiting a variety of inland and coastal resources (Masters and Gallegos 1997).

Late Prehistoric (AD 500–1769)

The Late Prehistoric Period is an antecedent to Spanish settlement (AD 1769). It was a "time of cultural transformations brought about by trait diffusion, immigration, and *in-situ* adaptation to environmental changes" (Moratto 1984:153). Subsistence strategies involved a focus on terrestrial collection and hunting (Christenson 1992); however, shellfish and other maritime resources were also used. Settlement included large villages near permanent water sources, temporary campsites, quarries, and resource exploitation sites. Small triangular points, pottery, and Obsidian Butte obsidian are characteristic of this period (Christenson 1992; Masters and Gallegos 1997; True

1966, 1970). Cremations replaced flexed inhumations, and mortuary goods became more elaborate (Wallace 1955). Cremations are believed to have been introduced into the area during the Late Prehistoric Period and are the result of Shoshonean intrusion (1,500 BP or 450 BC) from the deserts (True 1966) into northern San Diego County. However, in the southern part of San Diego County, this practice has been attributed to a "Colorado River origin that may have had an influence as far reaching as the Hohokam [current day Pima people and Tohono O'odham Nation] in southwestern Arizona" (True 1970:58). Kaldenberg (1976:67) had a different opinion on the origin and timing of the entrance of cremation practices into the region. He noted that the practice of cremation was introduced at the terminus of the Archaic Period (approximately 3,000 BP or 1,050 BC) with the "migration of Yuman people into the San Diego coastal region." By 2,000 BP or 50 AD, inhumations were replaced by cremations (Kaldenberg 1976).

Two complexes (San Luis Rey and Cuyamaca) are identified with the Late Prehistoric Period. True (1966) believed that the San Luis Rey complex was a precursor to the ethnographic Luiseño. Similarly, he suggested that the Cuyamaca complex was the predecessor to the ethnographic Kumeyaay. Through the examination of both geographic regions, True identified specific characteristics unique to each; however, he noted that, although geographically similar, these two cultures were distinctly different.

Ethnohistoric Period (Post-AD 1769)

The Ethnohistoric Period begins with the first permanent European settlements. Early Ethnohistoric accounts and mission documents have been used to reconstruct this period (Hale et al. 2018). This period overlaps with the initial historic period (a.k.a. Spanish Period). The Spanish Period was a time of European expansionism and is typically identified with the mission system. In addition, presidios (military defense) and pueblos (city government) played an important role in the structuring of the community (Campbell 1977). The mission system was the institution designated for the assimilation and exploitation of native people (Campbell 1977; Cline 1979; Jackson and Castillo 1995; Phillips 1981). Jackson and Castillo (1995:6) identified this exploitation as an extension of the 16th century policy of *congregación/reducción*.

Shipek (1993) delineated the boundaries between the Luiseño and the Kumeyaay as follows:

In 1769, the Kumeyaay national territory started at the coast about 100 miles south of the Mexican border (below Santo Tomas), thence north to the coast at the drainage divide south of the San Luis Rey River including its tributaries. Using the U.S. Geological Survey topographic maps, the boundary with the Luiseño then follows that divide inland. The boundary continues on the divide separating Valley Center from Escondido and then up along Bear Ridge to the 2240 contour line and then north across the divide between Valley Center and Woods Valley up to the 1,880-foot peak, then curving around east along the divide above Woods Valley.

The Kumeyaay (also known as Ipai/Tipai, Diegueño, and Kamia) lived in small villages, or rancherias, and would inhabit multiple locations throughout the year. According to Cline (1984), the typical settlement included two or more seasonal villages with temporary camps farther away from the main central villages. Hunting and gathering were the main economic focus, consisting of small game, acorns, grass seeds, and other plant resources. Similar to the Prehistoric Period, a wide range of tools (chipped and ground stone) that were made from locally available materials were used. Exotic materials, such as obsidian and chert, were imported from the deserts to the north and east. In addition to lithic tools, the Kumeyaay produced baskets and pottery.

5.12.1.2 Natural Setting

Regional Geology

The majority of San Diego County is in the Peninsular Ranges Geomorphic Province, bounded by the coastal province to the west and the Salton Trough (Desert Basin) province to the east (County of San Diego 2011). The City lies in the western (coastal) plain province which extends from the western edge of the Peninsular Ranges Geomorphic Province of California and runs roughly parallel to the coastline. The province is composed of dissected, mesa-like terraces that graduate inland into rolling hills. The terrain in the westernmost portion of the province is underlain by Upper Cretaceous, Tertiary, and Quaternary sedimentary rocks composed mainly of sandstone, shale, and conglomerate beds, reflecting the erosion of the Peninsular Ranges to the east (USGS 2023). The CRMP Phase 1 area is located within Bay Point Formation, Unnamed Marine Terrace deposits, San Diego Formation, and Ardath Shale (City of San Diego 2007).

Topography and Soils

The CRMP Phase 1 area is in the Coastal Plain, west of the Peninsular Ranges and Desert Basin. The elevation in the CRMP Phase 1 area ranges from approximately sea level to 79 feet above mean sea level (amsl). The topography of the CRMP Phase 1 area is highly variable, with the majority of the urban/developed areas gently sloping or relatively flat, and the shorelines and cliffs steeply decreasing in elevation from the ocean. The Coastal Plain region ranges in elevation from 0 feet amsl to 600 feet amsl and is characterized by topographic features including mesa tops, elevated marine terraces, and level floodplains of river valleys (County of San Diego 2011). The CRMP Phase 1 area is characteristic of elevated marine terraces that occur in the region.

Five soil types are mapped in the CRMP Phase 1 area (Appendix C). The five soil types include coastal beaches (La Jolla Shores, Mission Beach, Pacific Beach – Tourmaline Surf Park, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites), Corralitos loamy sand (0 percent to 5 percent slopes) (La Jolla Shores project site), lagoon water (Ocean Beach – Dog Beach project site), Reiff fine sandy loam (2 percent to 5 percent slopes) (Sunset Cliffs project site), and urban land (Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Dog Beach, Ocean

Beach –Pier, and Sunset Cliffs project sites) (USDA 2023). The remaining survey area not defined by a soil type is Made Land (Ocean Beach – Dog Beach project site).

Vegetation Communities and Land Cover Types

The CRMP Phase 1 area, which includes all six project sites and 100-foot survey buffer surrounding each site, is composed of 11 vegetation communities and land cover types (six wetland communities and five upland vegetation communities and land cover types). The six wetland communities include Subtidal Ocean, Intertidal Ocean, Estuarine, Southern Coastal Salt Marsh, Beach, and Concrete Channel; and the five upland vegetation communities and land cover types include Southern Foredunes, Diegan Coastal Sage Scrub, Sandstone Cliff, Non-Native Woodland, and developed disturbed land (refer to Section 5.3, Biological Resources).

Pilot Project: Ocean Beach – Dog Beach

The Ocean Beach – Dog Beach project site is approximately 12.85 acres, and the survey area is approximately 25.78 acres comprising open space beach and shoreline, and a developed parking lot, with a small portion of native dunes, scrub habitat, and Smiley Lagoon (estuarine and southern coastal salt marsh) in the eastern portion of the survey area. This survey area is bordered to the southeast by residential development, to the north and west by the outlet of the San Diego River and open waters of the Pacific Ocean, and to the east by Smiley Lagoon. The southern portion is directly adjacent to Ocean Beach – Pier survey area. The northern portion of the Ocean Beach – Dog Beach survey area is in the Multi-Habitat Planning Area.

La Jolla Shores

The La Jolla Shores project site is approximately 21.02 acres, and the survey area is approximately 35.63 acres and includes open space beach, shoreline, and parkland, bordered to the east by residential development and to the west by the open waters of the Pacific Ocean.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project site is approximately 3.66 acres, and the survey area is approximately 11.97 acres containing open space beach and shoreline, and a developed parking lot and stormwater infrastructure. This survey area is bordered to the north, south, and east by residential development and to the west by the open waters of the Pacific Ocean.

Mission Beach

The Mission Beach project site is approximately 8.92 acres, and the survey area is approximately 17.09 acres consisting of open space beach and shoreline, as well as commercial development, open space park, and a developed parking lot along the eastern edge. This survey area is bordered to the north and south by residential development, to the east by commercial development and open space parks, and to the west by the open waters of the Pacific Ocean.

Ocean Beach – Pier

The Ocean Beach – Pier project site is approximately 11.90 acres, and the survey area is approximately 21.38 acres consisting of open space beach and shoreline, as well as developed parking lot, with a small portion of commercial development along the southeastern edge. This survey area is bordered to the north by the Ocean Beach – Dog Beach survey area (open beach), to the south and east by residential development, and to the west by the open waters of the Pacific Ocean.

Sunset Cliffs

The Sunset Cliffs project site is approximately 0.29 acres, and the survey area is approximately 29.79 acres and includes open space shoreline along the west side and a developed roadway and residential buildings along the east side. The survey area is bordered to the east by residential development and to the west by the open waters of the Pacific Ocean. Directly south of the project site is a Multi-Habitat Planning Area.

5.12.1.3 Previously Identified Cultural Resources

Harris contacted the NAHC on June 13, 2023, for a Sacred Lands File search to determine whether sacred lands are present within the CRMP Phase 1 area. On July 7, 2023, the NAHC provided a positive response to the Sacred Lands File search and recommended that the list of Tribes provided be contacted for more information. On August 11, 2023, all Tribal points of contact on the list provided by the NAHC were contacted by email and/or regular mail for any information they may have regarding sacred lands that may be present on the CRMP Phase 1 area. To date, four Tribes (Jamul, San Pasqual, Sycuan, and Viejas) have responded. Jamul and Viejas have requested additional information or to meet to discuss the CRMP Phase 1. Sycuan has concerns regarding old villages along the coastline and indigenous plants and species, and has requested additional time to provide a response. San Pasqual requested formal Assembly Bill 52 government-to-government consultation to have a voice in the development of measures to protect the project sites. In addition, they requested copies of any cultural report prepared for the CRMP Phase 1. Harris staff reached out to each of these Tribes providing the requested information and explaining the characteristics of the CRMP Phase 1.

During the current cultural evaluation as documented in the CRTR (Appendix D to the PEIR), the following archaeological cultural resources have been identified within the survey area. These archaeological cultural resources are not necessarily Tribal Cultural Resources, and the determination must be made by the consulting Tribe at the time of Tribal consultation.

Pilot Project: Ocean Beach - Dog Beach

No known archaeological cultural resources were identified on the survey area for the Ocean Beach – Dog Beach project site.

La Jolla Shores

The following known archaeological cultural resource is identified within the survey area for the La Jolla Shores project site:

P-37-031697/CA-SDI-20130/SDM-W-2, is within the project site and was originally • recorded in 1926, included recovery of at least 12 burials that included internments. In addition, a shell deposit about 2 feet in depth and a lithic scatter were identified. In 2009, testing was conducted on the site; however, the work was conducted outside the La Jolla Shores project site. No human remains were identified; however, artifacts including tools, flakes, groundstone, angular waste, fire-affected rock, and charcoal were recovered. The work conducted in 2009 included reconstructing the boundaries of the cultural site as it appeared that the mapped boundaries were in error (Pigniolo et al. 2009; Rogers 1926). The site was tested in 2010 for the Avenida de la Playa Storm Drain project (Zepeda-Herman 2010). A total of six debitage pieces, one flaked lithic artifact, one fire-affected rock fragment, 111.5 grams of marine shell, seven non-human bone fragments, and one human bone fragment were recovered. The human bone fragment has been repatriated to the Kumeyaay Cultural Repatriation Committee. The site was monitored in 2011 and 2012 for the residential developments (Robbins-Wade et al. 2011; Pigniolo 2012). Only two artifacts and two pieces of shell were recovered. Portions of the site were tested in 2013 for a residential project. The survey and testing program identified a sparse artifact assemblage (debitage, marine shell, and fireaffected rock). The portions of the site tested represented intact deposits significant under CEQA criterion 4 and the City's Historical Resources Register under criteria A. The site was identified as significant because it exemplifies a special element in the City's cultural and archaeological development.

The site form for P-37-031697/CA-SDI-20130 indicates that the currently mapped boundary was the assumed maximum probable extent of secondary deposits from the grading of nearby P-37-000039/CA-SDI-39 (also known as the Spindrift Archeological District). Therefore, although the Spindrift Archaeological District is located outside of the survey area, cultural material could be present at subsurface levels of P-37-031697/CA-SDI-20130.

The following known archaeological cultural resources are outside the project APE but within the 100-foot buffer for the La Jolla Shores project site.

P-37-000039/CA-SDI-39 (Spindrift Archaeological District) is a resource of archaeological and cultural significance to the Kumeyaay Tribes of San Diego. It is a very large habitation site with multiple components and activity areas (Pigniolo 2009a). It is known as the Spindrift Archaeological District (Mut kula xuy/Mut lah hoy ya), of

which 11 locations within the district have been locally designated by the City of San Diego's Historic Resources Board. According to Kyle Ports (2020), this site has been encountered beneath existing streets, landscaping, and residences. These remaining elements represent the surviving parts of the large prehistoric village complex which encompassed land surrounding the La Jolla Beach and Tennis Club southward toward La Jolla Cove. This site was designated as the Spindrift Archaeological District because of the abundance of cultural materials associated with the large Native American population that occupied this site for approximately 8,000 years. Although P-37-000039/CA-SDI-39 has been substantially disturbed by land development over the past 80 years, the site is generally considered to be CEQA significant due to the presence of human remains and associated cultural materials/features that represent a substantial human occupation at this location. P-37-000039/CA-SDI-39 is south of the La Jolla Shores project site, but no evidence of this resource site was identified during the pedestrian survey because the portion of P-37-000039/CA-SDI-39 site within the 100-foot survey boundary of La Jolla Shores project site is developed.

- P-37-031696/CA-SDI-20129/SDM-W-199 was originally recorded as a "sea-margin intermittent camping" site. Carter excavated the site in 1947, describing it as a 20-foot-deep oyster and abalone midden containing hearths, shellfish, flakes, stone tools, a mano. In the 1950s, the site areas underwent housing developments and the installation of utility infrastructures. In 2009, Andrew Pigniolo (2009b) provided an archival search and update for the site, although no survey or testing was conducted. In 2020, Andrew Garrison conducted archaeological monitoring in which he recovered a small collection of groundstones and marine shell. As such, this site was not considered eligible for listing in the California Register of Historical Resources due to the disturbed context.
- **P-37-031720/CA-SDI-20151** included fire-affected rock, debitage, charcoal, and a burned lens, which appear to delineate a hearth, identified during utility trenching (Williams 2010). The feature appears to be intact and capped by the roadway; however, this site was not evaluated for significance under any of the registers.

Pacific Beach – Tourmaline Surf Park

No known archaeological cultural resources were identified on the survey area for the Pacific Beach – Tourmaline Surf Park project site.

Mission Beach

No known archaeological cultural resources were identified on the survey area for the Mission Beach project site.

Ocean Beach – Pier

No known archaeological cultural resources were identified on the survey area for the Ocean Beach – Pier project site.

Sunset Cliffs

The following three known archaeological cultural resources were identified in the survey area for the Sunset Cliffs project site:

- **P-37-011913/CA-SDI-11913** was recorded by Pigniolo and Briggs in 1990. It is described as a temporary prehistoric camp with a possible historic structure cobble and concrete footing. Artifacts identified included 15 cobble-based flakes and cores. In addition, shell fragments and fire-affected rock were also present. The recorders acknowledge that most of the prehistoric component is likely underneath the parking lot and/or Sunset Cliffs Boulevard. They were not able to determine if this portion of the site still exists or was destroyed during the construction of the parking lot and road. (Pigniolo and Briggs 1990a). This resource was not evaluated for significance under any of the registers.
- **P-37-011916/CA-SDI-11916** was originally recorded in 1990 and is described as a possible prehistoric habitation site. It contains lithics including flakes and tools, fire-affected rocks, a burned faunal bone fragment, midden, and a variety of shell fragments. No features were observed; however, hearths may be present. The site is subject to cliff erosion, and it is not known if the site extends underneath Sunset Cliffs Boulevard. According to the recorders, there is a Pleistocene shell lens below the site (Pigniolo and Briggs 1990b). This resource was not evaluated for significance under any of the registers.
- **P-37-024617/CA-SDI-16301** was recorded by the City of San Diego, Department of Parks and Recreation in 2002 (Hector 2002). The site is described as a shell midden with flaked stone artifacts and milling tools, appearing to be a small campsite. It is located along the bluffs of Sunset Cliffs Boulevard. This resource was not evaluated for significance under any of the registers.

The following known archaeological cultural resource were identified outside the project site but within the 100-foot buffer for the Sunset Cliffs survey area:

• **P-37-011912/CA-SDI-11912/H** was recorded by Andrew Pigniolo and Steven Briggs in 1990 as a shell scatter and possible historic structure remains. The shell scatter appeared within the terrace sidewalk below the existing parking area of Sunset Cliffs road. A historic feature was identified as "approximately 10 concrete footings and possibly as smugglers tunnel" located from the cliff to the corner of Osprey Street and Sunset Cliffs Boulevard. Remains of the shell scatter are believed to either exist underneath the paved parking lot and Sunset Cliffs Boulevard or to have been destroyed

during the construction of such infrastructure (Pigniolo and Briggs 1990c). This resource was not evaluated for significance under any of the registers.

- **P-37-011914/CA-SDI-11914** was recorded by Andrew Pigniolo and Steven Briggs in 1990, containing shell fragments, fire-affected rock, and possible flaked cobble tool. The site was recorded in very good integrity, but with erosion potential due to its location on a steep terrace cliff (Pigniolo and Briggs 1990d). This resource was not evaluated for significance under any of the registers.
- **P-37-011917/CA-SDI-11917** was originally recorded in 1990 by Andrew Pigniolo and Steven Briggs (1990f) as a possible temporary prehistoric camp, including shell fragments, fire-affected rocks, and over 5 cobble-based flakes. The shell deposit lies 80-100 centimeters below ground surface, with some surface components. A nearby housing development appears to have disturbed portions of the site, while the remaining is eroding to the Pacific Ocean. This resource was not evaluated for significance under any of the registers.
- **P-37-016217** was recorded in 1998 as a shell scatter (Kyle et al. 1998). The scatter included both *Chione* and *Argopecten* species. The site was identified as occurring west of Sunset Cliffs Boulevard. This resource was not evaluated for significance under any of the registers.
- **P-37-016218/CA-SDI-18605** was originally recorded in 1998 by Carolyn Kyle as a shell scatter including *Chione* sp. and *Argopecten* sp. shell remains in an area approximately 70 square meters in size. This resource was not evaluated for significance under any of the registers.
- **P-37-027750/CA-SDI-18013** was recorded in 2006 by Elizabeth Davidson (2006) as a temporary camp including marine shell, charcoal, fire-affected rocks, lithic flakes and stone tools. The site was tested and documented to have very high integrity. Some specimens were collected and analyzed, but further testing was recommended if additional portions of the site are to be impacted by future development projects. This resource was tested and collected for a previous project, but not evaluated for significance under any of the registers.

5.12.1.4 Survey Results

As part of the preparation of the CRTR, an intensive pedestrian survey was conducted by Harris Archaeologist, Bobby Bolger, between June 27 and October 23, 2023, for all six project sites. The survey area includes the six project sites and a 100-foot survey buffer around each project site. A pedestrian survey to locations of concern was conducted on October 23, 2023, with a Native American representative from Red Tail Environmental. Clint Linton of Red Tail Environmental requested to survey the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Ocean Beach –

Dog Beach, Ocean Beach – Pier, and Sunset Cliffs survey areas. No issues or concerns were raised by the Native American representative during the survey.

5.12.1.5 Native American Outreach

All Tribal representatives on the list provided by the NAHC were initially contacted by email and/or regular mail in the summer of 2023 for any information they may have regarding sacred lands that may be present on the CRMP Phase 1 area. Four Tribes (i.e., Jamul Indian Village of California [Jamul], San Pasqual Band of Mission Indians [San Pasqual], Sycuan Band of the Kumeyaay Nation [Sycuan], and Viejas Band of Kumeyaay Indians [Viejas]) responded. Jamul requested to meet to discuss the CRMP Phase 1. Sycuan had concerns regarding old villages along the coastline and indigenous plants and species, and requested additional time to provide a response. Viejas requested additional information on the CRMP Phase 1. San Pasqual requested formal Assembly Bill (AB) 52 government-to-government consultation to have a voice in the development of measures to protect the CRMP Phase 1 area. In addition, San Pasqual requested access to any cultural resource reports that would be prepared for the CRMP Phase 1. Harris staff reached out to each of these Tribes to provide the requested information, if available, and explain the characteristics of the CRMP Phase 1. Tribal outreach documentation is provided in Confidential Appendix G, Sacred Lands Tribal Outreach, of the CRTR (included as Appendix D to this PEIR).

City staff performed an additional outreach program to all Kumeyaay Tribes in San Diego County. Tribal representatives were contacted in the summer of 2024 to consult and engage on the CRMP Phase 1. However, staff did not receive any responses, including from the Tribes who had previously expressed interest in meeting to discuss or consult on the CRMP Phase 1. In the fall of 2024, City staff presented the CRMP Phase 1 to Tribal officials and representatives at a San Diego Association of Governments (SANDAG) Tribal Working Group meeting. On October 23, 2024, City staff delivered notices in accordance with AB-52 to Jamul Indian Village, lipay Nation of Santa Ysabel, and San Pasqual Band of Diegueno Mission Indians; however, staff have still not received any responses. On November 14, 2024, City staff reached out again to Tribal representatives to invite them to consult and engage. Staff received a response from the Viejas Band of Kumeyaay Indians confirming that they have reviewed the proposed project and at this time have determined that the project sites have cultural significance or ties to Viejas. Cultural resources have been located within or adjacent to the APE-DE of the proposed projects, and the Viejas Band requests that a Kumeyaay Cultural Monitor be on site for ground disturbing activities and to inform them of any new developments such as inadvertent discovery of cultural artifacts, cremation sites, or human remains. This request for monitoring has been incorporated in Mitigation Measure MM CUL-2, which is described in further detail below.

The consultation process with Tribal representatives is still ongoing.

5.12.2 Significance Determination Thresholds

5.12.2.1 Historical Resources

A "Traditional Cultural Property" is a locale which has been, and often continues to be of religious, mythological, cultural, economic and/or social importance to an identifiable ethnic group. This includes sacred areas where religious ceremonies have been or currently are practiced or which are central to a group's origins as a people. Also included are areas where plants or other materials have been or currently are gathered for food, medicine or other economic purposes. These kinds of Traditional Cultural Properties may not possess physical evidence of human activities. Traditional Cultural Properties also include neighborhoods which have been modified over time by ethnic or folk group use in such a way that the physical and cultural manifestations of the ethnic or folk culture are still distinguishable today. Cultural expressions shared within familial, ethnic, occupational, or regional groups include but are not limited to; technical skill, language, music, oral history, ritual, pageantry, and handicraft traditions which are learned orally, by limitation or in performance, and are generally maintained without benefit of formal instruction or institutional direction. Physical features may include: distinctive landscape and settlement patterns, architectural topologies, materials and methods of construction, and ornamental detailing.

Based on the City's CEQA Significance Determination Thresholds (City of San Diego 2023b) a significant impact regarding TCPs could occur if implementation of the CRMP Phase 1 would result in:

- 1. 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(k), or
 - b. 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.

California Public Resources Code, Section 5020.1(k), defines local register of historical resources as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution. California Public Resources Code, Section 5024.1(c), indicates that a resource may be listed as a historical resource in the California Register if it meets any of the following National Register of Historic Places (NRHP) 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; and/or

(4) Has yielded, or may be likely to yield, information important in prehistory or history.

5.12.2.2 Tribal Cultural Resources

California Public Resources Code, Sections 21074(a)(1) and 21074(a)(2), define 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 of Historical Resources (CRHR) 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, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1.

CEQA was amended in 2014 through AB 52, which created a new category of "Tribal Cultural Resources" that must be considered under CEQA and applies to all projects that file a Notice of Preparation or Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration on or after July 1, 2015. AB 52 requires lead agencies to provide notice to and begin consultation with California Native American Tribes that are traditionally and culturally affiliated with the geographic area of a project if that Tribe has requested, in writing, to be kept informed of projects by the lead agency prior to the determination of whether a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report will be prepared. If a Tribe requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the Tribe. AB 52 also specifies mitigation measures that may be considered to avoid or minimize impacts on Tribal Cultural Resources. Specifically, California Public Resources Code, Section 21074, provides the following guidance:

- (a) "Tribal Cultural Resources" are either of the following:
 - (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

- (2) 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.
- (b) A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

5.12.3 Impact Analysis

5.12.3.1 Issue 1: Tribal Cultural Resources

Would the proposed CRMP Phase 1 result in 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(k), or 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.

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The multi-use pathway would ultimately extend through the Ocean Beach – Pier project site. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway, which may improve the aesthetic of the dune compared to the existing condition. The Pilot Project could additionally include an option to relocate the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figure 3-3, Pilot Project at Ocean Beach – Dog Beach Concept Renderings, and Figure 3-4, Pilot Project at Ocean Beach – Dog Beach melocation, and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

As discussed in Section 5.12.1.3, Previously Identified Cultural Resources, the survey area for the Pilot Project does not contain any archaeological cultural resources that could potentially be determined as Tribal Cultural Resources and listed or eligible for listing in the CRHR or in a local register of historical resources. Although implementation of the Pilot Project would require ground-disturbing activities involving the construction of the multi-use path and elevated sand dune, restoration of dune area, and optional relocation of the existing restroom, the potential for discovering previously unidentified Tribal Cultural Resources that could be eligible for listing in the CRHR or determined to be historically significant by the City would be very low. Therefore, impacts on Tribal Cultural Resources would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two different design options for coastal flood protection at the La Jolla Shores project site. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Park, on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection path (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

As discussed in Section 5.12.1.3, there are four archaeological cultural resources (P-37-031696/CA-SDI-20129/SDM-W-199, P-37-031697/CA-SDI-20130, P-37-031720/CA-SDI-20151, and P-37-000039/CA-SDI-39) within the La Jolla Shores survey area. P-37-031696/CA-SDI-20129/SDM-W-199 is within the 100-foot survey buffer and was recorded as a sea-margin intermittent camping site with hearths, shellfish, flakes, stone tools, a mano and having a 20-foot depth. P-37-031697/CA-SDI-20130 is within the La Jolla Shores survey area and included recovery of at least 12 burials that included internments, a shell deposit, and a lithic scatter. P-37-031720/CA-SDI-20151 is located within the 100-foot survey buffer area and included fire-affected rock, debitage, charcoal, and a burned lens, which appear to delineate a hearth. The Spindrift Archaeological District (P-37-000039/CA-SDI-39), located within the 100-foot survey buffer area, is a resource of archaeological and cultural significance to the Kumeyaay Tribes of San Diego. According to the site records, soils from the Spindrift Site (P-37-000039/CA-SDI-39) were deposited on the P-37-031697/CA-SDI-20130 site.

Construction of the proposed earthen dikes and terraced seatwall under the Amphitheater Design Option and the reconfigured recreational areas and parking lot under the Reconfigured Park Design Option would require ground-disturbing activities. Considering the previously identified subsurface cultural resources within and in proximity of the La Jolla Shores project site, the CRTR determined that implementation of the La Jolla Shores project could potentially uncover existing and/or previously unidentified Tribal Cultural Resources during ground-disturbing construction activities. Therefore, impacts on Tribal Cultural Resources would be potentially significant. Mitigation Measure MM CUL-2 is provided to address potential impacts to Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to Tribal Cultural Resources would be fully avoided or minimized. Impacts to Tribal Cultural Resources would remain potentially significant.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into a sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. An optional component of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

As discussed in Section 5.12.1.3, the Pacific Beach – Tourmaline Surf Park survey area does not contain any archaeological cultural resources that are listed or eligible for listing in the NRHP, CRHR or in a local register of historical resources. Construction of the sand and cobble dune, restoration of the existing vegetated median, and the optional construction of an underground stormwater vault would require some ground-disturbance. However, given the lack of listed resources within the Pacific Beach – Tourmaline Surf Park survey area and the disturbed/developed nature of the site, the potential for discovering previously unidentified Tribal Cultural Resources that could be eligible for listing in the NRHP, CRHR or determined to be historically significant by the City would be very low. Therefore, impacts on Tribal Cultural Resources would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

As discussed in Section 5.12.1.3, the Mission Beach survey area does not contain any archaeological cultural resources that are listed or eligible for listing in the NRHP, CRHR or in a local register of historical resources. Construction of the elevated sand dune would occur entirely on sandy beach, which has been previously disturbed, particularly during construction of the annual winter berm. Additionally, potential construction of a perched beach and realignment of the existing seawall and Ocean Front Walk under the Perched Beach Design Option would occur entirely on previously disturbed land (i.e., Ocean Front Walk and a portion of Mission Beach Park). Although construction of the proposed elevated sand dune and potential perched beach would require some ground-disturbance, the potential for discovering previously unidentified Tribal Cultural Resources that could be eligible for listing in the NRHP, CRHR or determined to be historically significant by the City would be very low. Therefore, impacts on Tribal Cultural Resources would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach – Pier project.

As discussed in Section 5.12.1.3, the Ocean Beach – Pier survey area does not contain any archaeological cultural resources that are listed or eligible for listing in the NRHP, CRHR or in a local register of historical resources. Construction of the elevated sand dune and multi-use path, restoration of the existing dune area, and potential relocation or reconstruction of the restroom facilities would require ground-disturbing activities. However, given the lack of listed resources within the Ocean Beach – Pier survey area and the disturbed/developed nature of the site, the potential for discovering previously unidentified Tribal Cultural Resources that could be eligible for listing in the NRHP, CRHR or determined to be historically significant by the City would be very low. Therefore, impacts on Tribal Cultural Resources would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration configuration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive plant species and installation of native plants along the Sunset Cliffs trail (refer to Figure

3-11, Sunset Cliffs Project Concept Renderings). The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

As discussed in Section 5.12.1.3, the Sunset Cliffs survey area contains known archaeological cultural resources (P-37-011912/CA-SDI-11912/H, P-37-011913/CA-SDI-11913H, P-37-011914/CA-SDI-11914, P-37-011916/CA-SDI-11916, P-37-011917/CA-SDI-11917, P-37-016217, P-37-016218/CA-SDI-18605, P-37-024617/CA-SDI-16301, P-37-27750/CA-SDI-18013). P-37-011912/CA-SDI-11912/H is a shell scatter and possible historic structure remains; P-37-011913/CA-SDI-11913/H is a temporary prehistoric camp with a possible historic structure cobble and concrete footing; P-37-011914/CA-SDI-11914 is an artifact scatter with shell, fire-affected rock, and a cobble tool; P-37-011916/CA-SDI-11916 is a possible prehistoric habitation site; P-37-011917/CA-SDI-11917 is a temporary prehistoric camp; P-37-016217 is a shell scatter; P-37-016218/CA-SDI-18605 is a shell scatter; P-37-024617/CA-SDI-16301 is a possible campsite with a shell midden with flaked stone artifacts and milling tools; and P-37-027750/CA-SDI-18013 is a temporary camp with marine shell, charcoal, fire-affected rocks, lithic flakes and stone tools.

Considering the previously identified subsurface archaeological cultural resources in the area, the potential for subsurface Tribal Cultural Resources exists. Implementation of the proposed road reconfiguration program would involve the use of temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). Once the road design is finalized, reconfiguration of the road would primarily include restriping and installation of barriers, and therefore, is not expected to include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. Therefore, these activities would require grounddisturbing activities that could adversely affect potential subsurface Tribal Cultural Resources. Given the presence of cultural resources within and in proximity of the Sunset Cliffs project site, the CRTR determined that implementation of the Sunset Cliffs project could potentially uncover existing and/or previously unidentified Tribal Cultural Resources during ground-disturbing construction activities (e.g., trail enhancement, habitat enhancement, drainage improvements, and potential parking realignment and erosion control improvements). Therefore, impacts on Tribal Cultural Resources would be potentially significant. Mitigation Measure MM CUL-2 is provided to address potential impacts to Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to Tribal Cultural Resources would be fully avoided or minimized. Impacts to Tribal Cultural Resources would remain potentially significant.

5.12.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project would not result in a substantial adverse change in the significance of a Tribal Cultural Resource, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project will potentially result in a substantial adverse change in the significance of a Tribal Cultural Resource. Mitigation Measure MM CUL-2 is provided to address potential impacts to archaeological and Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to Tribal Cultural Resources would be fully avoided or minimized. Impacts to Tribal Cultural Resources would remain potentially significant.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not result in a substantial adverse change in the significance of a Tribal Cultural Resource, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would not result in a substantial adverse change in the significance of a Tribal Cultural Resource, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not result in a substantial adverse change in the significance of a Tribal Cultural Resource, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project will potentially result in a substantial adverse change in the significance of a Tribal Cultural Resource. Mitigation Measure MM CUL-2 is provided to address potential impacts to archaeological and Tribal Cultural Resources; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to Tribal Cultural Resources would be fully avoided or minimized. Impacts to Tribal Cultural Resources would remain potentially significant.

5.12.5 Mitigation Framework

To avoid or reduce the potential for significant impacts associated with a substantial adverse change in the significance of a Tribal Cultural Resource at the La Jolla Shores and Sunset Cliffs project sites, implementation of Mitigation Measure MM CUL-2 would be required (refer to Section 5.4.5, Mitigation Framework).

MM CUL-2 Archaeological and Tribal Cultural Resources Monitoring Program. The following monitoring program shall be implemented to protect unknown prehistoric and historic archaeological resources, sacred sites, and human remains that may be identified during any construction-related activities:

I. Prior to Permit Issuance or Bid Opening/Bid Award

- A. Entitlements Plan Check
 - 1. Prior to permit issuance or Bid Opening/Bid Award, whichever is applicable, the Environmental Designee shall verify that the requirements for Archaeological Monitoring and Native American monitoring have been noted on the applicable construction documents through the plan check process.
- B. Letters of Qualification have been submitted to ADD
 - 1. Prior to Bid Award, the applicant shall submit a letter of verification to Mitigation Monitoring Coordination (MMC) identifying the Principal Investigator (PI) for the project and the names of all persons involved in the archaeological monitoring program, as defined in the City of San Diego HRG. If applicable, individuals involved in the archaeological monitoring program must have completed the 40-hour HAZWOPER training with certification documentation.
 - 2. MMC will provide a letter to the applicant confirming the qualifications of the PI and all persons involved in the archaeological monitoring of the project meet the qualifications established in the HRG.
 - 3. Prior to the start of work, the applicant must obtain written approval from MMC for any personnel changes associated with the monitoring program.

II. Prior to Start of Construction

- A. Verification of Records Search
 - 1. The PI shall provide verification to MMC that a site-specific records search (1/4-mile radius) has been completed. Verification includes, but is not limited to a copy of a confirmation letter from South Coastal Information Center, or, if the search was in-house, a letter of verification from the PI stating that the search was completed.

- 2. The letter shall introduce any pertinent information concerning expectations and probabilities of discovery during trenching and/or grading activities.
- 3. The PI may submit a detailed letter to MMC requesting a reduction to the 1/4-mile radius.
- B. PI Shall Attend Precon Meetings
 - 1. Prior to beginning any work that requires monitoring; the Applicant shall arrange a precon meeting that shall include the PI, Native American consultant/monitor (where Native American resources may be impacted), Construction Manager (CM) and/or Grading Contractor, Resident Engineer (RE), Building Inspector (BI), if appropriate, and MMC. The qualified Archaeologist and Native American Monitor shall attend any grading/excavation related precon meetings to make comments and/or suggestions concerning the Archaeological Monitoring program with the CM and/or Grading Contractor.
 - a. If the PI is unable to attend the precon meeting, the Applicant shall schedule a focused precon meeting with MMC, the PI, RE, CM or BI, if appropriate, prior to the start of any work that requires monitoring.
 - 2. Acknowledgement of Responsibility for Curation (CIP or Other Public Projects)

The applicant shall submit a letter to MMC acknowledging their responsibility for the cost of curation associated with all phases of the archaeological monitoring program.

- 3. Identify Areas to be Monitored
 - a. Prior to the start of any work that requires monitoring, the PI shall submit an Archaeological Monitoring Exhibit (AME) (with verification that the AME has been reviewed and approved by the Native American consultant/monitor when Native American resources may be impacted) based on the appropriate construction documents (reduced to 11x17) to MMC identifying the areas to be monitored including the delineation of grading/excavation limits.

- b. The AME shall be based on the results of a site-specific records search as well as information regarding the age of existing pipelines, laterals and associated appurtenances and/or any known soil conditions (native or formation).
- c. MMC shall notify the PI that the AME has been approved.
- 4. When Monitoring Will Occur
 - a. Prior to the start of any work, the PI shall also submit a construction schedule to MMC through the RE indicating when and where monitoring will occur.
 - b. The PI may submit a detailed letter to MMC prior to the start of work or during construction requesting a modification to the monitoring program. This request shall be based on relevant information such as review of final construction documents which indicate site conditions such as depth of excavation and/or site graded to bedrock, etc., which may reduce or increase the potential for resources to be present.
- 5. Approval of AME and Construction Schedule

After approval of the AME by MMC, the PI shall submit to MMC written authorization of the AME and Construction Schedule from the CM.

III. During Construction

- A. Monitor(s) Shall be Present During Grading/Excavation/Trenching
 - 1. The Archaeological Monitor shall be present full-time during all soil disturbing and grading/excavation/trenching activities which could result in impacts to archaeological resources as identified on the AME. The CM is responsible for notifying the RE, PI, and MMC of changes to any construction activities such as in the case of a potential safety concern within the area being monitored. In certain circumstances OSHA safety requirements may necessitate modification of the AME.
 - 2. The Native American consultant/monitor shall determine the extent of their presence during soil disturbing and grading/excavation/trenching activities based on the AME and provide that information to the PI and MMC. If prehistoric resources are encountered during the Native American

consultant/monitor's absence, work shall stop and the Discovery Notification Process detailed in Section III.B-C and IV.A-D shall commence.

- 3. The PI may submit a detailed letter to MMC during construction requesting a modification to the monitoring program when a field condition such as modern disturbance post-dating the previous grading/trenching activities, presence of fossil formations, or when native soils are encountered that may reduce or increase the potential for resources to be present.
- 4. The archaeological and Native American consultant/monitor shall document field activity via the CSVR. The CSVRs shall be faxed by the CM to the RE the first day of monitoring, the last day of monitoring, monthly (**Notification of Monitoring Completion**), and in the case of ANY discoveries. The RE shall forward copies to MMC.
- B. Discovery Notification Process
 - 1. In the event of a discovery, the Archaeological Monitor shall direct the contractor to temporarily divert all soil disturbing activities, including but not limited to digging, trenching, excavating or grading activities in the area of discovery and in the area reasonably suspected to overlay adjacent resources and immediately notify the RE or BI, as appropriate.
 - 2. The Monitor shall immediately notify the PI (unless Monitor is the PI) of the discovery.
 - 3. The PI shall immediately notify MMC by phone of the discovery, and shall also submit written documentation to MMC within 24 hours by email with photos of the resource in context, if possible.
 - 4. No soil shall be exported off site until a determination can be made regarding the significance of the resource specifically if Native American resources are encountered.
- C. Determination of Significance
 - 1. The PI and Native American consultant/monitor, where Native American resources are discovered shall evaluate the significance of the resource. If Human Remains are involved, follow protocol in Section IV below.

- a. The PI shall immediately notify MMC by phone to discuss significance determination and shall also submit a letter to MMC indicating whether additional mitigation is required.
- b. If the resource is significant, the PI shall submit an Archaeological Data Recovery Program (ADRP) which has been reviewed by the Native American consultant/monitor, and obtain written approval from MMC, CM and RE. ADRP and any mitigation must be approved by MMC, RE and/or CM before ground disturbing activities in the area of discovery will be allowed to resume. **Note: If a unique archaeological site is also an historical resource as defined in CEQA, then the limits on the amount(s) that a project applicant may be required to pay to cover mitigation costs as indicated in CEQA Section 21083.2 shall not apply.**
 - (1).Note: For pipeline trenching and other linear projects in the public Right-of-Way, the PI shall implement the Discovery Process for Pipeline Trenching projects identified below under "D."
- c. If the resource is not significant, the PI shall submit a letter to MMC indicating that artifacts will be collected, curated, and documented in the Final Monitoring Report. The letter shall also indicate that that no further work is required.
 - (1). Note: For Pipeline Trenching and other linear projects in the public Right-of-Way, if the deposit is limited in size, both in length and depth; the information value is limited and is not associated with any other resource; and there are no unique features/artifacts associated with the deposit, the discovery should be considered not significant.
 - (2).Note, for Pipeline Trenching and other linear projects in the public Right-of-Way, if significance cannot be determined, the Final Monitoring Report and Site Record (DPR Form 523A/B) shall identify the discovery as Potentially Significant.
- D. Discovery Process for Significant Resources Pipeline Trenching and other Linear Projects in the Public Right-of-Way

The following procedure constitutes adequate mitigation of a significant discovery encountered during pipeline trenching activities or for other linear project types within the Public Right-of-Way including but not limited to excavation for jacking pits, receiving pits, laterals, and manholes to reduce impacts to below a level of significance:

- 1. Procedures for documentation, curation and reporting
 - a. One hundred percent of the artifacts within the trench alignment and width shall be documented in-situ, to include photographic records, plan view of the trench and profiles of side walls, recovered, photographed after cleaning and analyzed and curated. The remainder of the deposit within the limits of excavation (trench walls) shall be left intact.
 - b. The PI shall prepare a Draft Monitoring Report and submit to MMC via the RE as indicated in Section VI-A.
 - c. The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) the resource(s) encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines. The DPR forms shall be submitted to the South Coastal Information Center for either a Primary Record or SDI Number and included in the Final Monitoring Report.
 - d. The Final Monitoring Report shall include a recommendation for monitoring of any future work in the vicinity of the resource.

IV. Discovery of Human Remains

If human remains are discovered, work shall halt in that area and no soil shall be exported off-site until a determination can be made regarding the provenance of the human remains; and the following procedures as set forth in CEQA Section 15064.5(e), the California PRC (Section 5097.98) and State Health and Safety Code (Section 7050.5) shall be undertaken:

A. Notification

- 1. Archaeological Monitor shall notify the RE or BI as appropriate, MMC, and the PI, if the Monitor is not qualified as a PI. MMC will notify the appropriate Senior Planner in the Environmental Analysis Section (EAS) of the City Planning Department or Development Services Department to assist with the discovery notification process.
- 2. The PI shall notify the Medical Examiner after consultation with the RE, either in person or via telephone.

- B. Isolate Discovery Site
 - 1. Work shall be directed away from the location of the discovery and any nearby area reasonably suspected to overlay adjacent human remains until a determination can be made by the Medical Examiner in consultation with the PI concerning the provenance of the remains.
 - 2. The Medical Examiner, in consultation with the PI, will determine the need for a field examination to determine the provenance.
 - 3. If a field examination is not warranted, the Medical Examiner will determine with input from the PI, if the remains are or are most likely to be of Native American origin.
- C. If Human Remains **ARE** Determined to be Native American
 - 1. The Medical Examiner will notify the NAHC within 24 hours. By law, **ONLY** the Medical Examiner can make this call.
 - 2. NAHC will immediately identify the person or persons determined to be the Most Likely Descendent (MLD) and provide contact information.
 - 3. The MLD will contact the PI within 24 hours or sooner after the Medical Examiner has completed coordination, to begin the consultation process in accordance with CEQA Section 15064.5(e), the California Public Resources and Health & Safety Codes.
 - 4. The MLD will have 48 hours to make recommendations to the property owner or representative, for the treatment or disposition with proper dignity, of the human remains and associated grave goods.
 - 5. Disposition of Native American Human Remains will be determined between the MLD and the PI, and, if:
 - a. The NAHC is unable to identify the MLD, OR the MLD failed to make a recommendation within 48 hours after being granted access to the site, OR;
 - b. The landowner or authorized representative rejects the recommendation of the MLD and mediation in accordance with PRC 5097.94(k) by the NAHC fails to provide measures acceptable to the landowner, the landowner shall reinter the human remains and items associated with Native American human remains with appropriate dignity on the

property in a location not subject to further and future subsurface disturbance, THEN

- c. To protect these sites, the landowner shall do one or more of the following:
 - (1) Record the site with the NAHC;
 - (2) Record an open space or conservation easement; or
 - (3) Record a document with the County. The document shall be titled "Notice of Reinterment of Native American Remains" and shall include a legal description of the property, the name of the property owner, and the owner's acknowledged signature, in addition to any other information required by PRC 5097.98. The document shall be indexed as a notice under the name of the owner.
- d. Upon the discovery of multiple Native American human remains during a ground disturbing land development activity, the landowner may agree that additional conferral with descendants is necessary to consider culturally appropriate treatment of multiple Native American human remains. Culturally appropriate treatment of such a discovery may be ascertained from review of the site utilizing cultural and archaeological standards. Where the parties are unable to agree on the appropriate treatment measures the human remains and items associated and buried with Native American human remains shall be reinterred with appropriate dignity, pursuant to Section 5.c., above.
- D. If Human Remains are **NOT** Native American
 - 1. The PI shall contact the Medical Examiner and notify them of the historic era context of the burial.
 - 2. The Medical Examiner will determine the appropriate course of action with the PI and City staff (PRC 5097.98).
 - 3. If the remains are of historic origin, they shall be appropriately removed and conveyed to the San Diego Museum of Man for analysis. The decision for internment of the human remains shall be made in consultation with MMC, EAS, the applicant/landowner, any known descendant group, and the San Diego Museum of Man.

V. Night and/or Weekend Work

- A. If night and/or weekend work is included in the contract
 - 1. When night and/or weekend work is included in the contract package, the extent and timing shall be presented and discussed at the precon meeting.
 - 2. The following procedures shall be followed.
 - a. No Discoveries: In the event that no discoveries were encountered during night and/or weekend work, the PI shall record the information on the CSVR and submit to MMC via fax by 8AM of the next business day.
 - b. Discoveries: All discoveries shall be processed and documented using the existing procedures detailed in Sections III - During Construction, and IV – Discovery of Human Remains. Discovery of human remains shall always be treated as a significant discovery.
 - c. Potentially Significant Discoveries: If the PI determines that a potentially significant discovery has been made, the procedures detailed under Section III During Construction and IV-Discovery of Human Remains shall be followed.
 - d. The PI shall immediately contact MMC, or by 8AM of the next business day to report and discuss the findings as indicated in Section III-B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of construction
 - 1. The CM shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
 - 2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

VI. Post Construction

- A. Preparation and Submittal of Draft Monitoring Report
 - 1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Historical Resources Guidelines (Appendix C/D) which describes the results, analysis, and conclusions of

all phases of the Archaeological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring. It should be noted that if the PI is unable to submit the Draft Monitoring Report within the allotted 90-day timeframe resulting from delays with analysis, special study results or other complex issues, a schedule shall be submitted to MMC establishing agreed due dates and the provision for submittal of monthly status reports until this measure can be met.

- a. For significant archaeological resources encountered during monitoring, the Archaeological Data Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
- b. Recording Sites with State of California Department of Parks and Recreation: The PI shall be responsible for recording (on the appropriate State of California Department of Park and Recreation forms-DPR 523 A/B) any significant or potentially significant resources encountered during the Archaeological Monitoring Program in accordance with the City's Historical Resources Guidelines , and submittal of such forms to the South Coastal Information Center with the Final Monitoring Report.
- 2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
- 3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
- 4. MMC shall provide written verification to the PI of the approved report.
- 5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Artifacts
 - 1. The PI shall be responsible for ensuring that all cultural remains collected are cleaned and catalogued.
 - 2. The PI shall be responsible for ensuring that all artifacts are analyzed to identify function and chronology as they relate to the history of the area; that faunal material is identified as to species; and that specialty studies are completed, as appropriate.

- C. Curation of artifacts: Accession Agreement and Acceptance Verification
 - 1. The PI shall be responsible for ensuring that all artifacts associated with the survey, testing and/or data recovery for this project are permanently curated with an appropriate institution. This shall be completed in consultation with MMC and the Native American representative, as applicable.
 - 2. When applicable to the situation, the PI shall include written verification from the Native American consultant/monitor indicating that Native American resources were treated in accordance with state law and/or applicable agreements. If the resources were reinterred, verification shall be provided to show what protective measures were taken to ensure no further disturbance occurs in accordance with Section IV Discovery of Human Remains, Subsection C.
 - 3. The PI shall submit the Accession Agreement and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
 - 4. The RE or BI, as appropriate shall obtain signature on the Accession Agreement and shall return to PI with copy submitted to MMC.
 - 5. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
 - 1. The PI shall submit one copy of the approved Final Monitoring Report to the RE or BI as appropriate, and one copy to MMC (even if negative), within 90 days after notification from MMC that the draft report has been approved.
 - 2. The RE shall, in no case, issue the Notice of Completion and/or release of the Performance Bond for grading until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

5.13 Utilities and Service Systems

This section of the Programmatic Environmental Impact Report (PEIR) describes the existing utility infrastructure in the City of San Diego (City) and evaluates the potential impacts related to these utilities that could result from implementation of the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1).

The analysis is divided into four subsections, (1) water infrastructure and supply; (2) wastewater collection, conveyance, and treatment; (3) stormwater infrastructure; and (4) solid waste management, and is based on review of available plans and technical information, including the City's Urban Water Management Plan (2021), the City's Metropolitan Biosolids Center Improvements (2023a), and California Department of Resources Recycling and Recovery's Solid Waste Information System Facility/Site Search (2023).

5.13.1 Existing Conditions

The following utilities currently serve the CRMP Phase 1 area:

- Water San Diego County Water Authority (SDCWA)
- Wastewater City of San Diego Public Utilities Department (PUD)
- Stormwater City of San Diego Transportation and Storm Water Department, Storm Water Division
- Solid Waste City of San Diego Environmental Services Department

5.13.1.1 Water Infrastructure and Supply

The City's current and future water supplies consist of (1) water purchased from the SDCWA, either directly transferred or stored in various reservoirs; (2) local supplies, including groundwater, capture of local runoff from rainfall within seven of its nine surface reservoirs, and Pure Water San Diego program (advanced water purification program; Pure Water); and (3) recycled water for non-potable water use. The sources and distribution of these water supplies are described further below.

Metropolitan Water District of Southern California

The Metropolitan Water District of Southern California (MWD) is Southern California's regional wholesale water provider. The MWD service area is approximately 5,200 square miles and includes the Counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura. There are 26 member agencies of the MWD, including 14 cities and 12 municipal water districts (including SDCWA). The MWD imports water from two main supply sources: (1) the Colorado River Aqueduct, which it owns and operates, bringing water from the Colorado River into Southern California; and (2) the State Water Project, owned by the State of California and operated by the California Department of Water Resources, which brings water from the Delta, at

the western edge of the Central Valley by the confluence of the Sacramento and San Joaquin Rivers. The State Water Project and Colorado River Aqueduct are part of an extensive water supply system that includes federal, state, and local water conveyance. The MWD holds contracts to receive 550,000 acre-feet per year (AFY) of Colorado River water and 1,912,000 AFY of State Water Project water (City of San Diego 2021).

The MWD's existing water supplies have been historically sufficient to meet demands within its service area during years of normal precipitation, and while it manages reserve supplies to account for normal drought conditions, regulatory actions have placed limitations on its ability to provide water to its member agencies. Future population growth, regulatory restrictions, increased competition for low-cost water supplies, and other factors, such as climate change, could impact the MWD's ability to supply water to its member agencies even in normal years.

San Diego County Water Authority

The SDCWA, one of the MWD's member agencies, is the Countywide water wholesaler made up of 24 public member agencies stretching from the U.S./Mexico border to the Orange County and Riverside County borders. The SDCWA owns and operates five large-diameter pipelines to deliver imported water to its member agencies. In addition to water purchased from the MWD, the SDCWA secured a Quantification Settlement Agreement¹ for the Colorado River water supplies, created a water transfer program with Imperial Irrigation District, and developed a regional desalination facility in Carlsbad. The SDCWA began acquiring deliveries from the Claude "Bud" Lewis Carlsbad Desalination Plant in December 2015 and, as of 2020, provides approximately 50,000 AFY of the region's water demand (City of San Diego 2021).

To be more resilient and reliable, the SDCWA embarked on a multi-year Emergency & Carryover Storage Project beginning in 2000 with the goal of providing up to 6 months of emergency water supplies in the event of a system failure or another issue with receiving imported water from the MWD (City of San Diego 2021).

City of San Diego Public Utilities Department

The PUD is one of the public member agencies of the SDCWA and serves a population of 1.33 million, which is expected to increase about 18 percent over the next 25 years. The PUD's water system extends over 404 square miles and includes both potable and recycled water facilities. The City's water system has nine reservoirs (commonly referred to as City lakes), two water reclamation plants, three water treatment plants, and 29 treated water storage facilities. The City's three water treatment plants, and Otay—provide safe and reliable drinking water and have

¹ The Quantification Settlement Agreement, signed in 2003, defined the rights to a portion of Colorado River water for the SDCWA, Coachella Valley Water District, Imperial Irrigation District, and MWD.

a combined total rated capacity of 450 million gallons per day (mgd). The City currently delivers an average of 175,000 AFY, or 156 mgd, to its water customers (City of San Diego 2021).

Surface Water

The PUD maintains and operates nine reservoirs that capture surface water runoff from rainfall within local watersheds and store purchased imported water. These nine reservoirs have a combined capacity of 549,007 AF. Seven of these reservoirs provide a local water supply to the City, while two are for emergency storage only. Based on average data from 2016 to 2020, the native water captured in these reservoirs provides approximately 11 percent of the City's total supply (City of San Diego 2021).

In addition to availability, the use of local surface water is affected by water resource management policies. The PUD's policy is to use local water first to reduce imported water purchases. The PUD also operates emergency and seasonal storage programs in conjunction with its policy. The purpose of emergency storage is to maintain an accessible amount of stored water that could provide an uninterrupted supply of water to the City's water treatment facilities should an interruption to the supply of imported water occur. The purpose of seasonal storage is to store surplus imported water in the wet winter season for use during the dry summer season. The PUD may also increase use of imported water, in lieu of local water, in the winter so that local water may be saved in reservoirs or groundwater basins for summer use (City of San Diego 2021).

Recycled Water

To reduce dependence on imported water from the SDCWA, the PUD strives for more local surface water, recycled water, and conservation efforts to meet or offset potable demands. Recycled water is wastewater that has undergone additional treatment to make it suitable for a range of beneficial uses. In addition to the PUD's potable water system, the City has a separate recycled water system that currently extends approximately 99 miles and includes two water reclamation plants that provide recycled water to meet non-potable (not for drinking) water demands: the North City Water Reclamation Plant (NCWRP) and the South Bay Water Reclamation Plant (SBWRP). The total wastewater treatment capacity of the two plants is approximately 50,440 AFY (City of San Diego 2016). In 2020, the City provided 8,195 AFY of non-potable recycled water within the City and 4,232 AFY to its three wholesale customers (City of Poway, Olivenhain Municipal Water District, and Santa Fe Irrigation District). Landscape irrigation continues to be the leading use of recycled water, while the remainder is used for cooling towers, construction, ornamental fountains, and toilet/urinal flushing (City of San Diego 2021).

Additionally, potable reuse through Pure Water, approved by City Council in 2014, is currently under development. Pure Water is a 20-year (2015–2035) multi-phased water and wastewater initiative that is expected to create 83 mgd of locally controlled water upon full implementation in 2035. Pure Water will divert treated water from the Point Loma Wastewater Treatment Plant

(PLWTP) ocean outfall and recycle this valuable and limited resource that is currently discharged to the ocean. Pure Water will use advanced water treatment processes to turn recycled water into water of equal or greater quality than the imported sources. Pure Water Phase 1 is expected to be online by March 2025. Production is expected to be a staged ramp-up flow with 30 mgd produced by the end of 2025. This will allow the City to provide a reliable drinking water supply that is locally controlled and drought proof and reduce the amount of water it purchases from other water providers (City of San Diego 2021).

Conservation

Given the pattern of cyclical droughts due to its semiarid climate and low levels of rainfall, the City adopted a Water Conservation Program in 1985 to address water scarcity concerns. In addition, the City has progressively updated its municipal code and adopted programs, policies, and ordinances designed to promote water conservation practices. For instance, the City has year-round City and state permanent mandatory water restrictions in place, and new restrictions went into effect on June 10, 2022. The City also conducts comprehensive public information and education campaigns. For example, the City offers a broad range of conservation tactics to help meet the needs of residential and commercial water customers. These tactics include but are not limited to the following (City of San Diego 2024):

- Rebate programs for high-efficiency toilets, washing machines, and commercial water saving devices
- Rebates for replacing grass with sustainable landscapes and micro-irrigation systems
- Residential interior/exterior and commercial landscape survey programs
- Public education and outreach

Water Distribution

The PUD's water system consists of nine reservoirs that capture runoff from local watershed rainfall, three water treatment plants, a small supply of groundwater, two water reclamation plants and a recycled water distribution system that delivers recycled water for non-potable water uses, numerous treated water storage facilities with more than 200 million gallons of potable water capacity, and more than 3,000 miles of pipelines. In addition, the PUD maintains and operates approximately 49 water pump stations that deliver treated water from the water treatment plants to more than 300,000 metered service connections in approximately 131 different hydraulic pressure zones (City of San Diego 2021).

The PUD also maintains several emergency connections to and from neighboring water agencies to provide mutual aid during times of catastrophic supply interruptions (City of San Diego 2019; 2021). These agencies include the following:

- Santa Fe Irrigation District (Miramar Water Treatment Plant)
- Poway Municipal Water District (Miramar Water Treatment Plant)

- Cal-American Water Company (Alvarado and Otay Water Treatment Plant)
- Sweetwater Authority (Otay Water Treatment Plant)
- Otay Water District (Otay Water Treatment Plant)

5.13.1.2 Wastewater Collection, Conveyance, and Treatment

The wastewater system throughout the CRMP Phase 1 area is managed by the PUD's Wastewater Branch, which operates the wastewater collection and treatment system, collectively known as the Metro System. The Metro System collects, treats, and disposes of nearly 180 mgd of sewage from the City's own customers and customers from other cities/agencies that form the Metro Wastewater Joint Powers Authority. Wastewater is treated at three treatments plants, all within City limits: NCWRP, SBWRP, and PLWTP. Recycled water is produced at both NCWRP and SBWRP. Two additional water recycling facilities are located outside the City's water and wastewater system: (1) the Ralph W. Chapman Water Recycling Facility in Otay, and (2) the Padre Dam Water Recycling Facility in the Padre Dam Municipal Water District. These plants reduce wastewater flows that would have historically been conveyed to the Metro Wastewater System at the PLWTP for treatment. Both facilities send treated solids into the City's system for further treatment at the PLWTP. After wastewater is treated, it is then distributed within the PUD's own service area as recycled water and sold as such to its wholesale customers (City of San Diego 2021).

The PUD also operates the Metropolitan Biosolids Center, a regional biosolids facility that receives and processes solids from both the NCWRP and the PLWTP. Any remaining wastewater from the treatment process is returned to the PLWTP (City of San Diego 2023a).

5.13.1.3 Stormwater Infrastructure

The City's stormwater system is maintained by the City's Transportation and Stormwater Department, Stormwater Division. It consists of drainage and conveyance facilities such as underground storm drain pipes, culverts, outfalls, pump stations, open flood risk management channels, and more. This infrastructure collects and conveys storm water and other runoff downstream. Storm drains are designed to handle normal water flow, but occasionally during heavy rain, flooding will occur.

The Stormwater Division is responsible for the inspection, maintenance, and repair of the storm drain system in the public right-of-way and in drainage easements. In addition, other City departments, such as the Parks and Recreation Department or PUD, may also have the responsibility and jurisdiction to maintain the drainage systems within their own facilities.

Each of the project sites drains differently and contains differing degrees of stormwater facilities and/or conveyance systems. Nearly all stormwater runoff drains into the San Diego River and eventually into the Pacific Ocean.

5.13.1.4 Solid Waste Management

The City's Environmental Services Department pursues waste management strategies that emphasize waste reduction and recycling, composting, and environmentally sound landfill management. The department is also responsible for the collection and disposal of refuse, recyclables, household hazardous waste, and green waste. The Collection Services Division provides weekly residential refuse collection, biweekly collection of recyclables and greens, and collection and maintenance of street litter containers in business districts. The Disposal & Environmental Protection Division operates a full-service landfill and organic recycling facility at the Miramar Landfill, maintains eight closed landfills and eight inactive burn sites, ensures regulatory compliance of the City's underground fuel storage tanks, and provides household hazardous waste education and outreach. The Waste Reduction Division is responsible for zero waste planning; provides education, training, and programs for residents and businesses; enforces solid waste and recycling codes; and conducts illegal dump abatements and community cleanups.

Waste generated in the City is taken primarily to three landfills: Miramar Landfill (which has three locations: north, south, and west), Sycamore Landfill, and Otay Landfill. The West Miramar Landfill is operated by the City, located within the City, and permitted to receive a maximum of 8,000 tons of waste per day. Remaining capacity as of 2020 was 11,080,871 cubic yards. The estimated closure date of the facility is 2031 (CalRecycle 2023). The Sycamore Landfill is operated by Republic Services and is located within the City. The facility is permitted to receive 5,000 tons of waste per day. As of 2016, remaining capacity at this landfill was estimated to be 113,972,637 cubic yards. The estimated closure date for the facility is 2042 (CalRecycle 2023). The Otay Landfill is located within an unincorporated area within the City of Chula Vista and is also operated by Republic Services. The facility is permitted to receive 6,700 tons of waste per day. As of 2016, remaining capacity at this landfill was estimated could be 21,194,008 cubic yards. As of 2018, the landfill's estimated cease operation date was determined to be 2030 (CalRecycle 2023).

Additionally, a number of construction and demolition facilities serve the City and surrounding areas.

5.13.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to water supply; stormwater, sewer, water distribution, and communications systems infrastructure; and solid waste are based on applicable criteria in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (2023b). A significant impact could occur if implementation of the CRMP Phase 1 would:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects;

- b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; or
- d. Generate solid waste in excess of federal, state, or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

5.13.3 Impact Analysis

5.13.3.1 Issue 1: New or Expanded Utilities

Would the proposed CRMP Phase 1 require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1 for a complete description of the Pilot Project at the Ocean Beach – Dog Beach project site.

As described in Section 5.8.3.3, Issue 3: Deviation or Variance, the Pilot Project would be consistent with existing land use categories and designations and would not result in a land use change. The potential relocated or reconstructed restroom facility is anticipated to be relatively the same size and capacity as the existing restroom facility at the Ocean Beach – Dog Beach project site. Therefore, the optional relocation or reconstruction of the existing restroom facility for the Pilot Project would not result in an increase in water demand or wastewater generation compared to existing conditions. Further, the Pilot Project would not develop housing or other uses that would introduce permanent populations near the Ocean Beach – Dog Beach project site. As such, implementation of the Pilot Project would not increase demand for water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities, such that additional facilities would be required in the future.

Additionally, the Pilot Project would not substantially affect stormwater drainage at the Ocean Beach – Dog Beach project site. As described in Section 5.7.3.2, Issue 2: Groundwater Supplies,

the proposed multi-use path included as part of the Pilot Project would result in an incremental increase (16,800 square feet [sf] or 0.39 acre) in impervious surfaces across the project site. The proposed multi-use path would be 14 feet wide and approximately 1,200 feet long. This incremental change in impervious surfaces would not alter drainage patterns or substantially affect stormwater drainage at the Ocean Beach – Dog Beach project site.

Construction of the elevated sand dune and multi-use path may require the realignment of existing streetlamps along the back of the beach. Realignment of existing streetlamps could require new electric power connections to existing utilities at the Ocean Beach – Dog Beach project site. In addition to electrical connections, the optional restroom facility relocation or reconstruction component of the Pilot Project could require new connections to existing water and wastewater infrastructure at the Ocean Beach – Dog Beach project site. New connections to existing utilities would result in minor and localized earthwork, which would not cause significant environmental effects. Therefore, impacts related to relocation or construction of new or expanded utilities would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1 for a complete description of the La Jolla Shores project.

As described in Section 5.8.3.3, Issue 3: Deviation or Variance, the La Jolla Shores project would be consistent with existing land use categories and designations and would not result in a land use change. Additionally, the La Jolla Shores project would not develop housing or other uses that would introduce permanent populations near the La Jolla Shores project site. As such, implementation of the La Jolla Shores project would not increase demand for water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities, such that additional facilities would be required in the future.

Additionally, the La Jolla Shores project would not substantially affect stormwater drainage at the La Jolla Shores project site. The terraced seatwall under the Amphitheater Design Option would not result in an increase in impervious surface because it would be constructed on currently paved

surface along the western border of the existing parking lot. The proposed earthen dikes at La Jolla Shores Park and Kellogg Park would be vegetated with grass or native plants, and therefore, would allow for stormwater infiltration, consistent with existing conditions at the project site. Additionally, the Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot at the project site, but would maintain the same footprint of pervious recreational area and impervious paved parking lot. As such, this design option would also allow for stormwater infiltration, consistent with existing conditions at the project site. Therefore, the La Jolla Shores project would not alter drainage patterns or substantially affect stormwater drainage at the La Jolla Shores project site. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2 for a complete description of the Pacific Beach – Tourmaline Surf Park project.

As described in Section 5.8.3.3, Issue 3: Deviation or Variance, the Pacific Beach – Tourmaline Surf Park project would be consistent with existing land use categories and designations and would not result in a land use change. Additionally, the Pacific Beach – Tourmaline Surf Park project would not develop housing or other uses that would introduce permanent populations near the Pacific Beach – Tourmaline Surf Park project site. As such, implementation of the Pacific Beach – Tourmaline Surf Park project would not increase demand for water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities, such that additional facilities would be required in the future.

Neither construction of the proposed sand and cobble dune nor restoration of the vegetated median at the Pacific Beach – Tourmaline Surf Park project site would result in an increase in impervious surfaces across the project site. Additionally, the optional pedestrian walkway along the existing drainage culvert would either cover or underground the culvert and would not alter drainage patterns across the site. Construction of the optional underground stormwater vault would not result in significant environmental impacts. As described further in Section 5.5, Geology and Soils, limited soil erosion could occur associated with excavation for the optional underground stormwater vault; however, any potential impacts related to erosion would be avoided, minimized, or mitigated as conditions of subsequent project-level approval prior to the implementation of the Pacific Beach – Tourmaline Surf Park project. For example, the Pacific Beach – Tourmaline Surf Park project would be required to comply with erosion, sedimentation, and water pollution control measures outlined in the San Diego

Municipal Code (SDMC), the required Storm Water Pollution Prevention Plan, and the standards established in the City's Land Development Manual. Therefore, implementation of the Pacific Beach – Tourmaline Surf Park would not substantially affect stormwater drainage at the Pacific Beach – Tourmaline Surf Park project site. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching north-south along the project site, similar to the Dune Design Option. Refer to Section 3.4.4.3 for a complete description of the Mission Beach project.

As described in Section 5.8.3.3, Issue 3: Deviation or Variance, the Mission Beach project would be consistent with existing land use categories and designations and would not result in a land use change. Additionally, the Mission Beach project would not develop housing or other uses that introduce permanent populations near the Mission Beach project site. As such, implementation of the Mission Beach project would not increase demand for water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities, such that additional facilities would be required in the future.

The Dune Design Option would be limited to the construction of a sand dune along the back of the beach, and therefore, would not result in development of any impervious surfaces. Additionally, the Perched Beach Design Option would not result in development of additional impervious surfaces. For example, this design option would convert a portion of the pervious recreational space at Mission Beach Park to pervious sandy beach. A 350-foot section of the impervious Ocean Front Walk would be realigned. As such, the Mission Beach project would not alter drainage patterns or substantially affect stormwater drainage at the Mission Beach project site. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. Refer to Figure 3-10, Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4 for a complete description of the Ocean Beach - Pier project.

As described in Section 5.8.3.3, Issue 3: Deviation or Variance, the Ocean Beach – Pier project would be consistent with existing land use categories and designations and would not result in a land use change. Additionally, the Ocean Beach – Pier project would not develop housing or other uses that would introduce permanent populations near the Ocean Beach – Pier project site. As such, implementation of the Ocean Beach – Pier project would not increase demand for water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities, such that additional facilities would be required in the future.

As described for the Pilot Project, the Ocean Beach – Pier project would construct a multi-use path along the back of the beach that would result in an incremental increase in impervious surfaces. This incremental change in impervious surfaces would not alter drainage patterns or substantially affect stormwater drainage at the Ocean Beach – Pier project site. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. Refer to Section 3.4.4.5 for a complete description of the Sunset Cliffs project.

As described in Section 5.8.3.3, Issue 3: Deviation or Variance, the Sunset Cliffs project would be consistent with existing land use categories and designations and would not result in a land use change. Additionally, the Sunset Cliffs project would not develop housing or other uses that would introduce permanent populations near the Sunset Cliffs project site. As such, implementation of the Sunset Cliffs project would not increase demand for water, wastewater treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities, such that additional facilities would be required in the future.

The Sunset Cliffs project would not result in construction of any new impervious surfaces. The proposed road reconfiguration program would occur within the existing alignment of Sunset Cliffs Boulevard along the southern 0.64-mile portion of the roadway. The Sunset Cliffs project would include drainage improvements, habitat enhancement, and erosion control measures to

reduce stormwater runoff and coastal bluff erosion. The optional component to reconfigure the parking from the existing parking lots along the northern portion of the project site would remove existing pavement of the lots and convert these areas to more natural material (e.g., decomposed granite, bare earth). The optional realigned parking areas could also be graded to ensure that drainage moves towards Sunset Cliffs Boulevard, which would prevent stormwater runoff on the bluff to minimize erosion. Additional stormwater infrastructure and drainage improvements could be implemented as the new parking configurations are designed and implemented. Therefore, the proposed drainage improvements would not substantially affect stormwater drainage at the Sunset Cliffs project site such that additional stormwater drainage facilities would be required in the future. Impacts would be less than significant, and no mitigation is required.

5.13.3.2 Issue 2: Water Supply Availability

Would the proposed CRMP Phase 1 have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom facility within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

Limited water would be required during the construction phase (e.g., watering exposed soils to reduce dust). The temporary use of water for construction activities would be short-term and negligible, given the limited scope of the Pilot Project. Operationally, the Pilot Project would not develop housing or other uses that would substantially increase long-term water demand or water use at the Ocean Beach – Dog Beach project site. The optional relocation or reconstruction of the existing restroom facility would not result in an increase in water demand when compared to existing conditions. Therefore, impacts related to water supplies would be less than significant, and no mitigation is required.

La Jolla Shores

The Amphitheater Design Option would construct earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational

areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards.

Limited water would be required during the construction phase (e.g., watering exposed soils to reduce dust). The temporary use of water for construction activities would be short-term and negligible, given the limited scope of the La Jolla Shores project. Operationally, the La Jolla Shores project would not develop housing or other uses that would substantially increase long-term water demand or water use at the La Jolla Shores project site. Therefore, impacts related to water supplies would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment.

Limited water would be required during the construction phase (e.g., watering exposed soils to reduce dust). The temporary use of water for construction activities would be short-term and negligible, given the limited scope of the Pacific Beach – Tourmaline Surf Park project. Operationally, the Pacific Beach – Tourmaline Surf Park project would not develop housing or other uses that would substantially increase long-term water demand or water use at the Pacific Beach – Tourmaline Surf Park project site. Therefore, impacts related to water supplies would be less than significant, and no mitigation is required.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run north– south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland.

Limited water would be required during the construction phase (e.g., watering exposed soils to reduce dust). The temporary use of water for construction activities would be short-term and negligible, given the limited scope of the Mission Beach project. Operationally, the Mission Beach project would not develop housing or other uses that would substantially increase long-term water demand or water use at the Mission Beach project site. Therefore, impacts related to water supplies would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier.

Limited water would be required during the construction phase (e.g., watering exposed soils to reduce dust). The temporary use of water for construction activities would be short-term and negligible, given the limited scope of the Ocean Beach – Pier project. Operationally, the Ocean Beach – Pier project would not develop housing or other uses that would substantially increase long-term water demand or water use at the Ocean Beach – Pier project site. Therefore, impacts related to water supplies would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures.

Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, would not include earthwork with heavy construction equipment during construction. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, could require the use of heavy construction equipment. As future site-specific project designs are finalized, this project would be subject to discretionary review and would require additional environmental analysis pursuant to CEQA, which would evaluate the potential for substantial water use during construction and operation. Given the scope of the Sunset Cliffs project, it can be assumed that limited water would be required for any construction that would occur. Operationally, the Sunset Cliffs project would not develop housing or other uses that would substantially increase long-term water demand or water use at the Sunset Cliffs project site. Therefore, impacts related to water supplies would be less than significant, and no mitigation is required.

5.13.3.3 Issue 3: Wastewater Treatment Capacity

Would the proposed CRMP Phase 1 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?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

The potential relocated or reconstructed restroom facility is anticipated to be relatively the same size and capacity as the existing restroom facility at the Ocean Beach – Dog Beach project site. Therefore, the optional relocation or reconstruction of the existing restroom facility for the Pilot Project would not result in an increase in water demand when compared to existing conditions. In addition, the Pilot Project would not develop housing, additional restroom facilities, or other uses which would result in an increase in water generation at the Ocean Beach – Dog Beach project site. Therefore, the Pilot Project would not result in increase demand for wastewater treatment, and there would be no impact. No mitigation is required.

La Jolla Shores

The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards.

The La Jolla Shores project would not develop housing, additional restroom facilities, or other uses which would result in an increase in wastewater generation at the La Jolla Shores project site. Therefore, the La Jolla Shores project would not result in increased demand for wastewater treatment, and there would be no impact. No mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment.

The Pacific Beach – Tourmaline Surf Park project would not develop housing, additional restroom facilities, or other uses which would result in an increase in wastewater generation at the Pacific Beach – Tourmaline Surf Park project site. Additionally, the optional underground stormwater vault would include water quality treatment for stormwater runoff across the existing parking lot and paved areas. Therefore, the Pacific Beach – Tourmaline Surf Park project would not result in increased demand for wastewater treatment, and there would be no impact. No mitigation is required.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run north– south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland.

The Mission Beach project would not develop housing, additional restroom facilities, or other uses which would result in an increase in wastewater generation at the Mission Beach project site. Therefore, the Mission Beach project would not result in increased demand for wastewater treatment, and there would be no impact. No mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier.

The Ocean Beach – Pier project would not develop housing, additional restroom facilities, or other uses which would result in an increase in wastewater generation at the Ocean Beach – Pier project site. Therefore, the Ocean Beach – Pier project would not result in increased demand for wastewater treatment, and there would be no impact. No mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures.

The Sunset Cliffs project would not develop housing, restroom facilities, or other uses which would result in an increase in wastewater generation at the Sunset Cliffs project site. Therefore, the Sunset Cliffs project would not result in increased demand for wastewater treatment, and there would be no impact. No mitigation is required.

5.13.3.4 Issue 4: Solid Waste Generation

Would the proposed CRMP Phase 1 generate solid waste in excess of federal, state, or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project at the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

Construction of the proposed multi-use path and potential relocation or reconstruction of the existing restroom facility included as part of the Pilot Project may result in the generation of solid waste materials (e.g., concrete). These materials would be transported to a local permitted landfill, as necessary, in accordance with requirements for the recycling of construction and demolition debris specified in the City's Construction and Demolition Debris Diversion Deposit Program Ordinance (SDMC Sections 66.0601 through 66.0610). It should be noted that the proposed sand dune would be constructed with sand derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone or the San Diego River flood shoal. Therefore, clearing and dredging of existing flood channels, such as the San Diego River flood channel, would be used at the Ocean Beach – Dog Beach project site and would not require transport of this dredged material to landfills.

Operation of the Pilot Project would not include housing, additional restroom facilities, or other uses which would result in a long-term increase in solid waste generation. Therefore, following the completion of construction activities, no increase in solid waste generation would occur. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards. Construction of the terraced seatwall under the Amphitheater Design Option and reconfiguration of the grassy recreational areas and parking lot under the Reconfigured Park Design Option may result in the generation of solid waste materials (e.g., concrete). These materials would be transported to a local permitted landfill, as necessary, in accordance with requirements for the recycling of construction and demolition debris specified in the City's Construction and Demolition Debris Diversion Deposit Program Ordinance (SDMC Sections 66.0601 through 66.0610). Operation of the La Jolla Shores project would not include housing, additional restroom facilities, or other uses which would result in a long-term increase in solid waste generation. Therefore, following the completion of construction activities, no increase in solid waste generation would occur. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plantings. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment.

Construction of the proposed sand and cobble dune with a rock core would not result in the generation of solid waste materials. The existing rip rap material would be reused on-site and buried within the dune where it is currently located. It should also be noted that sand for the proposed dune would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone.

Operation of the Pacific Beach – Tourmaline Surf Park project would not include housing, additional restroom facilities, or other uses which would result in a long-term increase in solid waste generation. Therefore, following the completion of construction activities, no increase in solid waste generation would occur. No impact would occur; therefore, impacts would be less than significant, and no mitigation is required.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run north– south along the back of the beach from Ventura Place to San Fernando Place. The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland.

Construction of the proposed sand dune would not result in the generation of solid waste materials. It should also be noted that sand for the proposed dune would be derived from local coastal sources, similar to the City's existing winter berm program, which uses sand from the adjacent beach intertidal zone.
Operation of the Mission Beach project would not include housing, additional restroom facilities, or other uses which would result in a long-term increase in solid waste generation. Therefore, following the completion of construction activities, no increase in solid waste generation would occur. No impact would occur; therefore, impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north-south along the length of the site from the Avalanche Groin to the Ocean Beach Pier.

Construction of the proposed multi-use path may result in the generation of solid waste materials (e.g., concrete). These materials would be transported to a local permitted landfill, as necessary, in accordance with requirements for the recycling of construction and demolition debris specified in the City's Construction and Demolition Debris Diversion Deposit Program Ordinance (SDMC Sections 66.0601 through 66.0610).

Operation of the Ocean Beach – Pier project would not include housing, additional restroom facilities, or other uses which would result in a long-term increase in solid waste generation. Therefore, following the completion of construction activities, no increase in solid waste generation would occur. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures.

Reconfiguration of the roadway would primarily include restriping and installation of barriers, and therefore, is not anticipated to include any construction-related earthwork. Implementation of the proposed trail enhancement, interpretative signage, drainage improvements, habitat enhancement, and optional components, such as parking realignment and erosion control measures, may result in the generation of solid waste materials (e.g., soil material, concrete). In particular, the optional component to reconfigure the parking from the existing parking lots along the northern portion of the project site would remove existing pavement of the lots and therefore, would result in solid waste to be transported to a landfill. These materials would be transported to a local permitted landfill, as necessary, in accordance with requirements for the recycling of construction and demolition debris specified in the City's Construction and Demolition Debris Diversion Deposit Program Ordinance (SDMC Sections 66.0601 through 66.0610).

Operation of the Sunset Cliffs project would not include housing, additional restroom facilities, or other uses which would result in an increase in a long-term increase solid waste generation. Therefore, following the completion of construction activities, no increase in solid waste generation would occur. Impacts would be less than significant, and no mitigation is required.

5.13.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

Implementation of the Pilot Project at the Ocean Beach – Dog Beach project site would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects. The Pilot Project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant. Additionally, implementation of the Pilot Project would not result in an increase in wastewater generation, and therefore, would not 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. The Pilot Project would not generate solid waste in excess of federal, 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, and no mitigation is required.

La Jolla Shores

Implementation of the La Jolla Shores project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects. The La Jolla Shores project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant. Additionally, implementation of the La Jolla Shores project would not result in an increase in wastewater generation, and therefore, would not 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. The La Jolla Shores project would not generate solid waste in excess of federal, 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, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

Implementation of the Pacific Beach – Tourmaline Surf Park project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, which could cause significant

environmental effects. The Pacific Beach – Tourmaline Surf Park project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant. Additionally, implementation of the Pacific Beach – Tourmaline Surf Park project would not result in an increase in wastewater generation, and therefore, would not 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. The Pacific Beach – Tourmaline Surf Park project would not generate solid waste in excess of federal, 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, and no mitigation is required.

Mission Beach

Implementation of the Mission Beach project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects. The Mission Beach project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant. Additionally, implementation of the Mission Beach project would not result in an increase in wastewater generation, and therefore, would not 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. The Mission Beach project would not generate solid waste in excess of federal, 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, and no mitigation is required.

Ocean Beach – Pier

Implementation of the Ocean Beach – Pier project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects. The Ocean Beach – Pier project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant. Additionally, implementation of the Ocean Beach – Pier project would not result in an increase in wastewater generation, and therefore, would not 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. The Ocean Beach – Pier project would not generate solid waste in excess of federal, 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, and no mitigation is required.

Sunset Cliffs

Implementation of the Sunset Cliffs project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunication facilities, which could cause significant environmental effects. The Sunset Cliffs project would have sufficient water supplies available to serve the project during normal, dry, and multiple dry years. Impacts would be less than significant. Additionally, implementation of the Sunset Cliffs project would not result in an increase in wastewater generation, and therefore, would not 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. The Sunset Cliffs project would not generate solid waste in excess of federal, 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, and no mitigation is required.

5.13.5 Mitigation Framework

Impacts to public utilities and service systems would be less than significant; therefore, no mitigation is required.

5.14 Wildfire

This section of the Programmatic Environmental Impact Report describes the existing wildfire conditions in the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) area and evaluates the potential impacts related to wildfire on the six project sites described in Section 2.3, Project Locations, and within the wider region that could result from implementation of the proposed CRMP Phase 1. Refer to Section 5.10, Public Services and Recreation, for a discussion of the City of San Diego (City) Fire-Rescue Department's services and facilities.

The analysis in this section is based on review of available plans and technical information, including the City's General Plan Public Facilities, Services and Safety Element (City of San Diego 2023a), California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP) maps (CAL FIRE 2009), and the City's California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2023b).

5.14.1 Existing Conditions

5.14.1.1 Wildfire Hazards

Threat from wildfire hazards is determined based on a number of factors, including fuel loading (vegetation); topography; climatic conditions, such as wind, humidity, and temperature; and the proximity of structures and urban development to fire hazards. Wildland fire hazards are most pronounced in wildland–urban interface areas, or where urban development is located close to open space areas where vegetation can serve as fuel. Generally, the periods of greatest risk for wildland fire are the late summer and early fall when vegetation is at its driest. Human activity, including residential and agricultural burning, campfires, and the use of fireworks, can all trigger fires. Natural causes such as lightning strikes may also start fires.

CAL FIRE's FRAP provides spatial data, maps, and online data viewers, which provide information on the health and risk factors associated with forest and rangelands within California. As part of CAL FIRE's FRAP, the department has identified areas based on the severity of fire hazard. These areas, or "zones," are based on factors such as fuel (e.g., flammable vegetation), slope, and fire weather. There are three fire hazard severity zones, based on increasing fire hazard: moderate, high, and very high. As shown on CAL FIRE's Map of Fire Hazard Severity Zones in Local Responsibility Areas for the City of San Diego, the project sites are in urban areas not mapped within a Fire Hazard Severity Zone, with the exception of the Sunset Cliffs project site. The southern portion of the Sunset Cliffs project site is within a Very High Fire Hazard Severity Zone due to its location adjacent to the Sunset Cliffs Natural Park – Hillside Park and other open space areas in Point Loma (CAL FIRE 2009).

5.14.1.2 Emergency Preparedness

The County of San Diego Office of Emergency Services (OES) coordinates the overall County response to disasters. OES is responsible for notifying appropriate agencies when a disaster occurs, coordinating all responding agencies, ensuring that resources are available and mobilized, developing plans and procedures for response to and recovery from disasters, and developing and providing preparedness materials for the public.

The OES staffs the Operational Area Emergency Operations Center (EOC), a central facility that provides regional coordinated emergency response, and also acts as staff to the Unified Disaster Council, its governing body. The Unified Disaster Council, established through a joint powers agreement among all 18 incorporated cities and the County of San Diego, provides for the coordination of plans and programs countywide to ensure the protection of life and property.

The City's disaster prevention and response activities are conducted in accordance with the U.S. Department of Homeland Security Office of Domestic Preparedness requirements and incorporate the functions of planning, training, exercising, and execution. The City's disaster preparedness efforts include oversight of the City's EOC, including maintaining the EOC in a continued state of readiness, training City staff and outside agency representatives in their roles and responsibilities, and coordinating EOC operations when activated in response to an emergency or major event/incident.

5.14.2 Significance Determination Thresholds

Thresholds used to evaluate potential impacts related to wildfire are based on applicable criteria in Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) and the City's CEQA Significance Determination Thresholds (City of San Diego 2023b). A significant impact could occur if implementation of the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones and if the project would:

- a. Substantially impair an adopted emergency response plan or emergency evacuation plan;
- b. 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;
- c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or result in temporary or ongoing impacts on the environment; or
- d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

5.14.3 Impact Analysis

5.14.3.1 Issue 1: Emergency Response or Evacuation Plans

Would the proposed CRMP Phase 1 substantially impair an adopted emergency response plan or emergency evacuation plan?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would include a 14-foot wide, 1,200-foot multi-use path for cyclists and pedestrians fronted by elevated sand dunes along the beach on the Ocean Beach – Dog Beach project site. The proposed multi-use path would be constructed as a Class I Bike Path and connect with the existing terminus of the San Diego River Bikeway to the north, which is also a Class I Bike Path, and the proposed multi-use path within the Ocean Beach – Pier project site to the south. The proposed multi-use path on the Ocean Beach – Pier project site would connect to the existing paved pedestrian path adjacent to Ocean Beach Veterans Plaza.

The multi-use path and sand dunes would be located along the landward edge of the beach, adjacent to the existing parking lot. The sand dunes, which are inspired by the City's existing winter berm program, would provide flood protection to the coastal park infrastructure and community of Ocean Beach by adding elevation to the back of the beach and by providing a reservoir of sand to the beach that can be used during erosive conditions. In addition to the proposed multi-use path and sand dunes, the existing sand dunes north of the parking lot (adjacent to the north and south of the San Diego River Bikeway) would be restored with native vegetation. Two optional components of the Pilot Project include restroom relocation and an express shuttle stop on the Ocean Beach – Dog Beach project site. Refer to Figures 3-3 and 3-4 and Section 3.4.3.1, Site Conditions and Constraints, for a complete description of the Pilot Project on the Ocean Beach – Dog Beach project site.

Similar to the winter berm program, partial access to the beach would be maintained throughout the duration of construction. During construction, emergency access to the Ocean Beach – Dog Beach project site would be maintained along roadways, and no lane closures are anticipated to occur. Construction activities on the Ocean Beach – Dog Beach project site would be short term and temporary.

The Pilot Project would not change the existing vehicular access to the project site. Vehicular access to the Ocean Beach – Dog Beach project site would continue to be provided from existing roadways, namely Voltaire Street, Brighton Avenue, and West Point Loma Boulevard/Spray Street. The Pilot Project has also been designed in coordination with the City's Lifeguard Services and Fire-Rescue Department to ensure adequate emergency access. In addition, the Pilot Project would have beneficial impacts to the area's transportation system through a new multi-use path and an optional express shuttle with a shuttle stop in the existing parking lot on site (refer to Section 5.11, Transportation). The multi-use path and optional shuttle would provide enhanced opportunities for

people with access and functional needs (e.g., low income and transportation disadvantaged) to evacuate the Ocean Beach – Dog Beach project site in the event of an emergency. The proposed multi-use path and dune structures would include emergency access points to the beach to ensure emergency vehicles are not hindered and appropriate public access is maintained. The optional express shuttle stop that may run from an appropriate transportation center to the Ocean Beach – Dog Beach project site could reduce parking lot congestion to improve emergency access, as direct access to the project site is provided through the parking lot. Neither construction nor operation of the Pilot Project would substantially impair an adopted plan.

The Pilot Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project includes two design options. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks on either side of the existing parking lot. Along the western edge of the parking lot, a terraced seatwall would be constructed to provide a viewing and seating area while also providing flood protection (refer to Figure 3-5, La Jolla Shores Project Amphitheater Design Option). The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to align the parking lot further inland and away from coastal flood hazards. This option would realign the grassy recreational areas to provide one continuous waterfront park that could include a long earthen dike along the western edge of the park (refer to Figure 3-6, La Jolla Shores Project Reconfigured Park Design Option). Refer to Section 3.4.4.1, La Jolla Shores, for a complete description of the La Jolla Shores project.

During construction, emergency access to the La Jolla Shores project site would be maintained along roadways, and no lane closures are anticipated. The La Jolla Shores project site has also been designed in coordination with the City's Lifeguard Services and Fire-Rescue Department to ensure adequate emergency access.

Under the Amphitheater Design Option, there would be no changes to the existing on- and off-site vehicular and/or pedestrian access network, including the existing parking lot configuration or access to the site. Accessways through the terraced seatwall would be integrated at key points with both staired terraces and access ramps compliant with the Americans with Disabilities Act (ADA) to allow for emergency access and evacuation of the La Jolla Shores project site in the event of an emergency. Therefore, the La Jolla Shores project would not result in inadequate emergency access.

Under the Reconfigured Park Design Option, the reconfigured parking lot would include new access features such as new driveways and crosswalks. Design details and the exact placement of any new driveways and crosswalks are not available. However, the reconfigured parking lot and

access features would be designed to meet the City's engineering standards, including providing adequate emergency vehicle access to meet the California Fire Code, Section 503, which includes requirements for emergency access. The La Jolla Shores project site would continue to be accessed from Camino Del Oro, the La Vereda pedestrian path, and Vallecitos.

Because the project would not alter existing emergency access, it would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project provides a hybrid nature-based solution that includes elevated sand dune, restored dune area, and optional pedestrian access. The elevated dune and restoration of the existing dune area would not increase any vehicular or non-vehicular traffic to the site and would not impact an adopted emergency response or evacuation plan. Refer to Figure 3-7, Pacific Beach – Tourmaline Surf Park Project Concept Renderings, and Section 3.4.4.2, Pacific Beach – Tourmaline Surf Park, for a complete description of the Pacific Beach – Tourmaline Surf Park, for a complete description of the Pacific Beach – Tourmaline Surf Park project.

During construction, emergency access to the Pacific Beach – Tourmaline Surf Park project site would be maintained along roadways, and no lane closures are anticipated. The optional pedestrian access component of the Pacific Beach – Tourmaline Surf Park project includes covering or undergrounding the existing drainage culvert along the northern border of the parking lot. This component of the Pacific Beach – Tourmaline Surf Park project would not generate additional non-vehicular traffic to the Pacific Beach – Tourmaline Surf Park project site but would improve pedestrian safety between the parking lot and the beach, especially in the event of an emergency. The Pacific Beach – Tourmaline Surf Park project site has also been designed in coordination with the City's Lifeguard Services and Fire-Rescue Department to ensure adequate emergency access. Vehicular access to the Pacific Beach – Tourmaline Surf Park project site would continue to be provided from Tourmaline Street, and no changes to Tourmaline Street or other roadway network would occur. Additionally, the Pacific Beach – Tourmaline Surf Park project would not increase vehicular or non-vehicular traffic to the site and, therefore, would have no impacts to on- or off-site emergency access.

The Pacific Beach – Tourmaline Surf Park project would not alter existing emergency access, and therefore, would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project includes two different design options for coastal flood protection at the Mission Beach project site. The Dune Design Option would include construction of an elevated

sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place (refer to Figure 3-8, Mission Beach Project Dune Design Option). The Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning a 350-foot section of the existing seawall and Ocean Front Walk inland (refer to Figure 3-9, Mission Beach Project Perched Beach Design Option). This concept could be implemented in conjunction with a dune feature stretching northsouth along the project site, similar to the Dune Design Option. The dune feature is designed to mimic the elevation of the existing winter berm that is built along the beach annually. The Mission Beach project would be constructed along Ocean Front Walk, designated as a Class I bike path by the City's Bicycle Master Plan, but would not modify this existing bicycle facility. Refer to Figure 3-7, Mission Beach Project Concept Renderings, and Section 3.4.4.3, Mission Beach, for a complete description of the Mission Beach project.

During construction, emergency access to the Mission Beach project site would be maintained along roadways, and no lane closures are anticipated. The Mission Beach project would not modify or impact the off-site vehicular or non-vehicular access to the project site or increase vehicular or non-vehicular traffic to the Mission Beach project site. Project site access would continue to be provided from Mission Bay Drive/Ventura Place and San Fernando Place at the northern and southern terminuses of the project site and from the existing parking lots. Additionally, the Mission Beach project site has been designed in coordination with the City's Lifeguard Services and Fire-Rescue Department to ensure adequate emergency access. Appropriate openings and passageways would be provided into the dune structure to ensure emergency personnel and public access to the beach and evacuation in the event of an emergency. The Perched Beach Design Option would realign a 350-foot section of this existing bicycle facility; however, bicycle, pedestrian, and emergency access would be maintained along this realigned section.

The Mission Beach project would not alter existing emergency or vehicular access to the project site. Therefore, the Mission Beach project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The proposed Ocean Beach – Pier project would construct a multi-use path for cyclists and pedestrians fronted by an elevated vegetated sand dune (refer to Figure 3-8, Ocean Beach – Pier Project Concept Renderings), as described for the Pilot Project on the Ocean Beach – Dog Beach project site. The dunes and path would be along the landward edge of the beach and would connect to the proposed improvements on the Ocean Beach – Dog Beach project site. As such, the multi-use path for both the Pilot Project and the Ocean Beach – Pier project would connect the existing western terminus of the San Diego River Bikeway to the Ocean Beach Pier. Refer to Figure 3-10,

Ocean Beach – Pier Project Concept Renderings, and Section 3.4.4.4, Ocean Beach – Pier, for a complete description of the Ocean Beach – Pier project.

During construction, emergency access to the Ocean Beach – Pier project site would be maintained along roadways, and no lane closures are anticipated. The Ocean Beach – Pier project site would be accessible through existing roadways, namely Cape May Avenue, Saratoga Avenue, Santa Monica Avenue, and Newport Avenue, which run in a northwest–southeast direction, all connected by Abbott Street. No modifications to existing vehicular access are proposed.

The Ocean Beach – Pier project has also been designed in coordination with the City's Lifeguard Services and Fire-Rescue Department to ensure adequate emergency access. The Ocean Beach – Pier project would have beneficial impacts to the area's transportation system through the new multiuse path that connects through the Ocean Beach – Dog Beach project site to the San Diego River Bikeway. Designated accessways would be installed through the proposed multi-use path and sand dunes, which would allow for emergency access to the beach and evacuation from Ocean Beach – Pier project site in the event of an emergency.

The Ocean Beach – Pier project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project site is within the Sunset Cliffs Natural Park – Linear Park, an approximately 1.2-mile-long trail adjacent to Sunset Cliffs Boulevard to the east and along a cliff to the west. The Sunset Cliffs project would convert approximately 3,400 feet (0.64 mile) of two-lane, bidirectional vehicular travel along Sunset Cliffs Boulevard into one lane of southbound vehicular travel with a separated bidirectional multi-use (i.e., bicycle and pedestrian) path. This road reconfiguration would occur from the intersection of Sunset Cliffs Boulevard, Guizot Street, and Cordona Street to the north to the intersection of Sunset Cliffs Boulevard and Ladera Street to the south. The one-way traffic flow would continue west along Ladera Street from its intersection with Sunset Cliffs Boulevard to its intersection with Cordova Street. The program would monitor traffic flow and incorporate lessons learned back into the project design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail (refer to Figure 3-11, Sunset Cliffs Project Concept Renderings). Refer to Section 3.4.4.5, Sunset Cliffs, for a complete description of the Sunset Cliffs project.

Although the Sunset Cliffs project would convert north–south bidirectional vehicular roadway into southbound one-way roadway, there are three intersections (Sunset Cliffs Boulevard at Hill Street, Monaco Street, and Carmelo Street) within the project reach that vehicles can exit from the one-way

roadway to travel the opposite direction via other north–south directional streets, such as Cordova Street, Cornish Drive, and Amiford Drive. Therefore, emergency response vehicles would still be able to reach sections of Sunset Cliffs Boulevard. The Sunset Cliffs project would be implemented through temporary pilot (trial) phases to monitor the project and incorporate lessons learned back into the project design. As such, the road reconfiguration and separated multi-use path would be initially simulated through cones, signage, and other temporary traffic calming devices (e.g., waterfiled Jersey barriers) that are easily moved and modified. A transportation study would also be prepared to better determine ramifications of the proposed changes.

The Sunset Cliffs project would also enhance access along the Sunset Cliffs trail. Trail enhancement, interpretative signage, and drainage improvements would also be implemented along the Sunset Cliffs project site where feasible and appropriate.

The Sunset Cliffs project also includes optional components to realign parking further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. The optional parking lot reconfiguration would convert and reconfigure the existing four parking lot areas along the northern portion of Sunset Cliffs Boulevard. Specific parking layout opportunities would be evaluated to consider the space available, optimize the space gained and flow of traffic, and reduce conflicts with bicyclists. Additionally, the realigned parking would be designed to meet the City's engineering standards, including providing adequate emergency vehicle access to meet the California Fire Code, Section 503, which includes requirements for emergency access.

The Sunset Cliffs project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan. Impacts would be less than significant, and no mitigation is required.

5.14.3.2 Issue 2: Pollutant Concentrations or Spread of Wildfire

Would the proposed CRMP Phase 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?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would not add new population to the existing beaches in San Diego. The Pilot Project includes nature-based and other design solutions to reduce impacts from sea-level rise and coastal flooding. The Ocean Beach – Dog Beach project site ranges in elevation from sea level to roughly 16 feet. There are no steep slopes on site. The Pilot Project would vegetate the proposed sand dunes with native plants appropriate for sand dunes but does not propose any vegetation that would be considered flammable. The Pilot Project would be required to meet applicable fire measures included in the San Diego Municipal Code (SDMC), Chapter 5, Article 11, Division 1 (Adoption of the 2022 California Fire Code).

The fire station that serves the Ocean Beach – Dog Beach project site is Station 15 at 4711 Voltaire Street, located approximately 0.6 mile driving distance (3 minutes) from the site. Additionally, the Ocean Beach – Dog Beach project site encompasses several seasonal lifeguard towers (Temporary Lifeguard Towers 3, 4, and 5) (refer to Figure 2-3, Ocean Beach – Dog Beach Project Site). Refer to Section 5.10.3.1, Issue 1: Fire Protection, Police Protection, Schools, and Libraries, for a complete description of fire protection services.

The Pilot Project would not exacerbate wildfire risks or expose existing occupants, such as beachgoers and recreationists, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The La Jolla Shores project would not add new population to the existing beaches in San Diego. The project includes nature-based and other design solutions to reduce impacts from sea-level rise and coastal flooding. The La Jolla Shores project site ranges in elevation from 9 feet to roughly 14 feet. There are no steep slopes on site. The La Jolla Shores project would vegetate the proposed earthen dikes with grass or native plants but does not propose any vegetation that would be considered flammable. The La Jolla Shores project would be required to meet applicable fire measures included in the Adopted 2022 California Fire Code.

The fire station that serves the La Jolla Shores project site is Station 9 at 7870 Ardath Lane, located approximately 0.9 mile driving distance (4 minutes) from the site. Additionally, the La Jolla Shores project site encompasses the La Jolla Shores Lifeguard Station and several seasonal lifeguard towers (Temporary Lifeguard Towers 31, 32, and 33) (refer to Figure 2-5, La Jolla Shores Project Site). Refer to Section 5.10.3.1 for a complete description of fire protection services.

The project would not exacerbate wildfire risks or expose existing occupants, such as beachgoers and recreationists, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would not add new population to the existing beaches in San Diego. The project includes nature-based and other design solutions to reduce impacts from sea-level rise and coastal flooding. The Pacific Beach – Tourmaline Surf Park project site ranges in elevation from sea level to roughly 84 feet at the intersection of Tourmaline Street and La Jolla Boulevard; however, no improvements would be made along the eastern portion of the Pacific Beach – Tourmaline Surf Park project site. The highest elevation along the northern border of the parking lot, where the optional pedestrian pathway would be installed, is approximately 22 feet in elevation. There are no steep slopes on site, except for the entrance to the site that would remain unchanged from the existing condition. The Pacific Beach – Tourmaline

Surf Park project would vegetate the proposed sand and cobble dune with native plants appropriate for sand dunes but does not propose any vegetation that would be considered flammable. The Pacific Beach – Tourmaline Surf Park project would be required to meet applicable fire measures included in the Adopted 2022 California Fire Code.

The fire station that serves the Pacific Beach – Tourmaline project site is Station 21 at 750 Grand Avenue, located approximately 0.9 mile driving distance (4 minutes) from the site. Refer to Section 5.10.3.1 for a complete description of fire protection services.

The Pacific Beach – Tourmaline Surf Park project would not exacerbate wildfire risks or expose existing occupants, such as beachgoers and recreationists, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required.

Mission Beach

The Mission Beach project would not add new population to the existing beaches in San Diego. The Mission Beach project includes nature-based and other design solutions to reduce impacts from sea-level rise and coastal flooding. The Mission Beach project site ranges in elevation from sea level to roughly 13 feet. There are no steep slopes on site. The Mission Beach project would vegetate the proposed sand dunes with native plants appropriate for sand dunes but does not propose any vegetation that would be considered flammable. Additionally, the Mission Beach project would be required to meet applicable fire measures included in the Adopted 2022 California Fire Code.

The fire station that serves the Mission Beach project site is Station 21 at 750 Grand Avenue, located approximately 1.7 miles driving distance (7 minutes) from the site. Additionally, the Mission Beach project site is adjacent to the Mission Beach Lifeguard Station and encompasses several seasonal lifeguard towers (Temporary Lifeguard Towers 14 and 15) (refer to Figure 2-9, Mission Beach Project Site). Refer to Section 5.10.3.1 for a complete description of fire protection services.

The Mission Beach project would not exacerbate wildfire risks or expose existing occupants, such as beachgoers and recreationists, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The Ocean Beach – Pier project would not add new population to the existing beaches in San Diego. The project includes nature-based and other design solutions to reduce impacts from sealevel rise and coastal flooding. The Ocean Beach – Pier project site ranges in elevation from sea level to roughly 15 feet. There are no steep slopes on site. The cliffs on the southern side of the pier are part of the existing condition and outside the project site. The Ocean Beach – Pier project would vegetate the proposed sand dunes with native plants appropriate for sand dunes but does not propose any vegetation that would be considered flammable. Additionally, the Ocean Beach – Pier project would be required to meet applicable fire measures included in the Adopted 2022 California Fire Code.

The fire station that serves the Ocean Beach – Pier project site is Station 15 at 4711 Voltaire Street, located approximately 0.9 mile driving distance (4 minutes) from the site. Additionally, the Ocean Beach – Pier project site encompasses the Ocean Beach Lifeguard Station and two seasonal lifeguard towers (e.g., Temporary Lifeguard Towers 2 and 3) (refer to Figure 2-11, Ocean Beach – Pier Project Site). Refer to Section 5.10.3.1 for a complete description of fire protection services.

The Ocean Beach – Pier project would not exacerbate wildfire risks or expose existing occupants, such as beachgoers and recreationists, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The Sunset Cliffs project would not add new population to the existing beaches in San Diego. The project includes a road reconfiguration, a trail enhancement, interpretive signage, drainage improvements, and habitat enhancement. The Sunset Cliffs project site ranges in height from roughly 44 feet to 69 feet. Sunset Cliffs Boulevard sits atop a cliff and some improvements (e.g., trail enhancement, habitat restoration) may occur along minor slopes west of Sunset Cliffs Boulevard; however, the Sunset Cliffs project would not include substantial alterations to steep slopes. The Sunset Cliffs project would remove invasive plants and install native vegetation along the Sunset Cliffs Natural Park – Linear Park but does not propose any vegetation that would be considered flammable. Further, the Sunset Cliffs project would be required to meet applicable fire measures included in the Adopted 2022 California Fire Code. Emergency access to the Sunset Cliffs project site would be maintained along Sunset Cliffs Boulevard and intersecting streets.

The fire station that serves the Sunset Cliffs project site is Station 22 at 1055 Catalina Boulevard, located approximately 0.8 mile driving distance (3 minutes) from the site. Refer to Section 5.10.3.1 for a complete description of fire protection services.

The Sunset Cliffs project would not exacerbate wildfire risks or expose existing occupants, such as beachgoers and recreationists, to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required.

5.14.3.3 Issue 3: Exacerbate Fire Risk

Would the proposed CRMP Phase 1 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 result in temporary or ongoing impacts to the environment?

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would include a 14-foot wide, 1,200-foot multi-use path for cyclists and pedestrians fronted by elevated sand dunes along the beach on the Ocean Beach – Dog Beach project site. The proposed multi-use path would be constructed as a Class I bike path and connect with the existing terminus of the San Diego River Bikeway to the north, which is also a Class I bike path, and the proposed multi-use path within the Ocean Beach – Pier project site to the south. The proposed multi-use path on the Ocean Beach – Pier project site would connect to the existing paved pedestrian path adjacent to Ocean Beach Veterans Plaza.

The multi-use path and sand dunes would be located along the landward edge of the beach, adjacent to the existing parking lot. The Pilot Project does not include any other infrastructure that may exacerbate fire risk or result in ongoing impacts on the environment. Potentially significant temporary impacts on the environment from construction of the Pilot Project would be mitigated to less than significant levels (refer to Section 5.3, Biological Resources, and Section 5.9, Noise). Impacts would be less than significant with mitigation.

La Jolla Shores

The Amphitheater Design Option would construct earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards. None of these project components would exacerbate fire risk or result in ongoing impacts on the environment.

Potentially significant temporary impacts on the environment related to biological resources and noise from construction of the La Jolla Shores project would be mitigated to less than significant levels (refer to Section 5.3, Biological Resources, and Section 5.9, Noise). Impacts would be less than significant with mitigation. However, even with implementation of MM CUL-2 (refer to Section 5.4, Cultural Resources, and Section 5.12, Tribal Cultural Resources), it cannot be ensured that all potential impacts to archaeological and Tribal Cultural Resources would be fully avoided or minimized. Impacts to archaeological and Tribal Cultural Resources would remain potentially significant.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the Pacific Beach – Tourmaline Surf Park project would include covering or undergrounding the existing drainage culvert along the north edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment. Improvements to the Pacific Beach – Tourmaline Surf Park project site would not exacerbate fire risk or result in significant impacts to the environment.

The Pacific Beach – Tourmaline Surf Park project does not include any other infrastructure that may exacerbate fire risk or result in ongoing impacts on the environment. Potentially significant temporary impacts on the environment from construction of the Pacific Beach – Tourmaline Surf Park project would be mitigated to less than significant levels (refer to Section 5.3, Biological Resources, and Section 5.9, Noise). Impacts would be less than significant with mitigation.

Mission Beach

The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place. The proposed sand dunes would be vegetated with native plants, which would provide ecological benefits. In addition to the proposed sand dunes, the Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland.

None of these project components would exacerbate fire risk or result in ongoing impacts on the environment. Potentially significant temporary impacts on the environment from construction of the Mission Beach project would be mitigated to less than significant levels (refer to Section 5.3, Biological Resources; Section 5.4, Cultural Resources; and Section 5.9, Noise). Impacts would be less than significant with mitigation.

Ocean Beach – Pier

The Ocean Beach – Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier. The Ocean Beach – Pier project does not include any other infrastructure that may exacerbate fire risk or result in ongoing impacts on the environment. Potentially significant temporary impacts on the environment from construction of the Ocean Beach – Pier project would be mitigated to less than significant levels (refer to Section 5.3, Biological Resources, and Section 5.9, Noise). Impacts would be less than significant with mitigation.

Sunset Cliffs

The Sunset Cliffs project would include a road reconfiguration program as well as trail enhancement, interpretative signage, drainage improvements, and habitat enhancement along the southern 0.64-mile portion of the site. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures. None of these project components would exacerbate fire risk or result in ongoing impacts on the environment.

Potentially significant temporary impacts on the environment related to biological resources and noise from construction of the Sunset Cliffs project would be mitigated to less than significant levels (refer to Section 5.3, Biological Resources, and Section 5.9, Noise). Impacts would be less than significant with mitigation. However, even with implementation of MM CUL-2 (refer to Section 5.4, Cultural Resources, and Section 5.12, Tribal Cultural Resources), it cannot be ensured that all potential impacts to archaeological and Tribal Cultural Resources would be fully avoided or minimized. Impacts to archaeological and Tribal Cultural Resources would remain potentially significant.

5.14.3.4 Issue 4: Flooding or Landslides

Would the proposed CRMP Phase 1 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?

Pilot Project: Ocean Beach – Dog Beach

The purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The Pilot Project on the Ocean Beach – Dog Beach project site would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the San Diego River Bikeway to the Avalanche Groin. The Pilot Project would also restore the existing dune area north of the parking lot on either side of the San Diego River Bikeway. Additionally, the Pilot Project could include relocation or reconstruction of the existing restroom within the grassy landscaped area next to the parking lot and installation of an express shuttle stop within the parking lot.

The Pilot Project would not substantially alter existing drainage patterns on the Ocean Beach – Dog Beach project site. The elevated sand dune would be similar in height and width to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The proposed sand dune would be vegetated with native plants, which would help stabilize the sand dune. The Pilot Project would incrementally increase impervious surfaces across the project site with construction of a 1,200-foot-long and 14-foot-wide multi-use path. This incremental increase in impervious surface on the Ocean Beach – Dog Beach project site would not alter drainage patterns across the site.

The Pilot Project would comply with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The Pilot Project would also comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provisions, which would include compliance with an approved Stormwater Pollution Prevention Plan (SWPPP) that would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal conditions.

The Pilot Project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; therefore, impacts would be less than significant, and no mitigation is required.

La Jolla Shores

The purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The Amphitheater Design Option would construct two earthen dikes along the western edges of the grassy recreational areas at La Jolla Shores and Kellogg Parks and a terraced seatwall along the western edge of the parking lot to provide a viewing and seating area while also providing flood protection. The Reconfigured Park Design Option would reconfigure the grassy recreational areas and parking lot to provide one continuous waterfront park and align the parking lot further inland and away from coastal flood hazards.

The La Jolla Shores project would not substantially alter existing drainage patterns at the La Jolla Shores project site. Under the Amphitheater Design Option, the proposed earthen dikes and terraced seatwall would be similar in height and width to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The proposed earthen dikes would be vegetated with grass or native plants, which would help stabilize the soils. Given that the terraced seatwall would be constructed on existing paved surface along the parking lot, the La Jolla Shores project would not increase impervious surfaces across the project site with construction of the 550 feet long and 20 feet wide terraced seatwall. The waterfront park under the Reconfigured Park Design Option would also be vegetated. Under this design option, portions of the existing grassy recreational areas would be converted to impervious paved parking lot; however, a portion of the existing parking lot would also be converted to pervious grassy recreational area. The footprint of the proposed parking lot would remain the same as the footprint of the existing parking lot within the project site, and the footprint of the proposed recreational area would remain the same as the combined footprint of the existing recreational areas at La Jolla Shores Park and Kellogg Park. As such, no increase in impervious surfaces would occur under either design option. Under both design options, stormwater drainage would continue to be conveyed to the existing storm drain system. Therefore, the La Jolla Shores project site would not alter drainage patterns across the site.

The La Jolla Shores project would comply with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The La Jolla Shores project would also comply with the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions.

The La Jolla Shores project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; therefore, impacts would be less than significant, and no mitigation is required.

Pacific Beach – Tourmaline Surf Park

The purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The Pacific Beach – Tourmaline Surf Park project would convert the existing shoreline protection feature on the beach into sand and cobble dune with a rock core. The dune would be vegetated with native plants. In addition, the existing vegetated median between the restrooms and the access ramp would be restored with native vegetation. Optional components of the Pacific Beach – Tourmaline Surf Park project would include covering or undergrounding the existing drainage culvert along the northern edge of the parking lot to provide a pedestrian walkway and the addition of an underground vault for water quality treatment.

The Pacific Beach – Tourmaline Surf Park project would not substantially alter existing drainage patterns on the Pacific Beach – Tourmaline Surf Park project site. The proposed sand and cobble dune would be similar in height and width to the existing shoreline protection feature. The dune would be vegetated with native plants, which would help stabilize the dune. Further, restoration of the existing vegetated median between the restrooms and the access ramp and the optional pedestrian walking north of the parking lot would not alter drainage patterns across the site. The optional undergrounding of the culvert would likely involve installing a new drainage pipe, which would be appropriately sized to improve drainage and water quality (e.g., by reducing trash from directly entering the system) and reduce scour at the outflow. The Pacific Beach – Tourmaline Surf Park project would not result in construction of any new impervious surfaces across the project site with construction of the dune. Thus, the Pacific Beach – Tourmaline Surf Park project would not alter drainage patterns across the site.

The Pacific Beach – Tourmaline Surf Park project would comply with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations), and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The project would also comply with the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions.

The Pacific Beach – Tourmaline Surf Park project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; therefore, impacts would be less than significant, and no mitigation is required.

Mission Beach

The purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The Dune Design Option would include construction of an elevated sand dune that would run north–south along the back of the beach from Ventura Place to San Fernando Place. In addition to construction of the elevated sand dune, the Perched Beach Design Option would convert a portion of the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland.

The Mission Beach project would not substantially alter existing drainage patterns on the Mission Beach project site. The proposed sand dune under both design options would be constructed similarly to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. The Perched Beach Design Option would extend and elevate an approximately 350-foot section of the existing beach, which would continue to provide a pervious surface. The Mission Beach project would not result in construction of any impervious surfaces across the site with construction of the elevated sand dune or potential perched beach. Under both design options, stormwater drainage would continue to be conveyed to the existing storm drain system. Thus, the Mission Beach project would not alter drainage patterns across the site.

The Mission Beach project would comply with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The Mission Beach project would also comply with the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions.

The Mission Beach project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; therefore, impacts would be less than significant, and no mitigation is required.

Ocean Beach – Pier

The purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The Ocean Beach –

Pier project would include construction of an elevated sand dune that would be vegetated with native plants and a multi-use path that would run north–south along the length of the site from the Avalanche Groin to the Ocean Beach Pier.

The Ocean Beach – Pier project would not substantially alter existing drainage patterns on the Ocean Beach – Pier project site. The proposed sand dune would be constructed similarly to the annual winter berm that is constructed on the project site every fall and maintained through the winter season. The dune would be vegetated with native plants, which would help stabilize the dune. Similar to the Pilot Project, the Ocean Beach – Pier project would incrementally increase impervious surfaces across the project site with construction of a 1,200-foot-long and 10- to 14-foot-wide multi-use path. This incremental increase in impervious surface on the Ocean Beach – Dog Beach project site would not alter drainage patterns across the site.

The Ocean Beach – Pier project would comply with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The Ocean Beach – Pier project would also comply with the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions.

The Ocean Beach – Pier project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; therefore, impacts would be less than significant, and no mitigation is required.

Sunset Cliffs

The purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The Sunset Cliffs project would include a road reconfiguration program that would trial different configurations of vehicle, bicycle, and pedestrian access along the southern 0.64-mile portion of the site using temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers). The program would monitor traffic flow and incorporate lessons learned back into the roadway design before designing a more permanent road reconfiguration. In addition to the proposed road reconfiguration program, the Sunset Cliffs project would include trail enhancement, interpretative signage, drainage improvements, and habitat enhancement through removal of invasive species and installation of native plants along the Sunset Cliffs trail. The Sunset Cliffs project also includes optional components to realign parking in the northern parking lots further inland, enhance trails, improve inland drainage, install native plants, and implement erosion control measures.

The Sunset Cliffs project would not adversely alter existing drainage patterns on the Sunset Cliffs project site and would result in an overall improvement to the post-project drainage patterns. The Sunset Cliffs project would include drainage improvements (e.g., upgraded curb and gutter connections, new stormwater pipes, new and enhanced storm drain inlets, vegetated bioswales where appropriate, and trash management features), habitat enhancement, and erosion control measures where feasible to address safety issues and reduce stormwater runoff and coastal bluff erosion. The optional realigned parking areas could also be graded to ensure that drainage moves towards Sunset Cliffs Boulevard, which would prevent stormwater runoff on the bluff to minimize erosion. Additional stormwater infrastructure and drainage improvements could be implemented as the new parking configurations are designed and implemented.

The Sunset Cliffs project would comply with SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations), and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The Sunset Cliffs project would also comply with the NPDES General Construction General Permit provisions, which would include compliance with an approved SWPPP that would consider the full range of erosion control BMPs, including any additional site-specific and seasonal conditions.

The Sunset Cliffs project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes; therefore, impacts would be less than significant, and no mitigation is required.

5.14.4 Significance of Impacts

Pilot Project: Ocean Beach – Dog Beach

The Pilot Project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant. While the Pilot Project would not require the installation or maintenance of infrastructure that may exacerbate fire risk, temporary impacts on the environment may occur during construction; however, potential impacts would be mitigated to less than significant levels with implementation of MM BIO-1 through MM BIO-7 and MM NOI-1.

La Jolla Shores

The La Jolla Shores project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant. While the La Jolla Shores project would not require the installation or maintenance of infrastructure that may exacerbate fire risk, temporary impacts on the environment may occur during construction. Potential impacts would be mitigated with implementation of MM BIO-1 through MM BIO-7, MM CUL-2, and MM NOI-1; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to archaeological and Tribal Cultural Resources would be fully avoided or minimized. Impacts to archaeological and Tribal Cultural Resources would remain potentially significant.

Pacific Beach – Tourmaline Surf Park

The Pacific Beach – Tourmaline Surf Park project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant. While the Pacific Beach – Tourmaline Surf Park project would not require the installation or maintenance of infrastructure that may exacerbate fire risk, temporary impacts on the environment may occur during construction; however, potential impacts would be mitigated to less than significant levels with implementation of MM BIO-1 through MM BIO-7 and MM NOI-1.

Mission Beach

The Mission Beach project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant. While the Mission Beach project would not require the installation or maintenance of infrastructure that may exacerbate fire risk, temporary impacts on the environment may occur during construction; however, potential impacts would be mitigated to less than significant levels with implementation of MM BIO-1 through MM BIO-7, MM CUL-1, and MM NOI-1.

Ocean Beach – Pier

The Ocean Beach – Pier project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant. While the Ocean Beach – Pier project would not require the installation or maintenance of infrastructure that may exacerbate fire risk, temporary impacts on the environment may occur during construction; however, potential impacts would be mitigated to less than significant levels with implementation of MM BIO-1 through MM BIO-7 and MM NOI-1.

Sunset Cliffs

The Sunset Cliffs project would not substantially impair an adopted Emergency Response Plan or Emergency Evacuation Plan, expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

While the Sunset Cliffs project would not require the installation or maintenance of infrastructure that may exacerbate fire risk, temporary impacts on the environment may occur during construction. Potential impacts would be mitigated with implementation of MM BIO-1 through MM BIO-7, MM CUL-2, and MM NOI-1; however, even with implementation of MM CUL-2, it cannot be ensured that all potential impacts to archaeological and Tribal Cultural Resources would be fully avoided or minimized. Impacts to archaeological and Tribal Cultural Resources would remain potentially significant.

5.14.5 Mitigation Framework

Impacts related to wildfire would be mitigated with implementation of MM BIO-1 through MM BIO-7, MM CUL-1 and MM CUL-2, and MM NOI-1. Refer to Section 5.3.5, Section 5.4.5, and Section 5.9.5, respectively, for full discussion of these mitigation measures. As described above, even with implementation of MM CUL-2, impacts to archaeological and Tribal Cultural Resources would remain potentially significant.

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Chapter 6.0 Cumulative Impacts

6.1 Introduction

The California Environmental Quality Act (CEQA) Guidelines, Section 15355, defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." These individual effects may include changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of a project when added to other past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects occurring over a period of time.

CEQA Guidelines, Section 15130, requires that an Environmental Impact Report (EIR) discuss the cumulative impacts of a project when a project's incremental effect would potentially be cumulatively considerable. Cumulatively considerable, as defined in CEQA Guidelines, Section 15065(a)(3), means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, other current projects, and probable future projects. Where a lead agency determines a project's incremental effect would not be cumulatively considerable, a brief description of the basis for such a conclusion must be included. In addition, the CEQA Guidelines allow for a project's contribution to be rendered less than cumulatively considerable with implementation of appropriate mitigation.

According to CEQA Guidelines, Section 15130(b), the discussion of cumulative impacts "need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness." Additionally, one of the following two possible approaches is required for considering cumulative effects:

- A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency.
- A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document that has been adopted or certified, that described or evaluated region- 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.

Pursuant to CEQA Guidelines, Section 15130(d), cumulative impact discussions may rely on previously approved land use documents, such as General Plans, Specific Plans, and Local Coastal Plans, and may be incorporated by reference. In addition, no further cumulative impact analysis is required when a project is consistent with such plans and the lead agency determines that the regional or area-wide cumulative impacts of a project have already been adequately addressed in

a certified EIR for that plan. CEQA Guidelines, Section 15130(e), also states that "if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or General Plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact, as provided in Section 15183(j)."

6.2 Cumulative Analysis Setting and Methodology

The cumulative impacts assessment in this chapter primarily relies on the cumulative impact determinations in the City of San Diego Final Program EIR for the Draft General Plan (i.e., 2008 City of San Diego General Plan Update [General Plan]) (General Plan PEIR) (City of San Diego 2007). The following issues were identified as cumulatively considerable in the General Plan PEIR: agricultural resources, air quality, biological resources, geological conditions, health and safety, historical resources, hydrology, land use, mineral resources, noise, paleontological resources, population and housing, public services and facilities, public utilities, transportation/traffic/circulation/parking, visual effects and neighborhood character, water quality, and greenhouse gases (GHGs). Consistent with CEQA Guidelines, Section 15130(e), where the significance of cumulative impacts was previously identified for the General Plan PEIR, and the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1) is consistent with that plan, those impacts does not need to be analyzed further. The CRMP Phase 1, including the Pilot Project at the Ocean Beach – Dog Beach project site, as well as the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach - Pier, and Sunset Cliffs projects, is consistent with the General Plan, and no amendment to the General Plan or zoning code is proposed. As described in Section 3.6, Future Actions Associated with the Coastal Resilience Master Plan, discretionary actions required for the CRMP Phase 1 implement existing regulatory permit requirements. No changes to the land use assumptions and population growth projections used in the General Plan PEIR are proposed by the CRMP Phase 1. CRMP Phase 1 consistency with the applicable goals and policies of the General Plan is contained in Appendix E to this PEIR. Therefore, this section summarizes how the CRMP Phase 1 is consistent with the General Plan PEIR's cumulative analyses and how cumulative impacts of the CRMP Phase 1 have been adequately addressed in the General Plan PEIR.

6.3 Assessment of Cumulative Impacts

The geographic scope for the analysis of cumulative impacts depends on the nature of the issue and the individual projects and varies depending on the environmental issue being analyzed. Often, cumulative impacts are not limited by jurisdictional boundaries. The CRMP Phase 1 area spans the coastal jurisdictional boundaries of the City in six coastal locations within five community planning areas (i.e., Ocean Beach, La Jolla, Pacific Beach, Mission Beach, and Peninsula). The geographic scope for the cumulative analysis for the CRMP Phase 1 is the City of San Diego General Plan PEIR's cumulative effects analysis area based on the buildout of the General Plan, County of San Diego (County), and regional growth projections provided by the San Diego Association of Governments' (SANDAG) 2030 Regional Growth Forecast Update (Regional Growth Forecast).

6.3.1 Aesthetics

The General Plan PEIR determined that the General Plan buildout would result in significant projectlevel impacts associated with visual resources and neighborhood character, and result in cumulatively significant visual impacts in the City and County. Although implementation of the applicable federal, state, and local regulations would preclude incremental visual impacts, some projects may require additional mitigation measures to reduce impacts. Where no feasible mitigation measures exist, project-level incremental impacts would remain significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Furthermore, as discussed in Section 5.1, Aesthetics, the CRMP Phase 1 would not substantially obstruct scenic views of the Pacific Ocean from public viewing locations and would be designed to maintain the natural and open space aesthetics of the impacted areas. The project-specific impacts related to scenic vistas, scenic resources within a scenic highway, visual character or quality, zoning and regulations governing scenic quality, and light and glare were also determined to be less than significant. Cumulative impacts related to aesthetics would be less than significant, and the proposed project's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.2 Air Quality

A project would be considered to have a significant cumulative impact if its contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact). The geographic context for the analysis of cumulative impacts related to air quality is the San Diego Air Basin (SDAB). The SDAB is designated as a federal and state non-attainment area for 8-hour O₃ and a state non-attainment area for 1-hour O₃, PM₁₀, and PM_{2.5}.

The General Plan PEIR determined that future development associated with the General Plan would generate increased air pollutant emissions associated with construction activities, transportation, and stationary sources, including substantial emissions of PM₁₀ and PM_{2.5} during construction and localized concentration of carbon monoxide (CO) or CO hotspots due to increased volume of traffic flow at some intersections. The General Plan PEIR determined that implementation of the existing policies and compliance with federal, state, and local regulations would preclude incremental air quality impacts. The General Plan PEIR determined that where

adherence to regulations may not adequately avoid or reduce incremental project-specific impacts, additional mitigation measures may be required. If project-level air quality impacts cannot be feasibly mitigated, incremental impacts may remain significant and unavoidable. Therefore, incremental PM_{10} and $PM_{2.5}$ emissions during construction were determined to be cumulatively significant and unavoidable in the General Plan PEIR.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. As discussed in Section 5.2, Air Quality, projects that propose development at an intensity equal to or less than population growth projections and land use intensity assumed in the Regional Air Quality Strategy (RAQS) are inherently consistent with the plan emissions projections. The CRMP Phase 1 provides improvements to existing recreational areas and does not include any components that would generate population growth or increase or change existing land use intensity. Therefore, the CRMP Phase 1 would not result in buildout which would be greater than what was accounted for in the RAQS. Additionally, simultaneous construction at the six project sites would have less than significant construction emission impacts and operation of the CRMP Phase 1 projects would have less than significant operational impacts since only occasional criteria air pollutant emissions from operation of maintenance equipment would occur. Therefore, the CRMP Phase 1, in combination with other cumulative projects, would not result in a significant cumulative impact related to conflicts with the applicable Air Quality Plan; cumulatively considerable contribution to criteria air pollutants in the SDAB; exposure of sensitive receptors to substantial pollutant concentration; and odors adversely affecting a substantial number of people. Cumulative impacts related to air quality would be less than significant, and the proposed project's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.3 Biological Resources

The Multiple Species Conservation Program (MSCP), Multiple Habitat Conservation Program (MHCP), and the Multiple Habitat Conservation and Open Space Program collectively contribute to the conservation of vegetation communities and species in the County.

The City's General Plan PEIR determined that future development could occur on or adjacent to undeveloped lands, which may result in impacts to biological resources, including native habitat, wetlands, wildlife movement, and sensitive species. However, implementation of the existing policies and compliance with federal, state, and local regulations would preclude incremental biological resources impacts, and where an individual project's environmental review finds adherence to regulations may not adequately avoid or reduce incremental impacts, additional mitigation measures may be required. If project-level biological resources impacts cannot be feasibly mitigated, incremental impacts may remain significant and unavoidable. Therefore, the General Plan PEIR determined that incremental biological resources impacts cannot be precluded, and when viewed in connection with regional impacts to unprotected species, habitats, and other resources, are considered cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Consistent with the General Plan PEIR's cumulative analysis, the CRMP Phase 1 would comply with the existing federal, state, and local regulations, and would also implement project-specific mitigation measures to reduce impacts related to sensitive plant and wildlife species, sensitive vegetation community, jurisdictional aquatic resources, wildlife corridors and habitat linkages, habitat conservation plans, multi-habitat planning area adjacency, local policies or ordinances, and invasive species introduction to less than significant levels (refer to Section 5.3, Biological Resources, for a discussion of Mitigation Measures (MM) BIO 5.3-1 through BIO 5.3-7). With compliance with existing regulations and implementation of project-specific mitigation measures, cumulative impacts related to biological resources would be less than significant, and the proposed project's contribution would not be cumulatively considerable.

6.3.4 Cultural Resources

The General Plan PEIR's cumulative analysis stated development that is expected to occur through the implementation of the Draft General Plan and throughout the county could involve ground disturbance activities and substantial alteration, relocation, or demolition of historic buildings, structures, objects, landscapes, and sites that would significantly impact historic and archaeological resources and human remains. Although implementation of the General Plan policies and compliance with federal, state, and local regulations would preclude impacts to historic and archaeological resources and human remains, additional mitigation measures may be required for some projects where adherence to regulations may not adequately avoid or reduce incremental impacts. Because the degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at the program level of analysis for the General Plan, incremental impacts related to historic and archaeological resources and human remains, when viewed in connection with historic resources impacts elsewhere in the county, are considered cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and

policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Consistent with the General Plan PEIR's cumulative analysis, the CRMP Phase 1 would comply with existing federal, state, and local regulations. However, as discussed in Section 5.4, Cultural Resources, even with implementation of MM CUL-1 through CUL-2, the CRMP Phase 1 would result in potentially significant impacts related to archaeological resources. Therefore, the CRMP Phase 1 would incrementally contribute to the General Plan PEIR's cumulative impacts related to historic and archaeological resources and human remains.

6.3.5 Geology and Soils

The City's General Plan PEIR determined that future buildout of the General Plan and projected population growth in the City and the County would increase the number of people potentially exposed to seismic and geologic hazards. Although implementation of the existing federal, state, and local regulations would preclude impacts related to seismic and geologic hazards, for some projects where adherence to regulations may not adequately avoid or reduce incremental impacts, additional mitigation measures would be required. However, for some projects, incremental impacts may remain significant and unavoidable where no feasible mitigation exists. Therefore, the General Plan PEIR determined that an incremental increase in the number of people exposed to seismic and geologic hazards cannot be precluded, and when viewed in connection with the regional exposure of people to such hazards, is considered cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Consistent with the General Plan PEIR's cumulative analysis, the CRMP Phase 1 would comply with the existing federal, state, and local regulations. Furthermore, as discussed in Section 5.5, Geology and Soils, the CRMP Phase 1 would not construct any habitable structures and any structural development would be required to comply with the applicable California Building Code and San Diego Municipal Code (SDMC), which include design criteria for seismic loading and other geologic hazards and require that a geotechnical investigation be conducted for the structure. Therefore, the CRMP Phase 1 would result in less than significant impacts related to seismic hazards, erosion or loss or topsoil, and geologic instability. Applicable SDMC and National Pollutant Discharge Elimination System requirements would include best management practices for reducing potential soil erosion and sedimentation during construction activities. As project-specific impacts were determined to be less than significant, cumulative impacts related to geologic hazards would be less than significant and the proposed project's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.6 Greenhouse Gas Emissions

The City's General Plan PEIR determined that future development anticipated by implementation of the General Plan would result in a cumulatively considerable incremental contribution to the worldwide increase in GHG emissions; therefore, impacts were found to be significant and unavoidable.

The impact analysis of GHG emissions is a cumulative analysis by its nature because global climate change impacts are a cumulative issue caused by global GHG emissions and not by an individual project's emissions. However, as stated in CEQA Guidelines Sections 15064(h)(3), 15130(d), and 15183(b), a project's incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of a plan for the reduction of mitigation of GHG Emissions, such as the City's Climate Action Plan (CAP), adopted for its respective geographic location. The CRMP Phase 1 would not require any changes to the adopted General Plan, and as discussed in Section 5.6.3.1, Issue 1: Generation of Greenhouse Gas Emissions, the CRMP Phase 1 would be consistent with the City's CAP. Additionally, consistent with the Climate Resilient SD Plan Policy TNE-3, the CRMP Phase 1 would implement nature-based coastal resiliency projects that increase the City's ability to adapt, recover, and thrive in a changing climate. The CRMP Phase 1 would be consistent with and would support implementation of the City's applicable GHG plans, policies, and regulations, and would not result in a cumulatively considerable contribution to cumulative GHG emissions; therefore, no mitigation is required.

6.3.7 Hydrology and Water Quality

The City's General Plan PEIR determined that buildout of the General Plan and future development associated with projected population growth in the County will result in increased impervious surfaces within the county's watersheds, which will result in hydrologic and water quality impacts associated with increased absorption rates, drainage patterns, or rates of surface runoff. Although implementation of the existing federal, state, and local regulations would preclude impacts related to hydrological impacts, for some projects where adherence to regulations may not adequately avoid or reduce incremental impacts, additional mitigation measures would be required. However, the degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at the program level of analysis for the General Plan. Therefore, the General Plan PEIR determined that incremental hydrological impacts related to absorption rates, drainage patterns, and/or rates of surface runoff, when viewed in connection with hydrological impacts elsewhere in the county, would be considered cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be

applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Consistent with the General Plan PEIR's cumulative analysis, the CRMP Phase 1 would comply with the existing federal, state, and local regulations, including, but not limited to the National Pollutant Discharge Elimination System General Construction Permit, SDMC Chapter 14, Article 2, Division 4 (Landscape Regulations) and SDMC Chapter 14, Article 2, Division 2 (Storm Water Runoff Control and Drainage Regulations). The cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. Additionally, as discussed in Section 5.7, Hydrology and Water Quality, the CRMP Phase 1 impacts related to water quality standards; groundwater supplies; site drainage and hydrology; flood hazard, tsunami, or seiche zones; and conflict with water quality control plan or sustainable groundwater management plan, would be less than significant. The project would not result in a significant cumulative impact related to hydrology and water quality, and the project's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.8 Land Use and Planning

The General Plan PEIR stated that cumulative development within the county would not result in cumulative land use and planning impacts, with the potential exception of impacts related to land use incompatibilities. Protective measures within adopted regional, state, and federal environmental plans, including applicable habitat conservation plans and compliance with the mandatory policies and regulations of state or federal agencies would ensure that physical changes to the environment associated with the incremental effect of the General Plan on adopted regional, state, and federal environmental plans, policies and regulations is not cumulatively significant when viewed in connection with physical changes to the environment associated with the impacts related to land use incompatibility because infill and redevelopment allowed under the General Plan buildout could increase exposure of sensitive receptors to incompatible land uses such as restaurants, bars, and night clubs, industrial uses, traffic noise, and other adverse physical impacts.

The CRMP Phase 1 would not require any land use changes to the adopted General Plan. Consistent with the General Plan PEIR's cumulative analysis, the CRMP Phase 1 would comply with the existing federal, state, and local regulations. The cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the applicable plans, including the City's adopted General Plan, is analyzed in Appendix E of this PEIR. Furthermore, as discussed in Section 5.8, Land Use and Planning, the CRMP Phase 1 impacts related to physical division of an established community, conflict with applicable land use plans, policies, and regulations, and deviation or variance would be less than significant. As CRMP Phase 1 impacts were determined to be less than significant, cumulative land use impacts associated with CRMP Phase 1 would be less than significant and the proposed project's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.9 Noise

The City's General Plan PEIR determined that the increased ambient noise levels along major transportation corridors and within the vicinity of new stationary sources from the General Plan development could expose sensitive receptors to increased ambient noise impacts. Although implementation of the existing federal, state, and local regulations would preclude impacts related to the incremental exposure of sensitive receptors to increased ambient noise levels, for some projects where adherence to regulations may not adequately avoid or reduce incremental impacts, additional mitigation measures would be required. However, for some projects, incremental impacts may remain significant and unavoidable where no feasible mitigation exists. Therefore, the General Plan PEIR determined that incremental noise impacts cannot be precluded, and impacts would be cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Additionally, as discussed in Section 5.9 Noise, the CRMP Phase 1 would not result in significant construction noise impacts with implementation of MM NOI-1 to reduce noise levels in compliance with SDMC Section 59.5.0404. As with the CRMP Phase 1, cumulative projects would also be required to comply with the SDMC; therefore, no significant cumulative construction noise impacts are anticipated. During operation, the CRMP Phase 1 would not result in potentially significant permanent increase in noise levels from traffic or operation of maintenance equipment. Therefore, the CRMP Phase 1 would not result in potentially significant permanent increase in noise levels from traffic or operation of maintenance equipment. Therefore, the CRMP Phase 1 would not result in potentially significant permanent increase in noise levels from traffic or operation of maintenance equipment. Therefore, the CRMP Phase 1 would not result in potentially significant permanent increase in noise levels from traffic or operation of maintenance equipment. Therefore, the CRMP Phase 1 would not result in potentially significant permanent.

6.3.10 Public Services and Recreation

The General Plan PEIR stated future development in the county would require new or improved public services and facilities infrastructure due to the increased demand for police, fire, schools, libraries, parks, and other services associated with development. Although implementation of the General Plan policies and compliance with federal, state, and local regulations would preclude incremental impacts associated with new construction of, or improvements to, public services and facilities infrastructure, additional mitigation measures may be required for some projects where adherence to regulations may not adequately avoid or reduce incremental impacts. Because the degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at this program level of analysis for the General Plan, incremental impacts

associated with the construction of future public services and facilities infrastructure improvements, when viewed in connection with the increased regional demand for and construction of such improvements, were considered cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Additionally, as discussed in Section 5.10, Public Services and Recreation, the CRMP Phase 1 would result in less than significant impacts related to fire protection, police protection, schools, and libraries; parks; and recreation facilities. As CRMP Phase 1 impacts were determined to be less than significant, the proposed project would not incrementally contribute to cumulative impacts related to public services and recreation; therefore, no mitigation is required.

6.3.11 Transportation

The City's General Plan PEIR was certified on March 10, 2008, prior to the passing of Senate Bill (SB) 743, which changed the basis for evaluating transportation impacts in CEQA from the Level of Service (LOS) metric to the vehicle miles traveled (VMT) metric. The General Plan PEIR's cumulative analysis for transportation used the LOS metric to determine if a project would significantly impact transportation individually and cumulatively. Therefore, this section does not rely on the General Plan PEIR for cumulative transportation impacts. The potential for cumulative transportation impacts resulting from implementation of the CRMP Phase 1 in conjunction with other past, present, and reasonably foreseeable future projects is described for each of the City's CEQA Significance Determination Thresholds below (refer to Section 5.11, Transportation).

6.3.11.1 Issue 1: Transportation System Performance

The geographic context for the analysis of cumulative impacts associated with conflicts with an adopted transportation program, plan, ordinance, or policy is within the City. A significant cumulative impact would occur if the combination of cumulative projects would result in a cumulatively considerable impact related to conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. As discussed in Section 5.11.3.1, Issue 1: Transportation System Performance, the CRMP Phase 1 would be consistent with applicable programs, plans, ordinances, and policies addressing the transportation system, including transit, roadways, bicycle, and pedestrian facilities. Similar to the CRMP Phase 1, cumulative projects would be required to demonstrate consistency with existing adopted plans or require mitigation measures to ensure consistency for project approvals to occur. Therefore, the CRMP Phase 1, in combination with other cumulative projects, would not result in a
significant cumulative impact due to conflicts with adopted policies. The CRMP Phase 1's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.11.2 Issue 2: Vehicle Miles Traveled

The VMT analysis is, by nature, a cumulative issue. The City's Transportation Study Manual requires a project to determine if it would cause an increase in regional VMT. The Transportation Study Manual provides screening criteria where a project is presumed to have a less than significant VMT impact due to project characteristics and/or location. These screening criteria include development located in a VMT efficient area, small projects (generating less than 300 daily trips), locally serving facilities, affordable housing, mixed-use projects, and redevelopment projects (City of San Diego 2020). As discussed in Section 5.11.3.2, Issue 2: Vehicle Miles Traveled, none of these screening criteria are applicable to the CRMP Phase 1 due to the nature of development proposed under CRMP Phase 1 (e.g., nature-based solutions, multi-modal improvements, drainage improvements, habitat enhancements, and parking reconfigurations). Instead, the City has determined that a qualitative discussion of the proposed CRMP Phase 1 is sufficient to demonstrate that VMT impacts would be less than significant. For example, construction activities for the CRMP Phase 1 projects, which would generate vehicle trips, would be short-term and temporary. Once construction activities for the individual CRMP Phase 1 projects are completed, construction-related vehicle trips to and from the project sites would cease. Operationally, none of the CRMP Phase 1 projects would change the existing land uses of the project sites and would not attract or generate new vehicle trips to the project sites. Additionally, the CRMP Phase 1 would generally have a beneficial impact on VMT by improving multi-modal facilities (e.g., creating, enhancing, or protecting pedestrian and bicycle facilities). For example, the Pilot Project and Ocean Beach – Pier project would construct a multi-use path with a pedestrian pathway and Class I bike path that would connect the San Diego River Bikeway to the Ocean Beach Pier. Further, the optional express shuttle stop within the parking lot at the Ocean Beach – Dog Beach project site would improve regional access to the coast and reduce regional VMT associated with vehicle trips to the project site. Therefore, VMT impacts would be considered less than significant, and the CRMP Phase 1 would not contribute to a significant cumulative regional VMT impact. The CRMP Phase 1's contribution would not be cumulatively considerable; therefore, no mitigation is required.

6.3.11.3 Issue 3: Hazardous Design Features and Issue 4: Emergency Access

A significant cumulative impact would occur if cumulative projects would create traffic hazards through design or incompatible uses, block access roads, or if off-site road improvements would result in the closure of roads. The CRMP Phase 1 would not contribute to cumulatively considerable impacts associated with increased hazards due to design features and emergency access because the CRMP Phase 1 would improve multimodal accessibility and safety while providing adequate emergency access. For example, the Pilot Project at the Ocean Beach – Dog Beach project site, in

combination with the Ocean Beach – Pier project, would construct a multi-use path with a Class I bike path and separated pedestrian path that would connect the San Diego River Bikeway to the Ocean Beach Pier. The proposed multi-use path and elevated sand dunes would include designated accessways to maintain public and emergency access across these features. Street improvements for the CRMP Phase 1, as with other cumulative projects within the City, would be required to be constructed in accordance with the standards in the SDMC, the City's Standard Drawings (Appendix H of the City's Land Development Manual) (City of San Diego 2021), and the City's Street Design Manual (Appendix I of the City's Land Development Manual) (City of San Diego 2017), as appropriate. Cumulative impacts associated with increased hazards due to design features and emergency access would be less than significant; therefore, no mitigation is required.

6.3.12 Tribal Cultural Resources

The General Plan PEIR was certified on March 10, 2008, prior to Assembly Bill (AB) 52, which became effective on July 1, 2015. AB 52 requires that Tribal Cultural Resources be evaluated under CEQA. Therefore, the General Plan PEIR did not specifically analyze impacts related to Tribal Cultural Resources because they were not part of the CEQA Guidelines' Appendix G checklist. As such, this section does not rely on the cumulative impact analysis in the General Plan PEIR for Tribal Cultural Resources.

The CRMP Phase 1, along with other cumulative projects, would be required to comply with the existing federal, state, and local regulations, including but not limited to SB 18, AB 52, and California Public Resources Code, Section 21080.3.1 that require Tribal consultation early in the development review process (refer to Section 4.12.2, State Regulations). The CRMP Phase 1 and other cumulative projects would also be required to comply with the City's General Plan policies promoting the identification, protection, and preservation of archaeological resources and the City's Historical Resources regulations (SDMC Section 143.0212), which require review of discretionary permit applications for any parcel identified as sensitive on the Historical Resources Sensitivity Maps. As discussed in Section 5.12, Tribal Cultural Resources, even with implementation of MM CUL-2, the CRMP Phase 1 would result in potentially significant Tribal Cultural Resources impacts. Because the degree of future impacts and applicability, feasibility, and success of future mitigation measures by cumulative projects are speculative at this time, incremental impacts to Tribal Cultural Resources in connection with Tribal Cultural Resources impacts elsewhere in the City and the County would be considered significant and unavoidable.

6.3.13 Utilities and Service Systems

The General Plan PEIR stated that due to existing infrastructure deficiencies in existing built areas of the City and the potential for excessive energy consumption, it is anticipated that new or improved public utilities infrastructure would be required to accommodate the City's future growth based on the General Plan buildout. Although implementation of the existing federal, state, and

local regulations would preclude impacts associated with new construction of, or improvements to, public utilities infrastructure, for some projects where adherence to regulations may not adequately avoid or reduce incremental impacts, additional mitigation measures would be required. However, the degree of future impacts and applicability, feasibility, and success of future mitigation measures cannot be adequately known for each specific future project at the program level of analysis for the General Plan PEIR. Therefore, the General Plan PEIR determined that incremental impacts associated with the construction of future public utilities infrastructure improvements, when viewed in connection with the increased regional demand for energy and associated improvements, may be considered cumulatively significant and unavoidable.

The CRMP Phase 1 would not require any changes to the adopted General Plan and does not propose development that could increase population growth projections or land use intensity within the City. Therefore, the cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. The CRMP Phase 1's consistency with the applicable goals and policies of the adopted General Plan is analyzed in Appendix E of this PEIR. Consistent with the General Plan PEIR's cumulative analysis, the CRMP Phase 1 would comply with the federal, state, and local regulations, as applicable. The cumulative analysis contained in the General Plan PEIR would be applicable to the CRMP Phase 1. Additionally, as discussed in Section 5.13, Utilities and Service Systems, the CRMP Phase 1 would have less than significant impacts related to new or expanded utilities, water supply availability, wastewater treatment capacity, and solid waste generation. The CRMP Phase 1 would not contribute to cumulative impacts related to utilities and service systems; therefore, no mitigation is required.

6.3.14 Wildfire

The General Plan PEIR was certified on March 10, 2008, and therefore, did not specifically analyze cumulative impacts to wildfire because they were not officially part of the CEQA Guidelines' Appendix G checklist until January 1, 2019. However, cumulative impacts of wildfire as it relates to pollutant concentrations and spread of wildfire were considered as part of the global warming analysis in the General Plan PEIR, and impacts were determined to be significant and unavoidable.

As discussed in Section 5.14, Wildfire, the project sites are in urban areas not mapped within a fire hazard severity zone, with the exception of the Sunset Cliffs project site, as mapped by the California Department of Forestry and Fire Protection's (CAL FIRE's) Map of Fire Hazard Severity Zones in Local Responsibility Areas for the City of San Diego (CAL FIRE 2009). Although a portion of the Sunset Cliffs project site is within a fire hazard severity zone, the Sunset Cliffs project was determined to result in less than significant impacts related to wildfire. The Sunset Cliffs project would not adversely affect emergency access, create steep slopes, substantially alter hydrology, or exacerbate fire risk near the project site. The CRMP Phase 1 would result in less than significant impacts related to emergency response to evacuation plans; pollutant concentrations or spread of wildfire; exacerbating fire risk due to infrastructure

installation; and flooding or landslides as they relate to wildfire (refer to Section 5.14, Wildfire). The CRMP Phase 1 would not contribute to cumulative impacts related to wildfire; therefore, no mitigation is required.

Chapter 7.0 Other Mandatory Discussion Areas

The California Environmental Quality Act (CEQA) Guidelines require that an Environmental Impact Report (EIR) contain a discussion of impacts associated with growth inducement, effects found not to be significant, significant unavoidable environmental impacts, and significant irreversible environmental changes. Each of these discussion areas is addressed in the following sections.

7.1 Growth Inducement

This Programmatic EIR (PEIR) must examine the potential growth-inducing impacts of the Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1). More specifically, CEQA Guidelines, Section 15126.2(e), requires that an EIR:

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 waste water 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. . . It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

According to the City of San Diego's (City's) CEQA Significance Determination Thresholds, growth inducement "is usually associated with those projects that foster economic or population growth, or the construction of additional housing, either directly or indirectly, which may result in the construction of major new infrastructure facilities. Also a change in land use policy, or projects that provide economic stimulus such as industrial or commercial uses may induce growth. Accelerated growth may further strain existing community facilities or encourage activities that could significantly affect the surrounding environment." In addition, the thresholds state that "the analysis must avoid speculation and focus on probable growth patterns or projections" (City of San Diego 2023).

The CRMP Phase 1 includes natural areas, such as upland areas, wetland areas, and open beach; regional parkland for activities such as picnicking, kite flying, jogging, and informal sports; active recreation areas, such as beach volleyball and walking; and paved areas for parking and roadways. It is expected that improving and increasing areas allowing for these activities would introduce additional visitors to the CRMP Phase 1 area for recreational activities but would not introduce additional residents to the area. It is expected that the CRMP Phase 1 would serve existing residents of the San Diego area, as well as visitors. However, it is not expected that additional residents would relocate to the area as a result of the CRMP Phase 1.

The CRMP Phase 1 supports alternative transportation modes, such as walking and biking, and the CRMP Phase 1 area currently connects to existing City roadways, bikeways, pedestrian paths, and bus routes.

The CRMP Phase 1 would not foster economic or population growth or cause the construction of additional housing either directly or indirectly. The CRMP Phase 1 would result in the reduction in density in the CRMP Phase 1 area to increase habitat restoration, which would not increase economic growth. The CRMP Phase 1 would not promote growth patterns resulting in the need for and/or provision of new utilities or support unplanned population growth.

Future CRMP Phase 1 construction would be associated with a demand for construction trade skills and labor. It is anticipated that this demand would be met by the local labor force within San Diego County or surrounding areas and would not require the importation of a substantial number of workers that could cause an increased demand for temporary or permanent housing.

Therefore, the CRMP Phase 1 is not anticipated to result in overall regional population growth, and there would be no impacts due to growth inducement. No mitigation is required.

7.2 Effects Found Not to Be Significant

CEQA Guidelines, Section 15128, requires that an EIR contain a brief statement disclosing the reasons why various possible significant effects of a project were found not to be significant and, therefore, are not discussed in detail in this PEIR. Based on review concepts identified in the CEQA Guidelines, the City determined that this CRMP Phase 1 would not result in potentially significant impacts related to the following environmental resources:

- Agriculture and Forestry Resources
- Energy
- Hazards and Hazardous Materials

- Mineral Resources
- Paleontological Resources
- Population and Housing

7.2.1 Agriculture and Forestry Resources

All six project sites are located along the City's coastline, primarily at City beaches, with the exception of Sunset Cliffs, which is a coastal trail. None of the project sites encompass or are located in the vicinity of agricultural and/or forestry resources. None of the project sites are designated as agricultural land use in the City's General Plan. Further, none of the project sites are designated by the Farmland Mapping and Monitoring Program (FMMP) as Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance. Therefore, the CRMP Phase 1 would not convert an important farmland category designated by the FMMP to a non-agricultural use. In addition, the project sites are not located within or within the vicinity of a Williamson Act

Contract or agricultural preserve. Therefore, the CRMP Phase 1 would not conflict with the existing zoning for agricultural use or a Williamson Act Contract.

The project sites do not contain forest land or timberland. Neither the County of San Diego nor the City has existing Timberland Production Zones. In addition, the CRMP Phase 1 would not alter existing zoning on the project sites, and a rezone of the project sites is not proposed. Therefore, CRMP Phase 1 implementation would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or Timberland Production Zones. The CRMP Phase 1 would have no effect on agriculture or forestry resources, and no mitigation is required.

7.2.2 Energy

The CRMP Phase 1 would result in the use of energy resources during the construction phase. During construction, the CRMP Phase 1 may require the use of heavy construction equipment that would be fueled by gas and diesel. However, the energy use would be temporary, limited, and cease upon completion of construction activities. Construction would be conducted in compliance with local, state, and federal regulations (e.g., United States Environmental Protection Agency [USEPA] and the California Air Resources Board engine emission standards, which require highly efficient combustion systems that maximize fuel efficiency, reduce unnecessary fuel consumption, and set limitations on engine idling times). Compliance with these regulations would minimize short-term energy demand during the grading associated with the CRMP Phase 1 to the extent feasible. In addition, the CRMP Phase 1 does not include any permanent components that would increase operational demand for existing sources of energy. Energy needs for the CRMP Phase 1 construction would be temporary and are not anticipated to require additional capacity or substantially increase peak or base period demands for electricity and other forms of energy. Therefore, no significant impact to energy resources would result, and no mitigation is required.

7.2.3 Hazards and Hazardous Materials

CRMP Phase 1 construction would involve the transport of gasoline and other petroleum-based products associated with construction equipment. These materials are considered hazardous as they could cause temporary localized soil and water contamination. Incidents of spills or other localized contamination could occur during refueling, operation of machinery, undetected fluid leaks, or mechanical failure. However, all storage, handling, and disposal of these materials are regulated by California Department of Toxic Substances Control, the U.S. Environmental Protection Agency, and the City's Fire–Rescue Department. All construction activities involving the transportation, usage, and disposal of hazardous materials would be subject to all applicable federal, state, and local requirements, which would reduce impacts associated with the use and handling of hazardous materials during construction to less than significant. The CRMP Phase 1 would not involve additional operational components from existing site conditions. Therefore, the CRMP Phase 1 would not create a significant hazard to the public or the environment through the

routine transport, use, or disposal of hazardous materials, and impacts would be less than significant; no mitigation is required.

No public schools are located within 0.25 mile of the project sites. Several private schools are located within 0.25 mile of the CRMP Phase 1 area, including Valor Education (approximately 0.04 mile south of the La Jolla Shores project site), Audeo Charter School (approximately 0.25 mile east of the Pacific Beach – Tourmaline Surf Park project site), Sacred Heart Academy Preschool (approximately 0.25 mile east of the Ocean Beach – Pier project site), Saint Peter's by the Sea Preschool (approximately 0.01 mile east of the Sunset Cliffs project site), and Warren–Walker School (Point Loma Lower School Campus) (approximately 0.23 mile east of the Sunset Cliffs project site). However, the CRMP Phase 1 would only involve the transport and use of minor amounts of potentially hazardous materials (i.e., gasoline and other petroleum-based products) for operation of construction equipment during CRMP Phase 1 construction. Additionally, the transport and handling of minor amounts of hazardous materials during construction would comply with all applicable federal, state, and local regulations that control hazardous material handling. Therefore, the CRMP Phase 1 would not have an effect on an existing or proposed school, and no mitigation is required.

According to the database search of EnviroStor and GeoTracker, none of the project sites are identified as a hazardous materials site (DTSC 2024; SWRCB 2024). Thus, the project sites are not identified as listed hazardous materials sites and are not located adjacent to active listed hazardous sites. Therefore, the CRMP Phase 1 would not create a significant hazard to the public or environment. No impact would occur, and no mitigation is required.

The CRMP Phase 1 is not located within an Airport Influence Area, Airport Safety Zone, Avigation Easement, Overflight area, or a Federal Aviation Administration Height Notification Surface area. In addition, the CRMP Phase 1 does not propose construction of any structure that would constitute a safety hazard to aircraft and/or operations from an airport or heliport. Therefore, the CRMP Phase 1 would not constitute a safety hazard for people residing or working in the CRMP Phase 1 area. No impact would occur, and no mitigation is required.

Further, the CRMP Phase 1 would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Refer to Section 5.14, Wildfire, for further discussion of the CRMP Phase 1's potential to impact an emergency response plan or emergency evacuation plan.

7.2.4 Mineral Resources

According to Figure CE-6 of the City's General Plan Conservation Element, the project sites have been classified by the California Department of Conservation – Division of Mines and Geology as areas of "Potential Mineral Resource Significance" (MRZ-3) but with no active mines. The project

sites are surrounded by open space, Pacific Ocean, and developed residential and commercial land uses, which would be incompatible with future extraction of mineral resources on any of the project sites. A future mining operation on the project sites would likely create a significant impact to neighboring properties for issues such as noise, air quality, traffic, and possibly other impacts. Additionally, the project sites are small in size (ranging between 9.25 acres and 35.7 acres) and, therefore, could not support a commercial mining operation. Therefore, implementation of the CRMP Phase 1 would not result in the loss of availability of a known mineral resource that would be of value since the mineral resource extraction would not occur on the project sites due to incompatible land uses. No mitigation is required.

7.2.5 Paleontological Resources

Paleontological resources (fossils) are the remains and/or traces of plant and wildlife exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and wood are found in the geologic deposits (formations) in which they were originally buried. Paleontological resources represent a limited, nonrenewable, sensitive scientific, and educational resource.

The potential for fossil remains at a location can be predicted through previous correlations that have been established between the fossil occurrence and the geologic formations within which they are buried. For this reason, knowledge of the geology of a particular area and the paleontological resource sensitivity of particular formations make it possible to predict where fossils will or will not be encountered.

All project sites are located within Bay Point Formation and Unnamed Marine Terrace deposits, which have a high sensitivity for paleontological resources (Kennedy and Tan 2008). However, the City's CEQA Significance Determination Thresholds state that a project would result in potentially significant impacts if it either (1) required over 1,000 cubic yards of excavation in a high resource potential geologic deposit/formation/rock unit or (2) required over 2,000 cubic yards of excavation in a moderate resource potential geologic deposit/formation/rock unit (City of San Diego 2023). The CRMP Phase 1 includes nature-based solutions aimed at improving the City's resiliency to sea-level rise and coastal hazards. The CRMP Phase 1 would not require excavation of over 1,000 cubic yards on any of the six project sites. Therefore, the CRMP Phase 1 would not result in a potentially significant impact to a moderate or high resource potential geologic deposit/formation/rock unit. No mitigation is required.

7.2.6 Population and Housing

The CRMP Phase 1 would not induce substantial population growth in an area because the CRMP Phase 1 does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in an area including, but not limited to, the following: new or extended infrastructure or public facilities; new commercial or industrial facilities; large scale residential development; accelerated conversion of homes to commercial or multi-family use; or

regulatory changes including General Plan amendments, specific plan amendments, zone reclassifications, or sewer or water annexations. The CRMP Phase 1 would not displace any existing people or housing because the CRMP Phase 1 would not demolish any habitable structures and would be limited to green infrastructure improvements in the CRMP Phase 1 area. Therefore, no impact to population or housing would occur. No mitigation is required.

7.3 Significant Unavoidable Environmental Impacts

In accordance with CEQA Guidelines, Section 15126.2(c), any significant unavoidable impacts of a project, including those impacts that can be mitigated but not reduced to below a level of significance despite implementation of feasible mitigation measures, must be identified in the EIR. For the CRMP Phase 1, impacts related to archaeological and Tribal Cultural Resources would remain significant and unavoidable. All other significant impacts identified in Chapter 5.0, Environmental Analysis, of this PEIR can be reduced to below a level of significance with implementation of the mitigation framework identified in Chapter 5.0 and through compliance with applicable federal, state, regional, and/or local regulations.

7.4 Significant Irreversible Environmental Changes

CEQA Guidelines, Section 15126.2(d), requires an evaluation of significant irreversible environmental changes that would occur should the CRMP Phase 1 be implemented. Irreversible changes typically fall into one of three categories:

- **Primary impacts**, such as the use of nonrenewable resources (i.e., biological habitat, agricultural land, mineral deposits, water bodies, energy resources, and cultural resources)
- **Primary and secondary impacts**, such as highway improvements that provide access to previously inaccessible areas
- Environmental accidents potentially associated with future development under the project

CEQA Guidelines, Section 15126.2(d), states that irretrievable commitments of resources should be evaluated to assure that current consumption of such resources is justified.

Construction of development implemented in accordance with the CRMP Phase 1 would require the irreversible consumption of natural resources and energy. Natural resources consumption could include sand and gravel, lumber and other forest products, asphalt, steel, copper, other metals, and water. Infrastructure materials, while perhaps recyclable in part at some long-term future date, for practical purposes, would be permanently consumed. Energy derived from nonrenewable sources, such as fossil fuels, would be consumed during construction and as a result of operational lighting, heating, cooling, and equipment and transportation uses. This commitment of natural resources and energy would be irreversible. The commitment of natural resources required for the construction and operation of the CRMP Phase 1 would limit the availability of such resources for future generations or for other uses during the life of the CRMP Phase 1. Therefore, the CRMP Phase 1 would result in minor irreversible environmental changes.

Chapter 8.0 Alternatives

The California Environmental Quality Act (CEQA) Guidelines, Section 15126.6, requires that an Environmental Impact Report (EIR) compare the effects of a "reasonable range of alternatives" to the effects of a project. The CEQA Guidelines further specify that the alternatives selected should attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project. The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (CEQA Guidelines, Section 15126.6[f]). CEQA generally defines "feasible" to mean an alternative that is capable of being accomplished in a successful manner within a reasonable period of time while also taking into account economic, environmental, social, technological, and legal factors (CEQA Guidelines, Section 15126.6[f][1]).

The following section presents the analysis of alternatives to the proposed Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots (CRMP Phase 1).

8.1 Criteria for Selection and Analysis of Alternatives

The criteria for the selection and analysis of alternatives are provided in CEQA Guidelines, Section 15126.6(c). The alternatives must (1) meet most of the project objectives, (2) be feasible, and (3) avoid or substantially lessen the significant impacts resulting from the project. Therefore, the alternatives addressed in this Programmatic Environmental Impact Report (PEIR) were selected in consideration of one or more of the following factors (CEQA Guidelines, Section 15126.6[e]):

- The extent to which the alternative would feasibly accomplish most or all of the basic objectives;
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, general plan consistency, and consistency with other applicable plans and regulatory limitations;
- The extent to which the alternative would avoid or substantially lessen any of the identified significant environmental impacts of the project;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a "no project" alternative and to identify an "environmentally superior" alternative in addition to the No Project Alternative.

8.1.1.1 **Project Objectives**

The underlying fundamental purpose of the CRMP Phase 1 is to adapt to sea-level rise and coastal flooding through implementation of nature-based shoreline protection methods where feasible. The primary objectives of the CRMP Phase 1 are as follows:

- Prioritize the implementation of nature-based climate change solutions wherever feasible (Climate Resilient SD Plan Policy TNE-3)
- Address the effects of sea-level rise and coastal flooding while leveraging additional co-benefits of nature-based solutions
- Protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change
- Protect and enhance recreational opportunities
- Increase coastal access for all community members, with prioritization of Communities of Concern¹

8.1.1.2 Feasibility

CEQA Guidelines, Section 15126.6(f)(1), identifies the factors to be taken into account to determine the feasibility of alternatives. The factors are site suitability; economic viability; availability of infrastructure; General Plan consistency; other plans or regulatory limitations; jurisdictional boundaries; and if the project proponent can reasonably acquire, control, or otherwise have access to the alternative site. No one of these factors establishes a fixed limit on the scope of reasonable alternatives. An alternative does not need to be considered if its environmental effects cannot be reasonably ascertained, and if implementation of such an alternative is remote or speculative.

8.1.1.3 Evaluation of Significant Impacts

According to CEQA Guidelines, Section 15126.6(b), the alternatives discussion should focus on those alternatives that, if implemented, could eliminate or reduce any of the significant environmental impacts of a project. The alternatives are evaluated to determine if they would eliminate any significant adverse environmental impacts or reduce those impacts to a below a significant level. Project-related and cumulative impacts are those identified prior to the incorporation or implementation of any mitigation measures. As described in Chapter 5.0, Environmental Analysis, the CRMP Phase 1 would result in potentially significant impacts, prior to mitigation, for the following issue topics: biological resources, cultural resources, noise, and Tribal Cultural Resources.

¹ The City's term for communities with low to moderate access to opportunity based on the City's Climate Equity Index. The Climate Equity Index was developed in 2019, and revised in 2021, to measure the level of access to opportunity residents have within a census tract and assess the degree of potential impact from climate change to these areas (City of San Diego 2021).

The performance of an alternative relative to a project is evaluated to determine the "comparative merits of the alternative" (CEQA Guidelines, Section 15126.6[a]). The alternatives analysis is based on a comparison to the CRMP Phase 1's impacts.

8.2 Alternatives Considered and Eliminated

CEQA Guidelines, Section 15126.6(c), requires that an EIR disclose alternatives that were considered and rejected for further analysis and provide a brief explanation as to why such alternatives were eliminated from detailed consideration. As required by the CEQA Guidelines, the selection of alternatives for the CRMP Phase 1 included a screening process to determine which alternatives could avoid or substantially reduce the environmental impacts associated with the project while also feasibly meeting the project objectives. The following alternatives were considered but eliminated from further analysis due to inconsistency with project objectives.

8.2.1.1 All Nature-Based Solutions (No Gray Infrastructure)

This alternative would design and implement purely nature-based solutions at the six priority project sites. No gray infrastructure project components (e.g., multi-use path, terraced seatwall) would be incorporated into the site designs as part of the CRMP Phase 1. As described in Section 3.4, Project Description, a combination of solutions may offer greater shoreline protection and overall project benefits. Studies show that combining gray infrastructure solutions with naturebased solutions can be the most effective method for mitigating flooding while providing the greatest co-benefits (e.g., carbon sequestration, water quality improvement, erosion reduction, habitat provision) (Browder et al. 2019; Esraz-Ul-Zannat et al. 2024; The Nature Conservancy 2015; Wright 2021). Therefore, an alternative with only nature-based solutions at the project sites could reduce the efficacy of the coastal flood protection and additional project benefits compared to the hybrid approach proposed in CRMP Phase 1. Additionally, this alternative would not meet the project objective to protect and enhance recreational opportunities to the same extent that the CRMP Phase 1 would, because implementing purely nature-based solutions at the proposed project sites would only allow for certain passive uses, such as eco-tourism. It would necessitate the removal of existing active recreational spaces and uses in order to maintain a purely natural environment. It is also important to note that implementing purely nature-based solutions may not be feasible at the six CRMP Phase 1 project sites, as implementing such solutions would require the removal of, or significant change in, existing uses at the proposed sites, which has much larger implications for surrounding land uses. While taking a purely nature-based solutions approach would prioritize protection and enhancement of coastal habitat, it would likely necessitate major changes in how the project sites function, including reduced coastal access and recreational opportunities. As a result, this alternative would also not meet the project objectives to protect and enhance recreation opportunities and to increase coastal access for all community members, with prioritization of Communities of Concern. For these reasons, this alternative has been eliminated from further consideration.

8.2.1.2 All Gray Infrastructure (No Nature-Based Solutions)

This alternative would design and implement only gray infrastructure solutions at the six priority project sites. No nature-based solution project components would be incorporated into the site designs as part of the CRMP Phase 1. As described in Section 3.4, Project Description, a combination of solutions may offer greater shoreline protection and overall project benefits. Studies show that combining gray infrastructure solutions with nature-based solutions is the most effective method for mitigating flooding while providing the greatest co-benefits (e.g., carbon sequestration, water quality improvement, erosion reduction, habitat provision) (Browder et al. 2019; Esraz-Ul-Zannat et al. 2024; The Nature Conservancy 2015; Wright 2021). Therefore, this alternative, which would only include gray infrastructure solutions at the project sites, would reduce the efficacy of the coastal flood protection and overall project benefits compared to the CRMP Phase 1. This alternative would not meet project objectives to prioritize the implementation of nature-based climate change solutions wherever feasible in accordance with Climate Resilient SD Plan Policy TNE-3 and address the effects of sea-level rise and coastal flooding while leveraging additional co-benefits of nature-based solutions. This alternative would also not meet the project objective to protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change, as purely gray infrastructure solutions do not incorporate the restoration and establishment of new native plant species that provide this critical habitat. Finally, this alternative would also not meet the final two project objectives, as implementing gray infrastructure solutions (such as a sea wall) can increase erosion and lead to loss of beach over time, which would actually reduce recreational opportunities and coastal access. For all of these reasons, this alternative has been eliminated from further consideration.

8.3 Alternatives Analysis

Based on the criteria described in Section 8.1, Criteria for Selection and Analysis of Alternatives, this PEIR considers the following project alternatives:

- No Project Alternative
- Increased Sand Dune Height/Width Alternative
- Reduced Ground Disturbance Alternative

General descriptions of the characteristics of each of these alternatives, along with a discussion of their ability to reduce the significant environmental impacts associated with the project, are provided in the following subsections.

8.3.1 No Project Alternative

8.3.1.1 Description

In accordance with CEQA, the PEIR includes a No Project Alternative. Under the No Project Alternative, the proposed projects identified in the Coastal Resilience Master Plan would not be

developed at the six priority project sites. The Climate Resilient SD Plan (Policy TNE-3) would not be implemented, and the City's coastal assets (e.g., recreational facilities, utilities, and transportation infrastructure) at the six project sites would see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion (City of San Diego 2019; 2020).

Improvements at the Ocean Beach – Dog Beach project site, including construction of an elevated sand dune, construction of a multi-use path, and restoration of the existing dunes north of the parking lot, included as part of the Pilot Project would not occur (refer to Figure 3-3). Additionally, the optional restroom relocation and express shuttle stop would not be implemented under the No Project Alternative (refer to Figure 3-4). The parking lot and existing restroom facilities at the Ocean Beach – Dog Beach project site would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms.

At the La Jolla Shores project site, construction of the earthen dikes along the western border of the grassy recreational areas at La Jolla Shores and Kellogg parks would not occur under an Amphitheater Design Option. The terraced seatwall along the western border of the existing parking lot would also not be constructed under this design option (refer to Figure 3-5). There would also be no Reconfigured Park Design Option for a reconfigured waterfront park and reconfigured parking lot (refer to Figure 3-6). The existing parks and parking lot at the La Jolla Shores project site would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms.

At the Pacific Beach – Tourmaline Surf Park site, the sand and cobble dune would not be constructed and the existing vegetated median that is covered with invasive ice plant would not be restored with native plant species. Implementation of the optional pedestrian pathway that would be located along the northern border of the existing parking lot would not occur (refer to Figure 3-7). The beach, parking lot, and existing restroom facilities at the Pacific Beach – Tourmaline Surf Park project site would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms.

The Mission Beach project site would not be improved with an elevated sand dune along the back of the beach (refer to Figure 3-8), and there would be no Perched Beach Design Option to convert the grassy recreational space at Mission Beach Park to a perched sandy beach area by realigning the existing seawall and Ocean Front Walk inland (refer to Figure 3-9). The existing seawall and Ocean Front Walk inland overtopping during heavy storms.

Improvements at the Ocean Beach – Pier project site, including construction of an elevated sand dune and multi-use path, would not occur (refer to Figure 3-10). Saratoga Park, the northern parking lot, the Ocean Beach Lifeguard Station, Ocean Beach Veterans Plaza, and the Ocean Beach community east of the beach would continue to see increased exposure to sea level rise and associated vulnerabilities and consequences from coastal flooding and erosion, particularly during heavy winter storms.

At the Sunset Cliffs project site, the road reconfiguration program, trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site would not be implemented (refer to Figure 3-11). Additionally, the optional components, including realigning parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur. This site would continue to be susceptible to coastal bluff erosion and coastal squeeze due to the eroding cliffs and existing development east of Sunset Cliffs Boulevard.

8.3.1.2 Analysis of No Project Alternative

Aesthetics

The No Project Alternative would not develop nature-based solutions or other coastal flood protection solutions at the six priority project sites. Due to the absence of development, the No Project Alternative would not result in potential impacts related to short-term construction lighting or long-term views of the improvements proposed as part of the CRMP Phase 1. For example, there would be no elevated sand dunes at the Ocean Beach – Dog Beach, Mission Beach, and Ocean Beach - Pier project sites that would have the potential to partially block direct views of the Pacific Ocean from specific public viewing locations. Additionally, the No Project Alternative would not develop the two earthen dikes and terraced seatwall under the Amphitheater Design Option at the La Jolla Shores project site that could potentially partially block direct views of the Pacific Ocean from specific public viewing locations at La Jolla Shores Park, Kellogg Park, and the existing parking lot. However, implementation of the No Project Alternative would require the annual operation of heavy construction equipment at the Mission Beach, Ocean Beach - Dog Beach, and Ocean Beach - Pier project sites for implementation of the City's annual winter berm program. Therefore, the No Project Alternative would result in annual construction-related visual impacts at these project sites associated with implementation of the winter berm program, whereas the CRMP Phase 1 would implement permanent coastal flood protection solutions at these project sites, which would result in a long-term benefit related to unsightly views of construction equipment. Additionally, the winter berms construction at these sites are made of sand only and would not include native vegetation as proposed for the elevated sand dunes as part of the CRMP Phase 1.

Furthermore, the CRMP Phase 1 area would continue to be subject to sea-level rise and coastal flooding impacts. Increased frequency of coastal flooding and overtopping waves would result in increasingly more damage to coastal infrastructure and resources and associated impacts on views of the individual project sites. Therefore, the No Project Alternative would not result in the long-term benefits to coastal views associated with implementation of permanent coastal flood protections as proposed under the CRMP Phase 1.

It should also be noted that implementation of the No Project Alternative would not provide the accessibility and connectivity improvements (e.g., multi-use paths, optional express shuttle stop, improvements to pedestrian paths) included as part of the CRMP Phase 1. As such, the No Project Alternative would not be consistent with the applicable regulations governing scenic quality (i.e., community plan goals and policies related to design, natural resource, and open space) in these coastal communities to the same extent as the CRMP Phase 1.

The No Project Alternative would result in a decrease in potential impacts to direct views of the Pacific Ocean from certain public viewing locations and the potential for construction lighting. However, this alternative would have continue to have existing visual impacts related to views of the project sites during the annual construction of the winter berms, from coastal flooding and associated damage to coastal infrastructure, and the lack of public access enhancements proposed as part of the CRMP Phase 1. Therefore, it is estimated that impacts to aesthetics under the No Project Alternative would be increased compared to the CRMP Phase 1.

Air Quality

The No Project Alternative would not implement any of the proposed CRMP Phase 1 projects described in Section 3.4, Project Description. Under the No Project Alternative, air quality impacts would be negligible and substantially less than under the CRMP Phase 1. Due to the absence of short-term construction activities, the No Project Alternative would not result in construction air emissions from the use of heavy construction equipment. Additionally, implementation of the No Project Alternative would have no impact on sensitive receptors or odors. However, implementation of the No Project Alternative would require the annual operation of heavy construction equipment at the Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites for implementation of the City's annual winter berm program. Therefore, the No Project Alternative would not result in the long-term benefits associated with implementation of permanent coastal flood protections and discontinuation of the winter berm program at these sites, as proposed under the CRMP Phase 1. Additionally, implementation of the No Project Alternative would not provide the accessibility and connectivity improvements (e.g., multi-use paths, optional express shuttle stop, improvements to pedestrian paths) included as part of the CRMP Phase 1. As such, the No Project Alternative would not have the potential to reduce regional mobile emissions as described for the CRMP Phase 1. As a result of the continuation of the winter berm program operations and continued mobile emissions, it is reasonable to assume that criteria air pollutant

emissions associated with long-term operations would be greater than the CRMP Phase 1. With a decrease in construction emissions and greater operational emissions than the CRMP Phase 1, it is estimated that criteria air pollutant emissions under the No Project Alternative would be similar to the CRMP Phase 1. No impacts would occur related to consistency with an applicable Air Quality Plan, a cumulative increase in emissions, sensitive receptors, and odors.

Biological Resources

Implementation of the No Project Alternative would result in no impacts to sensitive plant and wildlife species, sensitive vegetation communities, wetlands, established wildlife corridors or native wildlife nursery sites, or introduction of invasive species of plants into open space. This alternative would substantially reduce impacts to biological resources compared to impacts from construction activities associated with the CRMP Phase 1. However, the No Project Alternative would require continuation of the City's winter berm program at the Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites. Implementation of the winter berm program involves the annual dredging of sediment from local littoral sources and installation of a sand berm near the back of these beaches. Implementation of the winter berm program results in the potential for continuous annual impacts to sensitive plant and wildlife species, sensitive vegetation communities, and jurisdictional aquatic resources, whereas the CRMP Phase 1 would implement permanent coastal flood protection solutions at these project sites, which would result in a long-term benefit related to avoidance of future impacts to sensitive plant and wildlife species, sensitive vegetation communities, and jurisdictional aquatic resources. Additionally, the CRMP Phase 1 project sites would continue to be subject to future sea-level rise and coastal flooding, which could disturb sensitive plant and wildlife species and their habitat near the project sites. The No Project Alternative would not provide the same protection or preservation of these resources from the future effects of climate change. The No Project Alternative would also not restore native plant species, remove invasive species, or implement the habitat restoration and enhancement activities proposed under the CRMP Phase 1. Nevertheless, the No Project Alternative would result in no short-term impacts to biological resources and reduced short-term impacts compared to the CRMP Phase 1.

Cultural Resources

Impacts to historic resources under the No Project Alternative would be reduced as compared to the CRMP Phase 1 as there would be no potential for impacts to the Mission Beach Boardwalk, which is an eligible historic resource present within the Mission Beach project site. Additionally, impacts to archaeological resources under the No Project Alternative would be reduced compared to the CRMP Phase 1, as there would be no CRMP Phase 1 construction activities at the La Jolla Shores and Sunset Cliffs project sites, where there are several subsurface archaeological resources present. Under the No Project Alternative, there would be no potential for disturbance or damage to any known or unknown sites or human remains as no development would occur. Therefore, the No Project Alternative would have less potential for impacts to historic and cultural resources than the CRMP Phase 1, and no impacts would occur.

Geology and Soils

Under the No Project Alternative, the CRMP Phase 1 area would be located in a seismically active region where ground shaking would continue to present potential risks for coastal recreation facilities. Unlike the CRMP Phase 1, this alternative would not involve ground disturbance for construction of coastal flood protection solutions. Therefore, short-term impacts to and from geologic and soil resources under the No Project Alternative would be less than under the CRMP Phase 1. However, the No Project Alternative would require continuation of the City's winter berm program at the Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites. Implementation of the winter berm program involves the annual dredging of sediment from local littoral sources and installation of a sand berm near the back of these beaches. Implementation of the winter berm program results in the potential for continuous annual impacts related to soil disturbance, erosion, and sedimentation, whereas the CRMP Phase 1 would implement permanent coastal flood protection solutions at these project sites, which would result in a long-term benefit related to avoidance of future erosion and sedimentation impacts. Additionally, the CRMP Phase 1 area would continue to be subject to future sea-level rise and coastal flooding, and associated coastal erosion at and near the project sites. Nevertheless, the No Project Alternative would result in no short-term impacts to geology and soils and reduced short-term impacts compared to the CRMP Phase 1.

Greenhouse Gas Emissions

Under the No Project Alternative, short-term construction greenhouse gas (GHG) emissions would be substantially reduced compared to the CRMP Phase 1. Short-term construction would not occur under this alternative, including the construction of elevated sand dunes, multi-use paths, earthen dikes and terraced seatwall, or waterfront park. As such, the short-term construction emissions under the No Project Alternative would be less than the CRMP Phase 1. In terms of long-term GHG generation, the No Project Alternative would include annual operation of heavy construction equipment at the Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites for implementation of the City's annual winter berm program. Therefore, the No Project Alternative would not result in the long-term benefits associated with implementation of permanent coastal flood protections and discontinuation of the winter berm program at these sites, as proposed under the CRMP Phase 1. The No Project Alternative would also not implement the mobility improvements associated with the CRMP Phase 1, including the multi-use paths and optional shuttle stops, which have the potential to reduce GHG emissions. As a result, it is reasonable to assume that GHG emissions associated with long-term operations under this alternative would be greater than the CRMP Phase 1. With a decrease in construction GHG emissions and an increase in operational GHG emissions, it is estimated that GHG emissions under the No Project Alternative would be similar to the CRMP Phase 1.

Hydrology and Water Quality

Due to the absence of construction activities, the No Project Alternative would not result in construction-related impacts to water quality standards, groundwater supplies, site drainage and hydrology, flood zones, or conflicts with a water quality control plan or sustainable groundwater management plan. The No Project Alternative would not implement construction activities that could contribute to a violation of water quality standards or otherwise substantially degrade surface or groundwater qualities. Implementation of the No Project Alternative would not increase impervious surfaces or pump groundwater. Therefore, this alternative would not substantially decrease groundwater supplies or interfere with groundwater recharge. No drainage patterns would be altered under the No Project Alternative; therefore, this alternative would not result in substantial erosion, increase the amount of runoff, or cause flooding. Further, this alternative would not result in an inconsistency with regional water regulations or plans. As a result, there would be no change in site hydrology or water quality compared to the CRMP Phase 1 and short-term impacts would be less than the CRMP Phase 1 as there would be no ground disturbance.

However, the No Project Alternative would require continuation of the City's winter berm program at the Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach – Pier project sites. Implementation of the winter berm program involves the annual dredging of sediment from local littoral sources and installation of a sand berm near the back of these beaches. Implementation of the winter berm program results in the potential for continuous annual impacts to water quality standards associated with erosion and sedimentation, whereas the CRMP Phase 1 would implement permanent coastal flood protection solutions at these project sites, which would result in a long-term benefit related to avoidance of future erosion and sedimentation impacts. Additionally, the individual project sites would continue to be subject to future sea-level rise and coastal flooding and associated water quality impacts. For example, overtopping waves that occur during heavy winter storms would continue to impact water quality from stormwater runoff and sedimentation by mixing with polluted runoff and other potentially hazardous materials (e.g., oil slick at the parking lot) and eventually bringing these materials back to coastal waters or the City's storm drain system. The No Project Alternative would not provide long-term benefits related to reduced sedimentation and polluted stormwater runoff entering coastal waters and the storm drain system due to coastal flood protection solutions as part of the CRMP Phase 1. As a result, it is reasonable to assume that water quality impacts associated with long-term operations would be greater than the CRMP Phase 1. With a decrease in construction water quality impacts and an increase in operational water quality impacts, it is estimated that impacts to water quality standards under the No Project Alternative would be similar to the CRMP Phase 1.

Land Use and Planning

The No Project Alternative would involve a continuation of existing operations in the CRMP Phase 1 area, with maintenance, repairs, and improvements occurring on an as-needed basis and the City's winter berm program occurring annually. As such, this alternative would be substantially consistent with existing regional and location plans and regulations, including the City's General Plan, the California Coastal Zone Management Act, the City's Park Master Plan, the City's Climate Action Plan, the Multiple Species Conservation Program Subarea Plan, and applicable community plans. However, this alternative would not include the projects identified in the Coastal Resilience Master Plan at any of the six priority project sites. As such, the No Project Alternative would not help the City implement nature-based solutions in accordance with Policy TNE-3 of the Climate Resilient SD Plan. As a result, this alternative would have greater land use and planning impacts than the CRMP Phase 1.

Noise

The No Project Alternative would retain the existing noise environment associated with noise and vibration. Noise impacts under the CRMP Phase 1 are primarily associated with short-term construction activities. Short-term construction and noise vibration would be minimal and substantially less than the CRMP Phase 1. For example, the No Project Alternative would not require construction of the multi-use path at the Ocean Beach – Dog Beach and Ocean Beach – Pier project sites or the earthen dikes and terraced seatwall or waterfront park at the La Jolla Shores project site. In terms of operations, the No Project Alternative would require continuation of the City's winter berm program at the Mission Beach, Ocean Beach – Dog Beach, and Ocean Beach - Pier project sites. Implementation of the winter berm program involves the annual dredging of sediment from local littoral sources and installation of a sand berm near the back of these beaches. Implementation of the winter berm program results in the potential for continuous annual noise impacts related to the operation of heavy construction equipment to construct the winter berm, whereas the CRMP Phase 1 would implement permanent coastal flood protection solutions at these project sites, which would result in a long-term benefit related to avoidance of future noise impacts. As a result, it is reasonable to assume that noise impacts associated with long-term operations would be greater than the CRMP Phase 1. With a decrease in short-term construction noise impacts and an increase in operational noise impacts, it is estimated that noise impacts under the No Project Alternative would be similar to the CRMP Phase 1.

Public Services and Recreation

The No Project Alternative would not implement any of the proposed CRMP Phase 1 projects described in Section 3.4, Project Description. Therefore, implementation of the No Project Alternative would have no impact on the demand for police protection, fire protection, schools, or libraries, similar to the CRMP Phase 1. Due to the absence of short-term construction activities,

the No Project Alternative would not result in lane closures or detours during construction activities that could affect emergency access to and evacuation from the individual CRMP Phase 1 project sites. Additionally, the No Project Alternative would not involve the construction of coastal flood protection solutions that could potentially temporarily affect access to and from the beach areas within the CRMP Phase 1 area. The No Project Alternative would not involve development that could result in adverse impacts to parks or recreational resources. However, implementation of this alternative would also not result in beneficial impacts associated with coastal flood protection solutions to protect, preserve, and enhance coastal park and recreational resources. Additionally, the No Project Alternative would not improve recreational value and opportunities associated with multi-use paths at the Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites, the potential pedestrian path at the Pacific Beach – Tourmaline Surf Park project site, and the potential express shuttle at the Ocean Beach – Dog Beach project site proposed under the CRMP Phase 1. As this alternative would not provide the parks and recreation improvements associated with the CRMP Phase 1, it would overall have slightly greater public services and recreation impacts than the CRMP Phase 1.

Transportation

The No Project Alternative would result in no development and no associated impacts related to conflict with an adopted program, plan, ordinance, or policy addressing the transportation system, including transit, roadways, bicycle and pedestrian facilities. However, implementation of the No Project Alternative would not include improvements to transit, bicycle, or pedestrian facilities. For example, the multi-use paths at the Ocean Beach – Dog Beach, Ocean Beach – Pier, and Sunset Cliffs project sites, the potential pedestrian path at the Pacific Beach – Tournaline Surf Park project site, and the potential express shuttle at the Ocean Beach – Dog Beach project site proposed under the CRMP Phase 1 would not occur under the No Project Alternative. Additionally, the No Project Alternative would not include the optional component to reconfigure parking spaces at the Sunset Cliffs project site in order to reduce conflicts with bicyclists, optimize space and flow of traffic, and serve as a traffic calming measure. Therefore, implementation of the No Project Alternative would not result in long-term beneficial impacts related to the transportation improvements proposed under the CRMP Phase 1. Due to the absence of construction activities, the No Project Alternative would not result in truck trips associated with the construction of coastal flood protection solutions proposed as part of the CRMP Phase 1. The No Project Alternative would not result in a change in land use or operations within the CRMP Phase 1 area. Therefore, vehicle miles traveled (VMT) associated with operation of the No Project Alternative would remain similar to existing conditions and conditions under the CRMP Phase 1. Given that the No Project Alternative would result in no development, no impacts would occur related to hazardous design features or emergency access. Therefore, the No Project Alternative would result in slightly reduced impacts related to hazardous design features or emergency access compared to the CRMP Phase 1; however, no long-term beneficial impacts would occur associated with transit, bicycle, and pedestrian facilities. Overall, transportation related impacts would be slightly less under the No Project Alternative than under the CRMP Phase 1.

Tribal Cultural Resources

Impacts to Tribal Cultural Resources under the No Project Alternative would be reduced compared to the CRMP Phase 1, as there would be no CRMP Phase 1 construction activities at the La Jolla Shores and Sunset Cliffs project sites, where there are several subsurface archaeological resources present that may be of importance to the Tribal community. Under the No Project Alternative, there would be no potential for disturbance or damage to any potential sites as no development would occur. Therefore, the No Project Alternative would have less potential for impacts to Tribal Cultural Resources than the CRMP Phase 1, and no impacts would occur.

Utilities and Services Systems

The No Project Alternative would result in no development and no associated impacts related to the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects. Additionally, the No Project Alternative would not result in a change in land use or operations within the CRMP Phase 1 area. Therefore, water demand, wastewater generation, and solid waste generation would occur consistent with existing conditions under this alternative. No impact would occur to utilities and service systems, and impacts would be slightly reduced compared to the CRMP Phase 1.

Wildfire

The No Project Alternative would not implement any of the proposed CRMP Phase 1 projects described in Section 3.4, Project Description. Under the No Project Alternative, impacts related to wildfire would be negligible and incrementally less than those described for the CRMP Phase 1. Due to the absence of short-term construction activities, the No Project Alternative would not result in lane closures or detours during construction that could affect emergency access to and evacuation from the Sunset Cliffs project site. The No Project Alternative would not expose visitors to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, 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 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. However, in response to the threshold for the installation or maintenance of associated infrastructure (such as roads, fuel breaks, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or result in response to the threshold for 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 result in temporary or ongoing impacts to the environment, the No Project Alternative would require the annual installation and maintenance of winter berms that may result in ongoing impacts

to the environment, including ongoing impacts related to air quality, biological resources, geology and soils, GHG emissions, water quality, and noise, as described above.

As a result, it is reasonable to assume that environmental impacts associated with long-term operations would be greater than the CRMP Phase 1. With a decrease in construction impacts and an increase in operational impacts, it is estimated that impacts to the environment under the No Project Alternative would be similar to the CRMP Phase 1.

Relationship to Project Objectives

The No Project Alternative would not meet several of the project objectives outlined in Section 8.1.1.1, Project Objectives. The existing winter berm program would continue under the No Project Alternative, therefore, this alternative would partially meet the project objectives to protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change, and to protect and enhance recreational opportunities. However, while the existing winter berm program does help protect critical coastal habitat and recreational opportunities, it does not enhance them like the CRMP Phase 1. As nature-based solutions would not be implemented at the six project sites under the No Project Alternative, this alternative would not meet the project objectives to prioritize the implementation of nature-based climate change solutions wherever feasible (Climate Resilient SD Plan Policy TNE-3), or to address the effects of sea-level rise and coastal flooding while leveraging additional co-benefits of nature-based solutions. Finally, this alternative would also not meet the project objective to increase coastal access for all community members, with prioritization of Communities of Concern, as it would not implement any of the multi-modal mobility improvements proposed under the CRMP Phase 1.

8.3.2 Increased Sand Dune Height/Width Alternative

8.3.2.1 Description

Under this alternative, the elevated sand dune proposed as part of the Pilot Project at Ocean Beach – Dog Beach would remain approximately 1,200 feet long and would be 70 feet wide, which would be 10 feet wider than the sand dune proposed for the CRMP Phase 1 Pilot Project. The crest level of the sand dune would be 22 feet NAVD88, which would be 4 feet taller than the sand dune proposed for the Pilot Project. The footprint of the sand dune under this alternative would increase by 12,000 sf compared to the Pilot Project (see Figure 8-1, Increased Sand Dune Height/Width Alternative). The purpose of increased height and width of the sand dune under this alternative would be to provide greater coastal flood protection to coastal infrastructure and resources inland of the project site and to the Ocean Beach community. Specifically, the Increased Sand Dune Height/Width Alternative, with the sand dune's increased height and width, would offer a more robust physical barrier against flooding. The additional sand material would enhance the dune's capacity to prevent overtopping during storm conditions. Furthermore, the

increased volume of the dune would improve the dune's resilience to coastal erosion, allowing more sand to be redistributed across the beach profile during erosion events.

The FEMA base flood elevation (BFE) is 18 feet (NAVD88) for the Ocean Beach – Dog Beach project site, including the beach, western boundary of the parking lot, and restroom facility. The sand dune proposed under the CRMP Phase 1 Pilot Project meets this elevation, while the Increased Sand Dune Height/Width Alternative provides an additional 4 feet above the BFE, offering superior flood protection. As such, the Increased Sand Dune Height/Width Alternative aims to maximize hazard reduction by providing greater protection to the back beach from coastal flooding and erosion impacts.

The Ocean Beach – Dog Beach project site was chosen for this alternative over the other project sites due to its high scoring in the Site Selection process and its preference as the location for the Pilot Project. For instance, as described in Table 3-2, the Ocean Beach – Dog Beach project site presents multiple opportunities to shift hardscape areas, provide additional elevation and buffer space, and enhance resilience to coastal hazards while continuing to serve diverse user groups and recreation types. This project site scored highest for the Communities of Concern, City ownership, Multi-Habitat Planning Area, and sea level rise vulnerability and need categories, and second highest for the ease of implementation and nature-based solution feasibility categories (refer to Table 3-2). As such, this alternative would occur at the Ocean Beach – Dog Beach site only. The site designs described for the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Pier, and Sunset Cliffs project sites would be planned and implemented as described in Section 3.4.4, Site Solutions.

8.3.2.2 Analysis of Increased Sand Dune Height/Width Alternative

Given that implementation of the Increased Sand Dune Height/Width Alternative would not affect the site designs or implementation of the La Jolla Shores, Pacific Beach – Tourmaline Surf Park, Mission Beach, Ocean Beach – Pier, and Sunset Cliffs projects, the analyses of impacts related to the Increased Sand Dune Height/Width Alternative below are limited to impacts at the Ocean Beach – Dog Beach project site.

Aesthetics

The Increased Sand Dune Height/Width Alternative would increase the height of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project by 4 feet and would increase the width of the proposed sand dune by 10 feet. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). Given the increased height and width of the proposed sand dune, views of the Pacific Ocean from would be substantially obstructed from public viewing locations at the Ocean Beach – Dog Beach project site, with the exception of locations along the

beach (seaward of the proposed sand dune). Therefore, impacts related to scenic vistas, regulations governing scenic quality, and visual character or quality would be increased compared to the CRMP Phase 1 Pilot Project.

As described in Section 5.1.3.2, Issue 2: Scenic Resources Within a Scenic Highway, the Ocean Beach – Dog Beach project site is not visible from an eligible or officially designated state scenic highway. Therefore, no impacts would occur related to damaging scenic resources within a state scenic highway, similar to the CRMP Phase 1 Pilot Project. Additionally, construction work for the Increased Sand Dune Height/Width Alternative would be similar to construction work described for the CRMP Phase 1 Pilot Project, and construction lighting, if necessary, would be short term and temporary. Therefore, impacts related to light or glare from construction lighting would be less than significant, similar to the CRMP Phase 1 Pilot Project.

Air Quality

The Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). As such, this alternative would increase the amount of construction work and associated criteria air pollutant emissions generated during construction activities compared to the CRMP Phase 1 Pilot Project. However, construction work for the Increased Sand Dune Height/Width Alternative would be similar to construction work described for the CRMP Phase 1 Pilot Project, and total construction emissions assuming simultaneous (worst-case) construction of all CRMP Phase 1 projects are well below the San Diego County Air Pollution Control District (SDAPCD) trigger level thresholds (refer to Table 5.2-5 in Section 5.2, Air Quality). Therefore, it is assumed that although the Increased Sand Dune Height/Width Alternative would increase impacts related to generation of construction emissions, total construction emissions would remain below the SDAPCD trigger level thresholds under this alternative, and impacts would remain less than significant. Additionally, while construction of the Increased Sand Dune Height/Width Alternative may incrementally increase pollutant concentrations in proximity of nearby sensitive receptors, the footprint of the Increased Sand Dune Height/Width Alternative would remain below the 4 acres per day screening level for potentially significant impacts to sensitive receptors, and impacts would remain less than significant. Implementation of the Increased Sand Dune Height/Width Alternative would not result in a change in land use, vehicle trips to the Ocean Beach - Dog Beach project site, or any change in operations at the site. Therefore, impacts related to consistency with an applicable Air Quality Plan, a cumulative increase in emissions, sensitive receptors, and odors would be less than significant under this alternative, similar to the CRMP Phase 1 Pilot Project.

Biological Resources

Implementation of the Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. Therefore, construction of the sand dune may result in an incremental increase in potential impacts to biological resources, including sensitive plant and wildlife species, sensitive vegetation communities, wetlands, and introduction of invasive species of plants into open space, compared to the CRMP Phase 1 Pilot Project. Implementation of Mitigation Measure (MM) BIO-1 through MM BIO-7 would be implemented under this alternative and would reduce impacts to a less than significant level, similar to the CRMP Phase 1 Pilot Project. Additionally, as described for the CRMP Phase 1 Pilot Project, impacts related to established wildlife corridors and native wildlife nursery sites would be less than significant without incorporation of any mitigation measures. As such, implementation of the Increased Sand Dune Height/Width Alternative would result in slightly increased impacts to biological resources, including sensitive plant and wildlife species, sensitive vegetation communities, wetlands, and introduction of invasive species of plants into open space, compared to the CRMP Phase 1 Pilot Project. However, impacts would remain less than significant with mitigation under this alternative, similar to the CRMP Phase 1 Pilot Project.

Cultural Resources

As described in Section 5.4, Cultural Resources, other than the mapped boundary of the locally designated district of the Beach Cottage Community Plan Area or the Ocean Beach Cottage Emerging Historical District (P-37-029025), which resulted in no historical resources within the mapped survey area, no resources were encountered during the pedestrian surveys on the Ocean Beach – Dog Beach project site. There are no designated or eligible historic resources or archaeological resources present within the Ocean Beach – Dog Beach area of potential effects (APE). Therefore, similar to the CRMP Phase 1 Pilot Project, implementation of the Increased Sand Dune Height/Width Alternative would result in no impact to historic or archaeological resources at the Ocean Beach – Dog Beach project site.

Geology and Soils

The Increased Sand Dune Height/Width Alternative would increase the height of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project by 4 feet and would increase the width of the proposed sand dune by 10 feet. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). As described in Section 5.5.3.1, Issue 1: Seismic Hazards, the Ocean Beach – Dog Beach project site is not located in a fault rupture hazard zone identified by the Alquist-Priolo Earthquake Fault Zoning Act, Special Publication 42, Revised 2007, Fault-Rupture Hazards Zones in California, or located within any other area with substantial

evidence of a known fault. However, given that the Ocean Beach – Dog Beach project site is located approximately 2.91 miles from the Rose Canyon Fault Zone, there remains potential for seismic-induced ground shaking at the project site. The Ocean Beach – Dog Beach project site is not an area where historic landslides have occurred. Construction of the Increased Sand Dune Height/Width Alternative would occur consistently with construction of the sand dune included as part of the CRMP Phase 1 Pilot Project and similar to the annual winter berm that is constructed at the project site every fall and maintained through the winter season. The proposed sand dune and dune restoration area would be vegetated with native plants, which would help stabilize the sand dune. Potential relocation or reconstruction of the existing restroom facility would occur in compliance with the California Building Code (CBC) and San Diego Municipal Code (SDMC), which include design criteria for seismic loading and other geologic hazards and require that a geotechnical investigation be conducted for the structure (SDMC Section 145.1803). Therefore, construction of the Increased Sand Dune Height/Width Alternative would not expose people or buildings to substantial adverse effects relative to strong seismic ground shaking, ground failure including liquefaction, or landslides beyond that which presently exists and would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the CRMP Phase 1. Impacts related to seismic hazards and geologic instability would be less than significant under this alternative, similar to the CRMP Phase 1 Pilot Project.

Construction of increased sand dune footprint would occur on sandy beach with no soil cover, where erosion is a naturally occurring process. Further, the proposed sand dune would provide additional sediment on the beach to reduce the effects of coastal erosion. Therefore, the sand dune would not result in erosion and topsoil loss beyond that which presently occurs. Construction of the Increased Sand Dune Height/Width Alternative would require compliance with erosion and siltation measures in accordance with the SDMC, as described for the CRMP Phase 1 Pilot Project. Furthermore, any development involving clearing, grading, or excavation that causes soil disturbance of one or more acres is subject to the National Pollutant Discharge Elimination System (NPDES) Construction General Permit provisions. Compliance with an approved Stormwater Pollution Prevention Plan (SWPPP) that would consider the full range of erosion control best management practices (BMPs), including any additional site-specific and seasonal conditions. Compliance with NPDES requirements would reduce the potential for substantial soil erosion or topsoil loss to occur from new development associated with the restroom relocation or reconstruction. Impacts would be less than significant under this alternative, similar to the CRMP Phase 1 Pilot Project.

Greenhouse Gas Emissions

The Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop)

components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). As such, this alternative would increase the amount of construction work and associated GHG emissions generated during construction activities compared to the CRMP Phase 1 Pilot Project. However, construction work for the Increased Sand Dune Height/Width Alternative would be similar to construction work described for the CRMP Phase 1 Pilot Project, and would provide greater coastal flood protection to coastal infrastructure inland of the project site and to the Ocean Beach community. Therefore, the Increased Sand Dune Height/Width Alternative would meet all six of the City's Climate Action Plan (CAP) strategies as well as the Climate Resilient SD Plan, as described for the CRMP Phase 1. Impacts related to consistency with the City's CAP and Climate Resilient SD Plan would be similar to those described for the CRMP Phase 1 and would be less than significant under this alternative.

Hydrology and Water Quality

Implementation of the Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. Therefore, construction of the sand dune may result in an incremental increase in potential impacts to water quality standards due to disturbance of soils and associated erosion potential and introduction of typical construction pollutants (e.g., fuels, lubricants) into runoff. Similar to the CRMP Phase 1 Pilot Project, construction of the Increased Sand Dune Height/Width Alternative would involve earthwork that would disturb soils across the Ocean Beach – Dog Beach project site, which would expose the underlying soils to potential erosion and mobilization from wind, rain, and on-site watering activities, necessary to reduce airborne dust. Surface runoff from exposed construction areas could flow into on-site storm drains, the Pacific Ocean, and the San Diego River, potentially carrying pollutants such as oils, fuels, lubricants, excess concrete, chemicals, sediments, and construction debris. Additionally, construction activities have the potential to contribute to polluted stormwater runoff due to the delivery, handling, and storage of construction materials and wastes. Construction of the Increased Sand Dune Height/Width Alternative would require compliance with erosion and siltation measures in accordance with the SDMC, as described for the CRMP Phase 1 Pilot Project. Furthermore, this alternative would be subject to the NPDES Construction General Permit provisions, including preparation and compliance with an approved SWPPP that would consider erosion control BMPs. Compliance with NPDES requirements would reduce the potential for substantial impacts to water quality standards. Impacts would be less than significant under this alternative, as described from the CRMP Phase 1 Pilot Project.

Similar to the CRMP Phase 1 Pilot Project, the Increased Sand Dune Height/Width Alternative would result in long-term beneficial impacts to water quality due to coastal flood protection from the elevated sand dunes and the discontinuation of the City's winter berm progress at the Ocean

Beach – Dog Beach project site, which currently increases erosion potential annually at the site (refer to Section 5.7.3.1, Issue 1: Water Quality Standards).

The Increased Sand Dune Height/Width Alternative would include the same project components as the CRMP Phase 1 Pilot Project as well as the same incremental increase in pervious surfaces for implementation of the proposed multi-use path. Therefore, this alternative would result in similar impacts related to groundwater supplies, site drainage and hydrology, and conflict with a Water Quality Control Plan or Sustainable Management Plan compared to the CRMP Phase 1 Pilot Project. Impacts would be less than significant.

Implementation of this alternative would provide even greater coastal flood protection compared to the CRMP Phase 1 Pilot Project. Therefore, impacts related to risk of pollutants due to inundation of the Ocean Beach – Dog Beach project site would be reduced compared to the CRMP Phase 1 Pilot Project and be less than significant.

Land Use and Planning

The Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). The increased height and width of the elevated sand dune would not result in the physical division of an established community and the multi-use path and sand dune would provide designated accessways to and from the beach, similar to the CRMP Phase 1 Pilot Project. Given that the Increased Sand Dune Height/Width Alternative would include the same project components as the CRMP Phase 1, this alternative would be consistent with all applicable land use plans, policies, and regulations, similar to the CRMP Phase 1. Impacts related to physical division of an established community and conflicts with applicable land use plans, policies, and regulations would be less than significant and similar to the CRMP Phase 1. Additionally, no zoning deviation or variance that would in turn result in a physical impact on the environment would occur, similar to the CRMP Phase 1.

Noise

Given that the Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project, this alternative would result in additional construction work and would subsequently increase the construction schedule. Similar to the CRMP Phase 1 Pilot Project, the Increased Sand Dune Height/Width Alternative would be constructed with conventional earthwork equipment (e.g., loaders, dozers, tracked excavators), and construction would occur during daytime hours in accordance with SDMC Section 59.5.0404. The increased construction schedule would result in a longer term of disturbance to nearby noise sensitive receptors in the area, including residences, hotels, and other visitor accommodations. However, given the use of the same construction equipment, the estimated noise levels occurring during construction activities for this alternative would be the same compared to the CRMP Phase 1 Pilot Project. MM NOI-1, which requires BMPs for construction (e.g., appropriately-sized intake and/or exhaust mufflers, locating noise-generating equipment as far as possible from adjacent residential receivers, temporary noise barriers), would be applied to the Increased Sand Dune Height/Width Alternative, as described for the CRMP Phase 1. Therefore, while noise impacts under this alternative would be increased compared to the CRMP Phase 1 Pilot Project, noise impacts would be less than significant with mitigation, similar to the CRMP Phase 1 Pilot Project. As described for the CRMP Phase 1 Pilot Project, no pile driving or blasting would be required for construction of the Increased Sand Dune Height/Width Alternative, the estimated construction equipment vibration levels would be the same for this alternative compared to the CRMP Phase 1 Pilot Project (refer to Table 5.9-1) and would remain below the threshold of 0.1 peak particle velocity at 25 feet. Therefore, impacts related to vibration would be less than significant, similar to the CRMP Phase 1 Pilot Project.

Public Services and Recreation

The Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). The Increased Sand Dune Height/Width Alternative would not result in a change in land use or operations at the Ocean Beach – Dog Beach project site. As such, existing visitation to and use of the Ocean Beach – Dog Beach project site is expected to maintain relatively the same as under current conditions. Therefore, this alternative would not generate an increased demand for police protection, fire protection, libraries, or schools compared to the CRMP Phase 1 Pilot Project. Impacts to parks under this alternative would be less than significant and similar to those described for the CRMP Phase 1 Pilot Project. The elevated sand dunes would provide coastal flood protection to the parks and the multi-use path would provide connectivity between Brighton Park at the Ocean Beach – Dog Beach project site and Saratoga Park and Ocean Beach Veterans Plaza to the south.

Additionally, given the increased footprint of the proposed sand dune under this alternative, the sand dune would require removal and relocation of additional volleyball courts compared to the CRMP Phase 1 Pilot Project. Under the proposed CRMP Phase 1 Pilot Project, all volleyball courts that would need to be removed for implementation of the elevated sand dune would be relocated at Ocean Beach and Ocean Beach Dog Beach. However, given the increase in volleyball courts that would be displaced under this alternative, there potentially would not be enough space at Ocean Beach and Ocean Beach to relocate the increased number of displaced volleyball courts. Therefore,

impacts to recreational facilities under the Increased Sand Dune Height/Width Alternative would be increased compared to the CRMP Phase 1 Pilot Project.

Transportation

The Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). Therefore, the Increased Sand Dune Height/Width Alternative would not result in any additional changes to the transportation system compared to the CRMP Phase 1 Pilot Project. Additionally, this alternative would not result in a change in land use or operations that would substantially increase VMT to and from the Ocean Beach – Dog Beach project site. Impacts to transportation system performance, VMT, hazardous design features, and emergency access would remain less than significant, similar to the CRMP Phase 1 Pilot Project.

Tribal Cultural Resources

As described in Section 5.12, Tribal Cultural Resources, there are no archaeological cultural resources present within the Ocean Beach – Dog Beach APE. Therefore, similar to the CRMP Phase 1 Pilot Project, implementation of the Increased Sand Dune Height/Width Alternative would result in no impact to Tribal Cultural Resources at the Ocean Beach – Dog Beach project site.

Utilities and Services Systems

The Increased Sand Dune Height/Width Alternative would increase the height and width of the proposed sand dune included as part of the CRMP Phase 1 Pilot Project. The proposed multi-use path, dune restoration, and optional (i.e., restroom relocation/reconstruction and express shuttle stop) components of the CRMP Phase 1 Pilot Project would remain the same under this alternative (refer to Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach). The Increased Sand Dune Height/Width Alternative would not result in a change in land use or operations at the Ocean Beach – Dog Beach project site. As such, existing visitation to the Ocean Beach – Dog Beach project site and use of the existing restroom and shower facilities is expected to maintain relatively the same as under current conditions. Therefore, this alternative would not generate an increased water demand, wastewater generation, or solid waste generation compared to the CRMP Phase 1 Pilot Project. Impacts to utilities and service systems would be less than significant, similar to the CRMP Phase 1 Pilot Project.

Wildfire

Under the Increased Sand Dune Height/Width Alternative, impacts related to wildfire would be similar to those described for the CRMP Phase 1 Pilot Project. Similar to the CRMP Phase 1 Pilot

Project, implementation of the Increased Sand Dune Height/Width Alternative would include designated passageways through the proposed multi-use path and elevated sand dunes in order to maintain emergency access to and adequate evacuation from the beach area within the Ocean Beach – Dog Beach project site. The Increased Sand Dune Height/Width Alternative would not change the existing vehicular access to the project site. Therefore, the Increased Sand Dune Height/Width Alternative would not substantially impair an adopted emergency response plan or emergency evacuation plan. The Increased Sand Dune Height/Width Alternative would include the same project components as the CRMP Phase 1 Pilot Project and would not include vegetation that would be considered flammable or create steep slopes. Therefore, the Increased Sand Dune Height/Width Alternative would not expose visitors to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire or require the installation or maintenance of infrastructure that may exacerbate fire risk. Similar to the CRMP Phase 1 Pilot Project, the Increased Sand Dune Height/Width Alternative would not substantially alter existing drainage patterns on the Ocean Beach – Dog Beach project site; as such, this alternative would not expose people or structures to significant risks, including downslope or downstream flooding or landslides. Therefore, wildfire impacts under the Increased Sand Dune Height/Width Alternative would be similar to the CRMP Phase 1 and less than significant.

Relationship to Project Objectives

The Increased Sand Dune Height/Width Alternative would attain all of the project objectives outlined in Section 8.1.1.1, Project Objectives; however, this alternative would not meet the project objective to protect and enhance recreational opportunities to the same extent as the CRMP Phase 1 because the footprint of the elevated sand dunes at the Ocean Beach – Dog Beach project site would displace more volleyball courts and beach space for other recreational uses than the sand dunes included as part of the CRMP Phase 1 Pilot Project. As such, there would potentially not be enough space at Ocean Beach and Ocean Beach Dog Beach to relocate the increased number of displaced volleyball courts and beach space for other recreational uses under this alternative.

8.3.3 Reduced Ground Disturbance Alternative

8.3.3.1 Description

Under this alternative, the proposed projects identified for the La Jolla Shores and Sunset Cliffs project sites would be replaced with alternate project concepts that would not require grounddisturbing construction activities and therefore would not disturb cultural and Tribal Cultural Resources located within these culturally sensitive areas. At the La Jolla Shores project site, construction of the earthen dikes along the western border of the grassy recreational areas at La Jolla Shores and Kellogg parks, and construction of the terraced seatwall along the western border of the existing parking lot would not occur under an Amphitheater Design Option (refer to Figure 3-5). There would also be no Reconfigured Park Design Option for a reconfigured waterfront park and reconfigured parking lot (refer to Figure 3-6). Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site (see Figure 8-2, Reduced Ground Disturbance Alternative – La Jolla Shores). This type of construction would be considered "capping," as defined by CEQA Statute 21083.2 and the City of San Diego's Land Development Manual for Historical Resources Guidelines, and it can help preserve the cultural site. As defined by the City's Land Development Manual for Historical Resources Guidelines, "Capping' or covering archaeological sites with a layer of soil before building tennis courts, parking lots, or similar facilities... is an acceptable alternative when the following conditions are not chemically active; (3) The site is one in which the natural processes of deterioration have effectively ceased; and (4) The site has been recorded and an index of the contents of the site has been made" (City of San Diego 2022).

At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program, which would first involve the use of temporary traffic calming devices (e.g., cones, signage, water-filled Jersey barriers) and would later, once the road design is finalized, involve restriping and installation of barriers, would occur (see Figure 8-3, Reduced Ground Disturbance Alternative – Sunset Cliffs). However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, would not be implemented (refer to Figure 3-11). Additionally, the optional components, including realigning parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, which could also require the use of heavy construction equipment and ground-disturbing construction activities, would not occur (refer to Figure 3-11).

The site designs described for the Ocean Beach – Dog Beach, Pacific Beach – Tourmaline Surf Park, Mission Beach, and Ocean Beach – Pier project sites would be planned and implemented as described in Section 3.4.3, Pilot Project: Ocean Beach – Dog Beach and Section 3.4.4, Site Solutions. Given that implementation of the Reduced Ground Disturbance Alternative would not affect the site designs or implementation of these four projects, the analyses of impacts related to the Reduced Ground Disturbance Alternative below are limited to impacts at the La Jolla Shores and Sunset Cliffs project sites. The purpose of changing the proposed project concepts for these two project sites under this alternative would be to reduce ground disturbance that may affect cultural and Tribal Cultural Resources located within these culturally sensitive areas.

8.3.3.2 Analysis of Reduced Ground Disturbance Alternative

Aesthetics

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. Impacts related to scenic vistas, visual character or quality, and zoning and regulations governing scenic quality from this vegetated dune under the Reduced Ground Disturbance Alternative would be similar to impacts under the proposed CRMP Phase 1 at the La Jolla Shores project site.

At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur. As implementation of the Reduced Ground Disturbance Alternative would not provide all of the accessibility and connectivity improvements and habitat enhancements included as part of the CRMP Phase 1 at this site, it would not be consistent with the applicable regulations governing scenic quality (i.e., community plan goals and policies related to design, natural resource, and open space) to the same extent as the CRMP Phase 1. The Reduced Ground Disturbance Alternative would also not result in the long-term benefits to coastal views associated with implementation of the full project at the Sunset Cliffs project site as proposed under the CRMP Phase 1. However, impacts related to scenic vistas, visual character or quality, and zoning and regulations governing scenic quality from the Reduced Ground Disturbance Alternative, while greater than under the proposed CRMP Phase 1, would remain less than significant at the Sunset Cliffs project site.

Given that both the La Jolla Shores project site and Sunset Cliffs project site are not visible from an official or eligible state scenic highway, the Reduced Ground Disturbance Alternative would result in no impact to scenic resources within a state scenic highway. Therefore, this impact would be similar to that described for the CRMP Phase 1.

Similar to the CRMP Phase 1, construction of the Reduced Ground Disturbance Alternative would also be limited to the hours between 7:00 a.m. to 7:00 p.m. during weekdays and, if necessary, on Saturdays in accordance with SDMC Section 59.5.0404. Because construction would occur during daylight hours, construction lighting is not anticipated to be necessary. If necessary, construction

lighting shall be shielded and directed toward the construction and staging areas to prevent spill over into adjacent properties or sensitive habitat areas. Additionally, the use of construction lighting, if necessary, would be short term and temporary. Therefore, impacts related to light or glare from construction lighting would be less than significant under the Reduced Ground Disturbance Alternative, similar to the CRMP Phase 1.

Overall, impacts to aesthetics under the Reduced Ground Disturbance Alternative would be slightly greater than impacts under the CRMP Phase 1. However, impacts would remain less than significant under this alternative.

Air Quality

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. As a result, compared to the CRMP Phase 1, this alternative would decrease the amount of construction grading or earthwork and associated criteria air pollutant emissions generated during construction activities at the La Jolla Shore project site.

At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur. For that reason, this alternative would also decrease the amount of construction grading or earthwork and associated criteria air pollutant emissions generated during construction activities at the Sunset Cliffs project site.

With this decrease in construction emissions, it is estimated that criteria air pollutant emissions under the Reduced Ground Disturbance Alternative would be less than the CRMP Phase 1. However, similar impacts would occur related to consistency with an applicable Air Quality Plan, a cumulative increase in emissions, sensitive receptors, and odors. Similar to the CRMP Phase 1, impacts related to air quality would be less than significant.

Biological Resources

Implementation of the Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park
and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur.

Under this alternative, implementation of the vegetated sand dune at the La Jolla Shores project site would have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species, on riparian habitat or other sensitive natural community, and on wetlands. However, unlike both of the CRMP Phase 1 design options for the La Jolla Shores site, this alternative would be implementing a vegetated sand dune on the sandy beach. Therefore, although impacts would remain less than significant with implementation of MM BIO-2 through MM BIO-7, impacts to this sensitive vegetation community and jurisdictional aquatic resource (beach) would be greater under this alternative than under the CRMP Phase 1.

Similar to the CRMP Phase 1, implementation of the road reconfiguration at the Sunset Cliffs project site under Reduced Ground Alternative would also have the potential to result in a substantial adverse impact on species identified as a candidate, sensitive, or special status species and on riparian habitat or other sensitive natural community. Impacts would be less than significant with implementation of MM BIO-2 through MM BIO-6. The road reconfiguration at Sunset Cliffs, like the CRMP Phase 1, would also not result in a substantial adverse impact on wetlands. Impacts would be less than significant, and no mitigation is required.

Under this alternative, the proposed vegetated sand dune at La Jolla Shores and road reconfiguration at Sunset Cliffs would not interfere substantially with the movement of any fish or wildlife species or with established wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant, similar to the CRMP Phase 1, and no mitigation is required. With implementation of MM BIO-6, the vegetated sand dune at La Jolla Shores and the road reconfiguration at Sunset Cliffs would also not result in adverse edge effects or the introduction of invasive species of plants into a natural open space area due to conflict with the provisions of an MSCP, habitat conservation plans, or other policies and ordinances. Similar to the CRMP Phase 1, implementation of MM BIO-6 would reduce potential impacts to less than significant.

Although potential impacts would remain less than significant under the Reduced Ground Disturbance Alternative, with greater impacts to sensitive vegetation communities and jurisdictional aquatic resources, and similar impacts related to sensitive plant and wildlife species, established

wildlife corridors and native wildlife nursery sites, and introduction of invasive species of plants into open space, impacts related to biological resources would be greater under this alternative than under the CRMP Phase 1.

Cultural Resources

Impacts to historical resources under the Reduced Ground Disturbance Alternative would be the same as compared to the CRMP Phase 1 as there would be similar potential for impacts to the Mission Beach Boardwalk, which is an eligible historical resource present within the Mission Beach project site. However, impacts to archaeological resources under the Reduced Ground Disturbance Alternative would be significantly reduced compared to the CRMP Phase 1, as this alternative would avoid ground-disturbing activities at the La Jolla Shores and Sunset Cliffs project sites, where there are several subsurface archaeological resources present. As discussed above, this type of construction at La Jolla Shores would be considered "capping" pursuant to CEQA Statute 21083.2 and the City's Land Development Manual for Historical Resources Guidelines, and it can help preserve the cultural site. As defined by the City's Land Development Manual for Historical Resources Guidelines, "Capping' or covering archaeological sites with a layer of soil before building tennis courts, parking lots, or similar facilities... is an acceptable alternative when the following conditions are met: (1) The soils to be covered will not suffer serious compaction; (2) The covering materials are not chemically active; (3) The site is one in which the natural processes of deterioration have effectively ceased; and (4) The site has been recorded and an index of the contents of the site has been made" (City of San Diego 2022). Under the Reduced Ground Disturbance Alternative, there would be no potential for disturbance or damage to any known or unknown sites or human remains at the La Jolla Shores and Sunset Cliffs project sites. Therefore, the Reduced Ground Disturbance Alternative would have substantially less potential for impacts to cultural resources than the CRMP Phase 1. Impacts related to archaeological resources would be less than significant.

Geology and Soils

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur. Similar to the CRMP Phase 1, the Reduced Ground Disturbance Alternative would implement hybrid nature-based solutions projects on the same six proposed sites within a seismically active region where ground shaking would continue to present potential risks for coastal recreation facilities. Therefore, this alternative would have less than significant impacts related to seismic hazards and geologic instability, similar to the CRMP Phase 1. However, unlike the CRMP Phase 1, this alternative would not implement several of the proposed project components that would increase the resiliency of the Sunset Cliffs project site, including the trail and habitat enhancement, drainage improvements, native plant installation, and erosion control measures that would be implemented under the CRMP Phase 1. As a result, impacts related to erosion or loss of topsoil would be greater under this alternative than under the CRMP Phase 1. With less than significant impacts related to erosion or loss of topsoil, the Reduced Ground Disturbance would have slightly greater impacts related to geology and soils than the CRMP Phase 1.

Greenhouse Gas Emissions

Under the Reduced Ground Disturbance Alternative, short-term construction emissions would still occur at the La Jolla Shores site in order to construct a vegetated sand dune in front of the existing seawall under this alternative. However, short-term construction at the Sunset Cliffs project site to implement project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur under the Reduced Ground Disturbance Alternative. As such, the short-term construction emissions under this alternative would be reduced compared to the CRMP Phase 1. In terms of long-term GHG generation, the Reduced Ground Disturbance Alternative would have similar impacts to the CRMP Phase 1.

However, because several of the proposed project components that would increase the resiliency of the Sunset Cliffs project site would not be implemented under this alternative, impacts related to consistency with the City's CAP and Climate Resilient SD Plan would be slightly greater under this alternative when compared to impacts under the CRMP Phase 1. Impacts related to conflicts with these applicable plans would still remain less than significant.

With slightly reduced impacts related to generation of GHG emissions, and slightly greater impacts related to conflicts with applicable plans, the Reduced Ground Disturbance Alternative would result overall in less than significant GHG impacts, as described in the CRMP Phase 1.

Hydrology and Water Quality

Due to the absence of ground-disturbing construction activities at the La Jolla Shores and Sunset Cliffs project sites, impacts to water quality standards under the Reduced Ground Disturbance Alternative would be less than significant, similar to the CRMP Phase 1. Furthermore, implementation of the vegetated sand dune at the La Jolla Shores project site and proposed road reconfiguration at the Sunset Cliffs project site would also not include or require the extraction of groundwater or deplete groundwater supplies. Therefore, impacts to groundwater supplies under this alternative would also be less than significant, similar to the CRMP Phase 1.

Under the Reduced Ground Disturbance Alternative, the vegetated sand dune proposed at the La Jolla Shores project site and road reconfiguration proposed at the Sunset Cliffs project site would not increase impervious surfaces, and stormwater drainage would continue to be conveyed to the existing storm drain systems. This alternative would also comply with the same erosion and siltation control measures, requirements, and standards discussed in Section 5.7.3.3 and would not result in flooding on- or offsite, create or contribute runoff water which would exceed the capacity of the stormwater drainage system or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. However, many of the proposed project components at the Sunset Cliffs project site that could require the use of heavy construction equipment and ground-disturbing construction activities would not be implemented under this alternative, including the proposed drainage improvements and erosion control measures. As a result, while impacts would remain less than significant, the Reduced Ground Disturbance Alternative would have greater impacts related to site drainage and hydrology than the CRMP Phase 1.

Under this alternative the La Jolla Shores and Sunset Cliffs project sites would remain located in FEMA Zone VE and a tsunami zone. However, similar to the proposed project, no habitable structures are proposed as part of the Reduced Ground Disturbance Alternative, and the passive uses at both sites would not result in an increased risk of pollutants release due to inundation of the project sites. Therefore, impacts related to flood hazard, tsunami, or seiche zones would remain less than significant, similar to the CRMP Phase 1. Finally, the vegetated sand dune at the La Jolla Shores project site and road reconfiguration at the Sunset Cliffs project site proposed under this alternative would occur in compliance with the San Diego Basin Water Quality Control Plan. These project sites are not subject to a sustainable groundwater management plan, and the proposed projects would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant, similar to the CRMP Phase 1.

With less than significant impacts related to water quality standards, groundwater supplies, and conflicts with water quality control plan or sustainable groundwater management plan, similar to the CRMP Phase 1, and greater impacts related to site drainage and hydrology, the Reduced Ground Disturbance Alternative would have slightly greater impacts related to hydrology and water quality than the CRMP Phase 1.

Land Use and Planning

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur.

Under the Reduced Ground Disturbance Alternative, the vegetated sand dune at the La Jolla Shores project site and the road reconfiguration at the Sunset Cliffs project site would not introduce new land uses or new features (e.g., roads) that would physically divide or interrupt the connection between surrounding land uses. The vegetated sand dune at the La Jolla Shores project site would also be consistent with all applicable land use plans, policies, and regulations. However, because proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities at the Sunset Cliffs site would not be implemented under this alternative, it would not achieve the goals and policies of applicable land use plans, policies, and regulations (as detailed in Appendix E) to the same extent as the CRMP Phase 1. Additionally, no zoning deviation or variance that would in turn result in a physical impact on the environment would occur for either project site, as described for the CRMP Phase 1.

Overall, while impacts related to Land Use and Planning for the Reduced Ground Disturbance Alternative would be slightly greater than for the CRMP Phase 1, impacts would remain less than significant.

Noise

Given that the Reduced Ground Disturbance Alternative would avoid ground-disturbing construction activities at both the La Jolla Shores and Sunset Cliffs project sites, this alternative would result in reduced construction work at these sites, and a shorter construction schedule for the Sunset Cliffs project site. As with the CRMP Phase 1, construction of the Reduced Ground Disturbance Alternative would occur during daytime hours in accordance with SDMC Section 59.5.0404. The decreased construction schedule would result in a shorter term of disturbance to nearby noise sensitive receptors in the area, including residences, hotels, and other visitor accommodations. Furthermore, as this alternative would not implement proposed project

components that could require the use of heavy construction equipment and ground-disturbing construction activities at the La Jolla Shores or Sunset Cliffs project sites, the estimated noise levels occurring during construction activities for this alternative would be reduced compared to the CRMP Phase 1. MM NOI-1, which requires BMPs for construction in accordance with the SDMC (e.g., appropriately-sized intake and/or exhaust mufflers, locating noise-generating equipment as far as possible from adjacent residential receivers, temporary noise barriers), would be applied to the Reduced Ground Disturbance Alternative as applicable, similar to the CRMP Phase 1. Following construction, noise under this alternative would generally be limited to normal conversation levels. The vegetated sand dune proposed at the La Jolla Shores project site under this alternative would be passive and would not generate noise, and would not generate new vehicle trips or result in a permanent increase in traffic noise levels. Similarly, the proposed road reconfiguration at the Sunset Cliffs project site under this alternative would reconfigure traffic flow on Sunset Cliffs Boulevard, but would not generate new vehicle trips and would not increase traffic noise levels following construction. Maintenance of the vegetated sand dune at La Jolla Shores would result in occasional noise from operation of maintenance equipment. However, noise would be limited to days that maintenance would occur, and would be similar to existing beach and recreation area maintenance efforts. Impacts would be less than significant during operation.

As described for the CRMP Phase 1, no pile driving or blasting would be required for construction of the Reduced Ground Disturbance Alternative. Given the avoidance of heavy construction equipment and ground-disturbing construction activities at the La Jolla Shores and Sunset Cliffs project sites, the estimated construction equipment vibration levels would also be reduced for this alternative compared to the CRMP Phase 1 and would remain below the threshold of 0.1 peak particle velocity at 25 feet. Following construction, the La Jolla Shores and Sunset Cliffs project sites would not include any components that would generate vibration. Occasional use of equipment for maintenance of the vegetated sand dune at the La Jolla Shores project site would be similar to existing conditions for the annual winter berm program, and would not be expected to vibration levels identified in Table 5.9-1 for construction. Therefore, impacts related to vibration would be less than significant.

Overall, noise impacts under the Reduced Ground Disturbance Alternative would be slightly decreased compared to the CRMP Phase 1, and would be less than significant with mitigation.

Public Services and Recreation

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur.

Similar to the CRMP Phase 1, the Reduced Ground Disturbance Alternative would not construct new residential units or generate an increased demand for police protection, fire protection, libraries, or schools. Implementation of the vegetated sand dune at the La Jolla Shores project site under this alternative may cause an increase in use of the park, similar to the CRMP Phase 1. However, use of the park would not increase such that substantial physical deterioration of the facilities would occur or be accelerated. Furthermore, most of the proposed project components that would improve and attract visitors to the Sunset Cliffs project site would not be implemented under this alternative, including the trail enhancements, signage improvements, drainage improvements, habitat enhancements that would be implemented under the CRMP Phase 1. As a result, impacts to parks would be less than significant under this alternative, and slightly less than the CRMP Phase 1. The Reduced Ground Disturbance Alternative would also protect and enhance the existing recreational spaces at the La Jolla Shores project site, similar to the proposed project. However, many of the proposed project components that would protect and enhance the existing recreational spaces at the Sunset Cliffs project site would not be implemented under this alternative, as they require potentially ground-disturbing activities. As a result, impacts related to recreational facilities would be slightly greater under this alternative than under the CRMP Phase 1. With similar less than significant impacts related to police protection, fire protection, libraries, or schools, slightly less impacts to parks, and slightly greater impacts to recreational facilities, overall, public services and recreation impacts under the Reduced Ground Disturbance Alternative would be less than significant, similar to the CRMP Phase 1.

Transportation

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. The vegetated sand dune at the La Jolla Shores site proposed under the Reduced Ground Disturbance Alternative would, similar to the Amphitheater Design Option proposed under the CRMP Phase 1, primarily support existing users of the area and would not increase demands for existing multi-modal transportation network. It would not modify any on- or off-site transportation network, including transit, roadways, bicycle, and pedestrian facilities. Impacts during construction would be temporary and would not conflict with the adopted program, plan, ordinance, or policy addressing the transportation system. However, while the proposed road reconfiguration would still occur at the Sunset Cliffs project site, proposed project components that that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, and optional realignment of parking lots, would not occur under this alternative. As a result, it would not meet the goals of applicable transportation plans discussed in Section 5.11.3.1 to the same extent as the CRMP Phase 1. Therefore, while impacts related to conflicts with any adopted program, plan, ordinance, or policy addressing the transportation system would remain less than significant under this alternative, impacts would be greater than under the CRMP Phase 1.

Similar to the CRMP Phase 1, construction activities associated with the vegetated sand dune proposed at the La Jolla Shores project site and the road reconfiguration proposed at the Sunset Cliffs project site under this alternative would be short-term and temporary. Once construction activities for these sites are completed, construction-related vehicle trips to and from the project sites would cease. Furthermore, operationally, the vegetated sand dune proposed at the La Jolla Shores project site and the road reconfiguration proposed at the Sunset Cliffs project site would not change the existing land uses of the project sites and would not attract or generate new vehicle trips to the project sites. Additionally, the proposed road reconfiguration would likely have a beneficial impact on VMT by improving bike connectivity, pedestrian access, and trail connectivity along Sunset Cliffs Boulevard and Sunset Cliffs Natural Park – Linear Park. As a result, this alternative would have a less than significant VMT impact and would not require further VMT analysis, similar to the CRMP Phase 1.

The vegetated sand dune proposed at the La Jolla Shores project site under the Reduced Ground Disturbance Alternative would not result in any changes to the on- or off-site roadways and/or driveways. The road reconfiguration proposed at the Sunset Cliffs project site would improve safety by converting the roadway into a one-way, southbound vehicular travel lane and providing a separate bidirectional multi-use (i.e., bicycle and pedestrian) path from the one-way vehicular travel lane, and implementation through pilot phases would ensure that design features of the reconfiguration do not increase safety hazards in the area. Furthermore, the proposed vegetated sand dune at the La Jolla Shores project site and road reconfiguration at the Sunset Cliffs project site also do not propose any use that would result in incompatible roadway use, such as operation of farm equipment. Therefore, the Reduced Ground Disturbance Alternative would not result in increased hazards due to a design feature or incompatible uses, and impacts would be less than significant, similar to the CRMP Phase 1.

Finally, the vegetated sand dune proposed at the La Jolla Shores project site under this alternative would not change the existing on- and off-site vehicular and/or pedestrian access network and would not result in inadequate emergency access. The proposed roadway reconfiguration at the

Sunset Cliffs project site would convert a portion of two-lane, bidirectional vehicular travel along Sunset Cliffs Boulevard into one lane of southbound vehicular travel with a separate bidirectional multi-use (i.e., bicycle and pedestrian) path. However, as discussed in Section 5.11.3.4, there are three intersections (Sunset Cliffs Boulevard at Hill Street, Monaco Street, and Carmelo Street) on the Sunset Cliffs project site that vehicles can exit from the one-way roadway to travel to the opposite direction via other north–south directional streets such as Cordova Street, Cornish Drive, and Amiford Drive. Therefore, emergency response vehicles would be able to reach sections of Sunset Cliffs Boulevard, and the proposed roadway reconfiguration would not result in inadequate emergency access. Impacts related to inadequate emergency access would be less than significant, similar to the CRMP Phase 1.

With greater impacts related to transportation system performance, and similar less than significant impacts related to VMT, emergency access, and hazardous design features, overall transportation related impacts under the Reduced Ground Disturbance Alternative would be slightly greater than the CRMP Phase 1.

Tribal Cultural Resources

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. This type of construction would be considered "capping" pursuant to CEQA Statute 21083.2 and the City's Land Development Manual for Historical Resources Guidelines, and it can help preserve the cultural site. As defined by the City's Land Development Manual for Historical Resources Guidelines, "Capping' or covering archaeological sites with a layer of soil before building tennis courts, parking lots, or similar facilities... is an acceptable alternative when the following conditions are met: (1) The soils to be covered will not suffer serious compaction; (2) The covering materials are not chemically active; (3) The site is one in which the natural processes of deterioration have effectively ceased; and (4) The site has been recorded and an index of the contents of the site has been made" (City of San Diego 2022). At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur.

Given that there are several previously identified subsurface archaeological resources in the area surrounding the La Jolla Shores and Sunset Cliffs project sites, the potential for subsurface Tribal Cultural Resources exists. However, the Reduced Ground Disturbance Alternative would avoid ground-disturbing activities at both of these project sites and would therefore have substantially reduced potential impacts to Tribal Cultural Resources compared to the CRMP Phase 1. Furthermore, as discussed above, implementation of the proposed vegetated sand dune at the La Jolla Shores project site would also be considered "capping," as defined by CEQA Statute 21083.2 and the City of San Diego's Land Development Manual for Historical Resources Guidelines, and this type of construction can help preserve the cultural site. Under this alternative, impacts related to Tribal Cultural Resources would be less than significant, and greatly reduced compared to the CRMP Phase 1.

Utilities and Services Systems

The Reduced Ground Disturbance Alternative would not include the construction of earthen dikes and a terraced seatwall as proposed under the Amphitheater Design Option for the La Jolla Shores project site. There would also be no development of a reconfigured waterfront park and reconfigured parking lot as proposed under the Reconfigured Park Design Option for this project site. Instead, a vegetated sand dune could be constructed in front of the existing seawall at the La Jolla Shores project site. At the Sunset Cliffs project site, implementation of the proposed road reconfiguration program would occur. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the Sunset Cliffs project site, would not occur.

Under the Reduced Ground Disturbance Alternative, implementation of the vegetated sand dune at the La Jolla Shores project site and the road reconfiguration at the Sunset Cliffs project site would be consistent with existing land use categories and designations and would not result in a land use change. Additionally, this alternative would not develop housing, additional restroom facilities, or other uses that would increase demand for water, wastewater or solid waste treatment, stormwater drainage, electrical power, natural gas, or telecommunications facilities. The Reduced Ground Disturbance Alternative would also not involve construction of any new impervious surfaces at the La Jolla Shores or Sunset Cliffs project sites that would alter drainage patterns or substantially affect stormwater drainage. However, proposed project components that could require the use of heavy construction equipment and ground-disturbing construction activities would not be implemented at both project sites under this alternative, including the drainage improvements proposed for the Sunset Cliffs project site under the CRMP Phase 1. As a result, this alternative would have slightly greater impacts related to stormwater drainage than the CRMP Phase 1. Overall, impacts related to utilities and service systems would be less than significant, and impacts would be slightly increased compared to the CRMP Phase 1.

Wildfire

Under the Reduced Ground Disturbance Alternative, the vegetated sand dune at the La Jolla Shores project site and the road reconfiguration program at the Sunset Cliffs project site would maintain emergency access during and after construction, resulting in less than significant impacts similar to the CRMP Phase 1. The vegetated sand dune at the La Jolla Shores project site also does not propose any vegetation that would be considered flammable, similar to the proposed project; rather, it would be vegetated with native plants. The road reconfiguration at the Sunset Cliffs project site under this alternative would also not implement any flammable vegetation. As a result, the Reduced Ground Disturbance Alternative would not exacerbate wildfire risks or expose existing occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant. Furthermore, neither the vegetated sand dune at the La Jolla Shores project site nor the road reconfiguration at the Sunset Cliffs project site proposed under this alternative would exacerbate fire risk or result in ongoing impacts on the environment. Finally, similar to the CRMP Phase 1, the vegetated sand dune at the La Jolla Shores project site would not substantially alter existing drainage patterns, and would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes. However, under this alternative, proposed project components at the Sunset Cliffs project site that could require the use of heavy construction equipment and ground-disturbing construction activities, including trail enhancements, signage improvements, drainage improvements, and habitat enhancements along the southern section of the project site, as well as the optional realignment of parking lots and trail enhancement, inland drainage improvements, native plant installation, and erosion control measures along the northern section of the project site, would not occur. As a result, impacts would be greater under this alternative when compared to the CRMP Phase 1.

Overall, with similar less than significant impacts related to emergency access, pollutant concentrations or spread of wildfire, and exacerbation of fire risk, and greater less than significant impacts related to flooding, the Reduced Ground Disturbance Alternative would have slightly greater impacts related to wildfire than the CRMP Phase 1.

Relationship to Project Objectives

The Reduced Ground Disturbance Alternative would attain all of the project objectives outlined in Section 8.1.1.1, Project Objectives. However, this alternative would not meet several project objectives to the same extent as the CRMP Phase 1. The vegetated sand dune proposed at the La Jolla Shores project site under the Reduced Ground Disturbance Alternative would have greater impacts to biological resources than the project concepts proposed for this site under the CRMP Phase 1. As a result, this alternative would not meet the objective to protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change to the same extent as the CRMP Phase 1. The Reduced Ground Disturbance Alternative would also not meet the project objective to protect and enhance recreational opportunities to the same extent as the CRMP Phase 1, because many of the proposed project components that would protect and enhance the existing recreational spaces at the Sunset Cliffs project site would not be implemented under this alternative, as they require potentially ground-disturbing activities. Similarly, other potentially ground-disturbing activities at the Sunset Cliffs project site that would not be implemented under this alternative include trail enhancements and improvements and the optional realignment of parking lots. As a result, the Reduced Ground Disturbance Alternative would not meet the project objective to increase coastal access for all community members, with prioritization of Communities of Concern, to the same extent as the CRMP Phase 1.

8.4 Environmentally Superior Alternative

CEQA Guidelines, Section 15126.6(e)(2), requires the identification of an environmentally superior alternative among the alternatives analyzed in an EIR. The guidelines also require that, if the No Project Alternative is identified as the environmentally superior alternative, then another environmentally superior alternative must be identified. Table 8-1, Summary of Impacts for Alternatives Compared to the Project, provides a summary comparison of the alternatives with the project to highlight if the alternatives would result in a similar, greater, or lesser impact regarding potentially significant impacts.

	CRMP Phase 1		Alternatives			
Impact	Without Mitigation	With Mitigation	No Project	Increased Sand Dune Height/Width Alternative	Reduced Ground Disturbance Alternative	
Section 5.1, Aesthetics						
Issue 1: Scenic Vistas	LS	N/A	>	>	>	
Issue 2: Scenic Resources Within a Scenic Highway	LS	N/A	=	=	=	
Issue 3: Visual Character or Quality	LS	N/A	>	>	>	
Issue 4: Zoning and Regulations Governing Scenic Quality	LS	N/A	>	>	>	
Issue 5: Light and Glare	LS	N/A	<	=	=	
Section 5.2, Air Quality						
Issue 1: Consistency with Applicable Air Quality Plan	LS	N/A	=	=	=	
Issue 2: Cumulative Increase in Emissions/Air Quality Standards	LS	N/A	=	>	=	

 Table 8-1. Summary of Impacts for Alternatives Compared to the Project

	CRMP Phase 1		Alternatives				
Impact	Without Mitigation	With Mitigation	No Project	Increased Sand Dune Height/Width Alternative	Reduced Ground Disturbance Alternative		
Issue 3: Sensitive Receptors	LS	N/A	<	>	=		
Issue 4: Odors	LS	N/A	<	=	=		
Section 5.3, Biological Resources							
Issue 1: Candidate, Sensitive, or Special-Status Species	PS	LS	<	>	=		
Issue 2: Riparian Habitat and Sensitive Natural Communities	PS	LS	<	>	>		
Issue 3: Wetlands	PS	LS	<	>	>		
Issue 4: Native Resident or Migratory Fish or Wildlife Species	LS	N/A	=	=	=		
Issue 5: Conflict with a Habitat Conservation Plan	PS	LS	<	>	=		
Section 5.4, Cultural Resources							
Issue 1: Historical Resources	PS	LS	<	=	=		
Issue 2: Archaeological Resources	PS	SU	<	=	~		
Section 5.5, Geology and Soils							
Issue 1: Seismic Hazards	LS	N/A	<	=	=		
Issue 2: Erosion or Loss of Topsoil	LS	N/A	>	=	>		
Issue 3: Geologic Instability	LS	N/A	=	=	=		
Section 5.6, Greenhouse Gas Emissions							
Issue 1: Generation of Greenhouse Gas Emissions	LS	N/A	=	=	<		
Issue 2: Conflict with Applicable Plan	LS	N/A	=	=	>		
Section 5.7, Hydrology and Water Quality							
Issue 1: Water Quality Standards	LS	N/A	=	>	=		
Issue 2: Groundwater Supplies	LS	N/A	<	=	=		
Issue 3: Site Drainage and Hydrology	LS	N/A	<	=	>		
Issue 4: Flood Hazard, Tsunami, or Seiche Zones	LS	N/A	=	<	=		
Issue 5: Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan	LS	N/A	=	=	=		

Table 8-1. Summary of Impacts for Alternatives Compared to the Project

	CRMP Phase 1		Alternatives			
Impact	Without Mitigation	With Mitigation	No Project	Increased Sand Dune Height/Width Alternative	Reduced Ground Disturbance Alternative	
Section 5.8, Land Use and Planning						
Issue 1: Physical Division of Established Community	LS	N/A	=	=	=	
Issue 2: Conflict with Applicable Land Use Plans, Policies, and Regulations	LS	N/A	>	=	>	
Issue 3: Deviation or Variance	NI	N/A	=	=	=	
		Section 5.9, Nois	e			
Issue 1: Exceedance of Noise Standards	PS	LS	=	>	<	
Issue 2: Excessive Groundborne Vibration or Noise	LS	N/A	=	=	=	
	Section 5.10,	Public Services a	and Recreation			
Issue 1: Fire Protection, Police Protection, Schools, and Libraries	NI	N/A	=	=	=	
Issue 2: Parks	LS	N/A	>	=	<	
Issue 3: Recreational Facilities	LS	N/A	>	>	>	
	Sect	on 5.11, Transpo	rtation			
Issue 1: Transportation System Performance	LS	N/A	>	=	>	
Issue 2: Vehicle Miles Traveled	LS	N/A	=	=	=	
Issue 3: Hazardous Design Features	LS	N/A	<	=	=	
Issue 4: Emergency Access	LS	N/A	<	=	=	
Section 5.12, Tribal Cultural Resources						
Issue 1: Tribal Cultural Resources	PS	SU	<	=	<	
Section 5.13, Utilities and Service Systems						
Issue 1: New or Expanded Utilities	LS	N/A	<	=	=	
Issue 2: Water Supply Availability	LS	N/A	<	=	=	
Issue 3: Wastewater Treatment Capacity	NI	N/A	<	=	>	
Issue 4: Solid Waste Generation	LS	N/A	<	=	=	
Section 5.14, Wildfire						
Issue 1: Emergency Response or Evacuation Plans	LS	N/A	=	=	=	
Issue 2: Pollutant Concentrations or Spread of Wildfire	LS	N/A	=	=	=	

	CRMP Phase 1		Alternatives		
Impact	Without Mitigation	With Mitigation	No Project	Increased Sand Dune Height/Width Alternative	Reduced Ground Disturbance Alternative
Issue 3: Exacerbate Fire Risk	LS	N/A	=	=	=
Issue 4: Flooding or Landslides	LS	N/A	=	=	>

Table 8-1. Summary of Impacts for Alternatives Compared to the Project

Notes: LS = Less than Significant Impact; NI = No Impact; PS = Potentially Significant Impact; SU = Significant and Unavoidable = Impacts would be similar to those of the project.

> Impacts would be greater than those of the project.

< Impacts would be less than those of the project.

Based on a reduction of short-term construction-related impacts to potentially significant impacts under the CRMP Phase 1, including impacts to biological resources, cultural resources, noise, and Tribal Cultural Resources, the environmentally superior alternative is the No Project Alternative. However, as previously mentioned, the CEQA Guidelines require that, if the No Project Alternative is identified as the environmentally superior alternative, then another environmentally superior alternative must be identified.

Based on a comparison of the alternatives' overall environmental impacts and their compatibility with the CRMP Phase 1's goals and objectives, the Reduced Ground Disturbance Alternative is the environmentally superior alternative for this PEIR. The Reduced Ground Disturbance Alternative would result in less than significant impacts related to both Cultural Resources and Tribal Cultural Resources, the only two issue areas that would have significant and unavoidable impacts after mitigation under the CRMP Phase 1. However, while all impacts under the Reduced Ground Disturbance Alternative would remain less than significant after mitigation, this alternative does have greater impacts than the CRMP Phase 1 in several issue areas, as demonstrated in Table 8-1.

Furthermore, as discussed above, the Reduced Ground Disturbance Alternative would attain all of the project objectives outlined in Section 8.1.1.1, Project Objectives. However, this alternative would not meet several project objectives to the same extent as the CRMP Phase 1. The vegetated sand dune proposed at the La Jolla Shores project site under the Reduced Ground Disturbance Alternative would have greater impacts to biological resources than the project concepts proposed for this site under the CRMP Phase 1. As a result, this alternative would not meet the objective to protect and enhance critical coastal habitat and associated wildlife from the impacts of climate change to the same extent as the CRMP Phase 1. The Reduced Ground Disturbance Alternative would also not meet the project objective to protect and enhance recreational opportunities to the same extent as the CRMP Phase 1, because many of the proposed project components that would protect and enhance the existing recreational spaces at the Sunset Cliffs project site would not be implemented under this alternative, as they require potentially ground-disturbing activities. Similarly, other potentially ground-disturbing activities at the Sunset Cliffs project site that would not be implemented under this alternative include trail enhancements and improvements and the optional realignment of parking lots. As a result, the Reduced Ground Disturbance Alternative would not meet the project objective to increase coastal access for all community members, with prioritization of Communities of Concern, to the same extent as the CRMP Phase 1.



N 0 150 3

Figure 8-1 Increased Sand Dune Height/Width Alternative

Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots

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Feet

Reduced Ground Disturbance Alternative - Sunset Cliffs

Coastal Resilience Master Plan, Phase 1: Prioritizing Nature-Based Solution Pilots

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Glossary

- Bedsworth, Louise, Dan Cayan, Guido Franco, Leah Fisher, and Sonya Ziaja. 2018. California's Fourth Climate Change Assessment: Statewide Summary Report. SUM-CCCA4-2018-013.
- CCC (California Coastal Commission). 2024. California Coastal Commission Sea Level Rise Policy Guidance: Draft 2024 Update. Accessed November 2024. https://documents.coastal.ca.gov /assets/slr/CCCSLRPolicyGuidance_2024Update_PublicReviewDraft.pdf#:~:text=Adaptation: %20Adjustment%20in%20natural%20or%20human%20systems,uncertainty%20and%20chall enges%20of%20climate%20change%20decision%2Dmaking.
- CEMA and CNRA (California Emergency Management Agency and California Natural Resources Agency). 2012. California Adaptation Planning Guide: Planning for Adaptive Communities.
- FEMA (Federal Emergency Management Agency). 2023. Guidance for Flood Risk Analysis and Mapping: Coastal Wave Runup and Overtopping. Accessed November 2024. https://www.fema.gov/sites/default/files/documents/fema_rm-coastal-wave-runup-andovertopping-nov-2023.pdf.
- FEMA. 2024. Nature-Based Solutions. Accessed November 2024. https://www.fema.gov/ emergency-managers/risk-management/climate-resilience/nature-based-solutions.
- IPCC (Intergovernmental Panel on Climate Change). 2012. "Glossary of Terms." In Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, by IPCC, 555-564. New York, NY: Cambridge University Press. Accessed November 2024. https://www.ipcc.ch/site/assets/uploads/2018/03/wg2TARannexB.pdf.
- U.S. Climate Resilience Toolkit. 2021. Glossary. Accessed November 2024. https://toolkit .climate.gov/content/glossary.
- Willows, R.I., and R.K. Connell, eds. 2003. Climate Adaptation: Risk, Uncertainty and Decisionmaking. UKCIP Technical Report. UKCIP, Oxford. Accessed November 2024. https://sciencepolicy.colorado.edu/students/envs_5120/UKCIP_2003.pdf.

Executive Summary

- City of San Diego. 2019. City of San Diego Sea Level Rise Vulnerability Assessment—Draft. December. Accessed November 2024. https://www.sandiego.gov/sites/default/files/sealevel-rise-vulnerability-assessment.pdf.
- City of San Diego. 2020a. "Figure LU-2: General Plan Land Use and Street System." Updated September 10. Accessed November 2024. https://www.sandiego.gov/sites/default /files/lu2_general_plan_land_use_wstreetsystem_sept2020.pdf.
- City of San Diego. 2020b. City of San Diego Climate Change Vulnerability Assessment. February. Accessed November 2024. https://www.sandiego.gov/sites/default/files/climate-changevulnerability-assessment.pdf.
- City of San Diego. 2022. City of San Diego Land Development Manual for Historical Resources Guidelines. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ldm historical_dec2022.pdf.

Chapter 1.0, Introduction

- City of San Diego. 1997. City of San Diego Multiple Species Conservation Program Subarea Plan. Final. March. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ legacy/planning/programs/mscp/pdf/subareafullversion.pdf.
- City of San Diego. 2005. Environmental Impact Report Guidelines. Revised September 2002. Updated December. Accessed November 2024. https://www.sandiego.gov/sites/default/ files/legacy/cip/pdf/stadiumeir/2005-12_eir-guidelines-update.pdf.
- City of San Diego. 2007. Program Environmental Impact Report for the Draft General Plan. Final. Accessed November 2024. https://www.sandiego.gov/planning/genplan/documents/peir.
- City of San Diego. 2021. Climate Resilient SD Plan. Adopted by City Council on December 14. Accessed November 2024. https://www.sandiego.gov/sites/default/files/crsd_final_plan_ with_appendices.pdf.
- City of San Diego. 2022. Climate Action Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/san_diegos_2022_climate_action_plan_0.pdf.
- City of San Diego. 2023a. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego. 2023b. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- City of San Diego. 2024. San Diego Municipal Code, as amended. Accessed November 2024. https://www.sandiego.gov/city-clerk/officialdocs/municipal-code.

Chapter 2.0, Environmental Setting

- City of San Diego. 2020. "Figure LU-2: General Plan Land Use and Street System." Updated September 10. Accessed November 2024. https://www.sandiego.gov/sites/default/files /lu2_general_plan_land_use_wstreetsystem_sept2020.pdf.
- City of San Diego. 2023. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- USGS (U.S. Geological Survey). 2019. CoSMoS data for San Diego County. Accessed November 2024. https://www.sciencebase.gov/catalog/item/57f1d519e4b0bc0bebfee13d.

Chapter 3.0, Project Description

- CCC (California Coastal Commission). 2021. Critical Infrastructure at Risk: Sea Level Rise Planning Guidance for California's Coastal Zone. Accessed November 2024. https://documents.coastal.ca.gov/assets/slr/SLR%20Guidance_Critical%20Infrastructure_ 8.16.21_FINAL_FullPDF.pdf.
- Caltrans (California Department of Transportation). 2019. San Diego Historical Damages Memorandum.

- City of San Diego. 2018. City of San Diego Coastal Erosion Assessment Photograph Analysis Update: 2003–2018. Prepared by ICF.
- City of San Diego. 2019a. City of San Diego Sea Level Rise Vulnerability Assessment—Draft. December. Accessed November 2024. https://www.sandiego.gov/sites/default/files/sealevel-rise-vulnerability-assessment.pdf.
- City of San Diego. 2019b. City of San Diego State Lands Sea Level Rise Vulnerability Assessment. Accessed November 2024. https://www.sandiego.gov/sites/default/ files/state-lands-sea-level-rise-vulnerability-assessment.pdf.
- City of San Diego. 2020. City of San Diego Climate Change Vulnerability Assessment. February. Accessed November 2024. https://www.sandiego.gov/sites/default/files/climate-changevulnerability-assessment.pdf.
- City of San Diego. 2021. City of San Diego Climate Equity Index. Accessed November 2024. https://www.sandiego.gov/sites/default/files/prbr210715a-item201b.pdf.
- FEMA (Federal Emergency Management Agency). 2021. Building Community Resilience with Nature-Based Solutions: A Guide For Local Communities. Accessed November 2024. https://www.fema.gov/sites/default/files/documents/fema_riskmap-nature-based-solutions-guide_2021.pdf.
- FEMA. 2023a. Nature-Based Solutions. Accessed November 2024. https://www.fema.gov/ emergency-managers/risk-management/climate-resilience/nature-based-solutions.
- FEMA. 2023b. "Setback Levee." Accessed November 2024. https://www.fema.gov/node/setbacklevee#:~:text=A%20setback%20moves%20the%20levee,dynamic%20river%20and%20c oastal%20systems.
- FEMA, n.d. Coastal Hazards & Flooding Mapping. A Visual Guide. Accessed November 2024. https://www.fema.gov/sites/default/files/documents/fema_coastal-glossary.pdf.
- Green Foothills. 2016. "Living Levees": Protecting Against Sea Level Rise by Restoring Wetlands. Accessed November 2024. https://www.greenfoothills.org/living-levees/.
- NOAA (National Oceanic and Atmospheric Administration). 2018a. North American Vertical Datum of 1988 (NAVD 88). Accessed November 2024. https://geodesy.noaa.gov/datums/ vertical/north-american-vertical-datum-1988.shtml.
- NOAA. 2018b. Vertical Datums. Accessed November 2024. https://www.ngs.noaa.gov/ datums/vertical/.
- NOAA. 2019. The Coastal Squeeze: Changing Tactics for Dealing with Climate Change. Accessed November 2024. https://www.fisheries.noaa.gov/feature-story/coastal-squeeze-changingtactics-dealing-climate-change.
- NOAA. 2022. Oyster Reef Habitat. Accessed November 2024. https://www.fisheries.noaa.gov/ national/habitat-conservation/oyster-reef-habitat.
- NOAA. 2023. Understanding Living Shorelines. Accessed November 2024. https://www.fisheries.noaa.gov/insight/understanding-living-shorelines.
- U.S. Department of Agriculture. 2015. Conservation Practice Standard: Dike, Code 356. Accessed November 2024. https://efotg.sc.egov.usda.gov/api/CPSFile/18661/356_IA_CPS_Dike_2015.

Chapter 4.0, Regulatory Framework

- CARB (California Air Resources Board). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Accessed November 2024. https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf.
- CARB. 2008. 2008 Scoping Plan Documents. Accessed November 2024. https://ww2.arb.ca.gov/ our-work/programs/ab-32-climate-change-scoping-plan/2008-scoping-plan-documents.
- CARB. 2011. Advanced Clean Cars Program. Accessed November 2024. https://ww2.arb.ca.gov /our-work/programs/advanced-clean-cars-program/about.
- CARB. 2016. Ambient Air Quality Standards. Accessed November 2024. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.
- CARB 2017. The 2017 Climate Change Scoping Plan Update—The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 20. Accessed November 2024. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.
- CARB. 2022. 2022 Scoping Plan Documents. Accessed November 2024. https://ww2.arb.ca.gov/ our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents.
- CCC (California Coastal Commission). 1994. Procedural Guidance for the Review of Wetland Projects in California's Coastal Zone. Accessed November 2024. https://repository.library .noaa.gov/view/noaa/10684.
- City of San Diego. 1997. Multiple Species Conservation Program City of San Diego MSCP Subarea Plan. Accessed November 2024. https://www.sandiego.gov/sites/ default/files/legacy/planning/programs/mscp/pdf/subareafullversion.pdf.
- City of San Diego. 2011. Peninsula Community Plan and Local Coastal Program Land Use Plan. Adopted July 14, 1987. Updated by City Council on June 20, 1989, and January 19, 1999. Last amended May 31. Accessed November 2024. https://www.sandiego.gov/ sites/default/files/legacy//planning/community/profiles/peninsula/pdf/peninsulacp082312.pdf.
- City of San Diego. 2013a. San Diego River Park Master Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/sdrp_master_plan_full.pdf.
- City of San Diego. 2013b. City of San Diego Bicycle Master Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/legacy/planning/programs/transportation/mo bility/pdf/bicycle_master_plan_final_dec_2013.pdf.
- City of San Diego. 2015. Ocean Beach Community Plan and Local Coastal Program. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ocean_beach_community_plan-final_document_reduced_0.pdf.
- City of San Diego. 2018a. Land Development Code: Biology Guidelines.
- City of San Diego. 2018b. City of San Diego Stormwater Standards. Accessed November 2024. https://www.sandiego.gov/sites/default/files/storm_water_standards_manual_oct_2018.pdf.

- City of San Diego. 2019. San Diego Municipal Code, Section 59.5.0401, Sound Level Limits. Accessed November 2024. https://docs.sandiego.gov/municode/MuniCodeChapter05 /Ch05Art09.5Division04.pdf.
- City of San Diego 2021a. City of San Diego Parks Master Plan. Adopted in August. Accessed November 2024. https://www.sandiego.gov/sites/default/files/parks-master-plan-adopted-2021.pdf.
- City of San Diego. 2021b. Mission Bay Park Master Plan. Update. Adopted August 2, 1994. Amended August 1, 1995; May 13, 1997; July 9, 2002; and November 23. Accessed November 2024. https://www.sandiego.gov/sites/default/files/000_mission_bay_park_ master_plan_2021.pdf.
- City of San Diego. 2022a. San Diego Municipal Code. Accessed November 2024. https://www.sandiego.gov/city-clerk/officialdocs/municipal-code.
- City of San Diego. 2022b. Historical Resources Guidelines. Amended December 14. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ldmhistorical_dec2022.pdf.
- City of San Diego. 2022c. Environmentally Sensitive Lands Regulations. Accessed November 2024. https://docs.sandiego.gov/municode/MuniCodeChapter14/Ch14Art03Division01.pdf.
- City of San Diego. 2022d. City of San Diego Transportation Study Manual. Accessed November 2024. https://www.sandiego.gov/sites/default/files/10-transportation-study-manual.pdf.
- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego. 2024a. City of San Diego General Plan Conservation Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/generalplan_08_conservation_july-2024.pdf.
- City of San Diego. 2024b. City of San Diego General Plan Environmental Justice Element. July. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/generalplan_11_environmental-justice_july-2024.pdf.
- City of San Diego. 2024c. City of San Diego General Plan Historic Preservation Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/generalplan_10_historic-preservation_july-2024.pdf.
- City of San Diego. 2024d. City of San Diego General Plan Land Use and Community Planning Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-08/general-plan_02_land-use_july-2024_updated.pdf.
- City of San Diego. 2024e. City of San Diego General Plan Mobility Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_11_environmental-justice_july-2024.pdf.
- City of San Diego. 2024f. City of San Diego General Plan Noise Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_09_noise_july-2024.pdf.

- City of San Diego. 2024g. City of San Diego General Plan Public Facilities, Services, and Safety Element. July. Accessed November 2024. https://www.sandiego.gov/sites/default/files /2024-07/general-plan_06_public-facilities_july-2024.pdf.
- City of San Diego. 2024h. City of San Diego General Plan Recreation Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_07_recreation_july-2024.pdf.
- City of San Diego. 2024i. City of San Diego General Plan Urban Design Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_04 _urban-design_july-2024.pdf.
- CNRA (California Natural Resources Agency). 2021. California Climate Adaptation Strategy.
- San Diego Coastkeeper. 2024. Areas of Special Biological Significance. https://www. sdcoastkeeper.org/water-quality/areas-of-special-biological-significance/#:~:text= San%20Diego%20boasts%20two%20beautiful,just%20north%20of%20Scripps%20Pier.
- SANDAG (San Diego Association of Governments). 2010. Riding to 2050: San Diego Regional Bike Plan. Accessed November 2024. https://www.sandag.org/-/media/SANDAG/ Documents/PDF/projects-and-programs/bikeways-and-walkways/regional-bike-plan /san-diego-regional-bike-plan-riding-to-2050.pdf.
- SANDAG. 2021. 2021 Regional Plan. Accessed November 2024. https://www.sandag.org/regionalplan/2021-regional-plan/-/media/8D0F181A086844E3A84C3D44576BED6B.ashx.
- SDAPCD (San Diego County Air Pollution Control District). 2016. 2016 Revision of the Regional Air Quality Strategy for San Diego County. December. Accessed November 2024. https://www.sdapcd.org/content/sdapcd/planning.html.
- SDAPCD. 2020. 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County. October. https://www.sdapcd.org/content/dam/sdapcd/ documents/grants/planning/Att%20A%20(Attainment%20Plan)_ws.pdf.
- SDAPCD. 2023. Rules & Regulations. Accessed November 2024. https://www.sdapcd .org/content/sdapcd/rules.html.
- SWRCB (State Water Resources Control Board). 2023. "About the Water Board." Accessed November 2024. https://www.waterboards.ca.gov/about_us/.
- USEPA (U.S. Environmental Protection Agency). 1981. Noise in America: the Extent of the Noise Problem. September.
- USEPA. 2022. NAAQS Table. Accessed November 2024. https://www.epa.gov/criteria-air-pollutants/naaqs-table.

Chapter 5.0, Environmental Analysis

None.

Section 5.1, Aesthetics

- Caltrans (California Department of Transportation). 2024. "California State Scenic Highway System Map" [map]. Accessed November 2024. https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa.
- City of San Diego. 1987. Peninsula Community Plan and Local Coastal Program Land Use Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/legacy//planning/ community/profiles/peninsula/pdf/peninsulacp082312.pdf.
- City of San Diego. 2007. Final Program Environmental Impact Report for the Draft General Plan. Accessed November 2024. https://www.sandiego.gov/planning/genplan/documents/peir.
- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- NOAA (National Oceanic and Atmospheric Administration). 2018a. "North American Vertical Datum of 1988 (NAVD 88)." National Geodetic Survey. Last modified July 12. Accessed November 2024. https://geodesy.noaa.gov/datums/vertical/north-american-vertical-datum-1988.shtml.
- NOAA. 2018b. "Vertical Datums." National Geodetic Survey. Last modified July 12. Accessed November 2024. https://www.ngs.noaa.gov/datums/vertical/.

Section 5.2, Air Quality

- CARB (California Air Resources Board). 2016. Ambient Air Quality Standards. Accessed November 2024. http://www.arb.ca.gov/research/aaqs/aaqs2.pdf.
- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- NRCS (Natural Resources Conservation Service). 2023. National Water and Climate Center: WETS Table. Accessed November 2024. http://agacis.rcc-acis.org/.
- SDAPCD (San Diego County Air Pollution Control District). 2020. Rule 20.2: New Source Review Non-Major Stationary Sources. Last revision adopted June 26, 2019, and effective October 16. Accessed November 2024. https://www.sdapcd.org/content/dam/sdapcd/ documents/rules/current-rules/Rule-20.2.pdf.
- SDAPCD. 2022a. Rule 20.1: New Source Review General Provisions. Revision adopted October 14, 2021, and effective October 28. Accessed November 2024. https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html.
- SDAPCD. 2022b. Rule 20.3: New Source Review Major Stationary Sources and PSD Stationary Sources. Revision adopted October 14, 2021, and effective October 28. Accessed November 2024. https://www.sdapcd.org/content/dam/sdapcd/documents/rules/currentrules/Rule-20.3.pdf.
- SDAPCD. 2023. Attainment Status. Accessed November 2024. https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html.

- SCAQMD (South Coast Air Quality Management District). 1993. CEQA Air Quality Handbook. Accessed November 2024. http://www.aqmd.gov/home/rules-compliance/ceqa/airquality-analysis-handbook/ceqa-air-quality-handbook-(1993)/.
- USEPA (U.S. Environmental Protection Agency). 2023. Air Quality National Summary. Accessed November 2024. https://www.epa.gov/air-trends/air-quality-national-summary.

Section 5.3, Biological Resources

- CDFW (California Department of Fish and Wildlife). 2023a. Biogeographic Information and Observation System Database. Accessed November 2024. https://wildlife.ca.gov/Data/BIOS.
- CDFW. 2023b. California Natural Diversity Database. State and Federally Listed Endangered, Threatened, and Rare Plants of California. July. Accessed November 2024. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109390&inline.
- City of San Diego. 1997. City of San Diego Multiple Species Conservation Program Subarea Plan. Final. March. Accessed November 2024. http://www.sandiego.gov/planning/programs/ mscp/pdf/subareafullversion.pdf.
- City of San Diego. 2018. Land Development Code: Biology Guidelines.
- City of San Diego. 2020. City of San Diego General Plan Land Use and Street System Map. September. Accessed November 2024. https://www.sandiego.gov/sites/default/files/lu2_general_plan_land_use_wstreetsystem_sept2020.pdf.
- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- Johnston, Karina K., Jennifer E. Dugan, David M. Hubbard, Kyle A. Emery, Melodie W. Grubbs. 2023. Using dune restoration on an urban beach as a coastal resilience approach. Sec. Marine Conservation and Sustainability, Volume 10. Accessed November 2024. https://www.frontiersin.org/journals/marine-science/articles/10.3389/fmars.2023.1187488/full.
- Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," Robert F. Holland, PhD, October 1986. Codes revised by Thomas Oberbauer in February 1996, revised and expanded by Meghan Kelly in August 2006, and further revised and reorganized by Jeremy Buegge in March 2008. Accessed November 2024. https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19_OberbauerTM2008.pdf.
- SanGIS. 2023. San Diego Geographic Information Source. Accessed November 2024. https://www.sangis.org/.

- Schooler, Nicholas K., Jenifer E. Dugan, and David M. Hubbard. 2019. No lines in the sand: Impacts of intense mechanized maintenance regimes on sandy beach ecosystems span the intertidal zone on urban coasts. Ecological Indicators, Volume 106. Accessed November 2024. https://www.sciencedirect.com/science/article/pii/S1470160X1930442X.
- USFWS (U.S. Fish and Wildlife Service). 2023. Information for Planning and Consultation. Accessed November 2024. https://ipac.ecosphere.fws.gov/location/index.

Section 5.4, Cultural Resources

- Campbell, Leon G. 1977. "The Spanish Presidio in Alta California during the Mission Period 1769–1784." Journal of the West 16(4):63–77.
- Carrico, Richard L. 1977. Archaeological/Historical Survey of the Oaks North Villa PRD/Bernardo Trails No. 5 Projects. Unpublished manuscript on file at the South Coastal Information Center.
- Case, Rob. 2011. Cultural Resources Monitoring Report for the La Jolla Shores Life Guard Station, San Diego, California. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Chartkoff, Joseph L., and Kerry Kona Chartkoff. 1984. The Archaeology of California. Stanford: Stanford University Press.
- Christenson, Lynne E. 1992. "The Late Prehistoric Yuman Settlement and Subsistence System: Coastal Adaptation." In Essays on the Prehistory of Maritime California. Terry L. Jones, ed. Davis: University of California, Davis, Center for Archaeological Research. 217–230.
- City of San Diego. 1973a. Nomination of The Plunge. Accessed November 2024. https://sandiego.cfwebtools.com/search.cfm?local=true&res_id=14627&local_id=1&disp lay=resource&key_id=366.
- City of San Diego. 1973b. Nomination of the Belmont Roller Coaster. Accessed November 2024. https://sandiego.cfwebtools.com/search.cfm?local=true&res_id=15328&local_id=1&disp lay=resource&key_id=369.
- City of San Diego. 2007. Final Program Environmental Impact Report for the Draft General Plan. Accessed November 2024. https://www.sandiego.gov/planning/genplan/documents/peir.
- City of San Diego. 2022. Historical Resources Guidelines.
- City of San Diego. 2023a. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- City of San Diego. 2023b. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego 2023c. Nomination of the Ocean Beach Pier. Accessed November 2024. https://sandiego.cfwebtools.com/search.cfm?local=true&res_id=18643&local_id=1&disp lay=resource&key_id=3856.
- Cline, Lora L. 1984. Just Before Sunset. Jacumba: J and L Enterprises.

- Costo, Jeanette Henry. 1987. "The Sword and the Cross: The Missions of California." In The Missions of California: A Legacy of Genocide. Rupert Costo and Jeanette Henry Costo, eds. San Francisco: Indian Historian Press. 49–66.
- County of San Diego. 2011. "Section 2.6: Geology and Soils." In San Diego County General Plan Update EIR. August 2011. Accessed November 2024. http://www.sandiegocounty.gov /pds/gpupdate/docs/BOS_Aug2011/EIR/FEIR_2.06_-_Geology_2011.pdf.
- Davidson, Elizabeth. 2006. Department of Parks and Recreation Forms for CA-SDI-18013/P-37-027750. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Dittmer, Frank and Juliette Meling. 2016. Department of Parks and Recreation Forms for CA-SDI-21939/P-37-036014. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Donaldson, Wayne and Eileen Magno. 1997. California Department of Transportation Architectural Inventory/Evaluation Form (P-37-016522). On file with the South Coastal Information Center at San Diego State University, San Diego.
- Erlandson, Jon M., and Roger H. Colton. 1991. "An Archaeological Context for Early Holocene Studies on the California Coast." In Hunter-Gatherers of the Early Holocene Coastal California. Jon M. Erlandson and Roger H, Colton, eds. Los Angeles: University of California, Los Angeles, Institute of Archaeology. 1–10.
- Gallegos, Dennis. 1995. Cultural Resource Phase I Boundary Test for the Jamul Shopping Center Project. Unpublished manuscript on file at the County of San Diego, Planning and Development Services.
- Hale, Micah, Brad Comeau, Adrienne Dorrler, and Adam Giacinto. 2018. Cultural Resources Report for the Newland Sierra Project, San Diego County, California. Unpublished manuscript on file at the County of San Diego, Planning and Development Services.
- Jackson, Robert H., and Edward Castillo. 1995. Indians, Franciscans, and Spanish Colonization: The Impact of the Mission System on California Indians. Albuquerque: University of New Mexico Press.
- Kaldenberg, Russell L. 1976. "Paleo-Technological Change at Rancho Park North, San Diego County, California." Master's thesis, San Diego State University.
- Kraft, Jennifer. 2011. Department of Parks and Recreation Forms for CA-SDI-20351/P-37-032117. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Masters, Patricia M., and Dennis R. Gallegos. 1997. "Environmental Change and Coastal Adaptations in San Diego County during the Middle Holocene." In Archaeology of the California Coast during the Middle Holocene. Jon Erlandson and Michael Glassow, eds. Los Angeles: University of California, Los Angeles, Institute of Archaeology. 11–22.
- Moriarty, James R. 1967. "Transitional Pre-Desert Phase in San Diego County, California." Science 155:553–556.
- Moratto, Michael. 1984. California Archaeology. San Francisco: Academic Press.

- Peterson, Gary L. 1977. The Geologic Setting of San Diego and Vicinity, in Geologic Hazards in San Diego, P.L. Abbot and J.K. Victoria, eds.; San Diego Society of Natural History.
- Phillips, George H. 1981. The Enduring Struggle: Indians in California History. San Francisco: Boyd and Fraser Publishing Company.
- Pigniolo, Andrew R. 2009a. Department of Parks and Recreation Forms for CA-SDI-39/P-37-000039. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew R. 2009b. Department of Parks and Recreation Forms for CA-SDI-20129/P-37-031696. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew R. 2012. Department of Parks and Recreation Forms for CA-SDI-20130/P-37-031697. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew R., Jose "Pepe" Aguilar, Natalie J. Brodie, Spencer G. Bietz, and Frank R. Dittmer. 2009. Research and Testing at the La Jolla Shores Site (SDM-W-2) and the La Jolla Shores Extension Site (SDM-W-199) for the Residential Block 1J Underground Utility District Project, La Jolla, California. On file at the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew and Steven H. Briggs. 1990a. Department of Parks and Recreation Forms for CA-SDI-19113/P-37-011913. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew and Steven H. Briggs. 1990b. Department of Parks and Recreation Forms for CA-SDI-19116/P-37-011916. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew, and Steven H. Briggs. 1990c. Department of Parks and Recreation Forms for CA-SDI-19112H/P-37-011912. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew, and Steven H. Briggs. 1990d. Department of Parks and Recreation Forms for CA-SDI-19114/P-37-011914. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew, and Steven H. Briggs. 1990e. Department of Parks and Recreation Forms for CA-SDI-19115/P-37-011915. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew, and Steven H. Briggs. 1990f. Department of Parks and Recreation Forms for CA-SDI-19117/P-37-011917. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Ports, Kyle. 2020. Department of Parks and Recreation Forms for CA-SDI-39/P-37-000039. On file with the South Coastal Information Center at San Diego State University, San Diego.

- Robbins-Wade, Mary, Andrew Giletti, J. Meriweather, D. Linton, and L. Hoff. 2011. Department of Parks and Recreation Forms for CA-SDI-20130/P-37-031697. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Rogers, Malcolm. 1926. A Preliminary Survey of the La Jolla Finds. Manuscript on file at the San Diego Museum of Man.
- Rogers, Malcolm. 1939. San Diego Museum Papers No. 3. San Diego: San Diego Museum of Man.
- Rogers, Malcolm. 1966. Ancient Hunters of the Far West. San Diego: Copley Press.
- Shipek, F.C. 1993. "Kumeyaay Plant Husbandry: Fire Water, and Erosion Management Systems." In Before the Wilderness: Native American Environmental Management. Thomas C. Blackburn and Kat Anderson, eds. Menlo Park: Ballena Press. 78–388.
- Stone, Ken. 2019. Historic Plunge Swimming Pool to Reopen July 4 at Belmont Park. Accessed November 2024. https://timesofsandiego.com/life/2019/07/03/historic-plunge-swimming-pool-to-reopen-july-4-at-belmont-park/.
- Taylor, R.E., and Clement Meighan. 1978. Chronologies in New World Archaeology. New York: Academic Press.
- True, Delbert. L. 1958. "An Early Complex in San Diego County, California." American Antiquity 23(3):255–263.
- True, Delbert. L. 1966. "Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California." PhD. diss. University of California, Los Angeles.
- True, Delbert. L. 1970. Investigation of a Late Prehistoric Complex in the Cuyamaca Rancho State Park, San Diego County, California. Los Angeles: University of California, Los Angeles, Department of Anthropology, Archaeological Survey Monograph.
- USGS (U.S. Geological Survey). 2023. San Diego Hydrogeology. Accessed November 2024. https://ca.water.usgs.gov/projects/sandiego/data/gis/geology/index.html#:~:text=1%20Qu aternary%20%E2%80%93%20All%20sediment%20younger%20than%20the,formations %3B%206%20Cretaceous%20%E2%80%93%20All%20sedimentary%20Cretaceous%20 formations%3B.
- USDA (U.S. Department of Agriculture). 1973. Soil Survey of the San Diego Area, California. Accessed November 2024. https://archive.org/details/usda-sandiegoCA1973/page/n3/mode/2up.
- Wahoff, Tanya, and Christy Dolan. 2000. Environmental Assessment for the Rincon San Luiseño Band of Mission Indians, Rincon Casino. Unpublished manuscript on file at the County of San Diego, Planning and Development Services.
- Wallace, William J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." Southwestern Journal of Anthropology 11:214–230.
- Wallace, William J. 1978. "Post-Pleistocene Archaeology, 9000–2000 B.C." In Handbook of North American Indians. Vol. 8. Robert F. Heizer, ed. Washington, DC: Smithsonian Institution. 25–36.

- Warren, Claude N., and D.L. True. 1961. UCLA Archaeological Annual Survey Reports, 1960– 1961. Los Angeles: University of California, Los Angeles.
- Williams, Brian. 2010. Archaeological Monitoring for the SDG&E La Jolla DIV, EUG Relocation Project, La Jolla, San Diego County, California. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Zepeda-Herman, Carme, 2010. Department of Parks and Recreation Forms for P-37-0031697/CA-SDI-20130. On file with the South Coastal Information Center at San Diego State University, San Diego.

Section 5.5, Geology and Soils

- California State Geoportal. 2022. California Geological Survey Seismic Hazards Program: Liquefaction Zones. Accessed November 2024. https://gis.data.ca.gov/datasets/ b70a766a60ad4c0688babdd47497dbad_0/explore?location=35.720844%2C-119.759465 %2C7.49.
- California Department of Conservation. 2021. EQ Zapp: California Earthquake Hazards Zone Application. Accessed November 2024. https://www.conservation.ca.gov/cgs/ geohazards/eq-zapp.
- California Department of Conservation. 2022. CGS Seismic Hazards Program: Alquist-Priolo Fault Hazard Zones. Accessed November 2024. https://gis.data.ca.gov/maps/ee92a5f9 f4ee4ec5aa731d3245ed9f53/explore?location=32.673033%2C-117.243435%2C12.48.
- City of San Diego. 2018. City of San Diego Coastal Erosion Assessment Photograph Analysis Update: 2003–2018. Prepared by ICF.
- City of San Diego. 2007. Final Program Environmental Impact Report for the Draft General Plan. Accessed November 2024. https://www.sandiego.gov/planning/genplan/documents/peir.
- City of San Diego. 2023a. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- City of San Diego. 2023b. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- County of San Diego. 2011. "Section 2.6: Geology and Soils." In San Diego County General Plan Update EIR. August 2011. Accessed November 2024. http://www.sandiegocounty.gov /pds/gpupdate/docs/BOS_Aug2011/EIR/FEIR_2.06_-_Geology_2011.pdf.
- Peterson, Gary L. 1977. The Geologic Setting of San Diego and Vicinity, in Geologic Hazards in San Diego, P.L. Abbot and J.K. Victoria, eds.; San Diego Society of Natural History.
- USDA (U.S. Department of Agriculture). 1973. Soil Survey of the San Diego Area, California. Accessed November 2024. https://archive.org/details/usda-sandiegoCA1973/page/n3/mode/2up.
- USGS (U.S. Geological Survey). 2023. San Diego Hydrogeology. Accessed November 2024. https://ca.water.usgs.gov/projects/sandiego/data/gis/geology/index.html#:~:text=1%20Qu aternary%20%E2%80%93%20All%20sediment%20younger%20than%20the,formations %3B%206%20Cretaceous%20%E2%80%93%20All%20sedimentary%20Cretaceous%20 formations%3B.

Section 5.6, Greenhouse Gas Emissions

- CARB (California Air Resources Board). 2021. California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators. July 28. Accessed November 2024. https://ww2.arb.ca.gov/sites/default/files/classic/cc/ca_ghg_inventory_trends_2000-2019.pdf.
- City of San Diego. 2021. Climate Resilient SD Plan. Adopted by City Council on December 14. Accessed November 2024. https://www.sandiego.gov/sites/default/files/crsd.pdf.
- City of San Diego. 2022. City of San Diego Climate Action Plan. Accessed November 2024. https://www.sandiego.gov/sustainability/climate-action-plan.
- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- IPCC (Intergovernmental Panel on Climate Change). 2014. "Summary for Policymakers." In Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Accessed November 2024. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_summary-for-policymakers.pdf.
- NASA (National Aeronautics and Space Administration). 2024. "Carbon Dioxide." Accessed November 2024. https://climate.nasa.gov/vital-signs/carbon-dioxide/?intent=121#:~:text=Since%20the% 20onset%20of%20industrial,of%20its%20value%20in%201750.
- National Research Council. 2010. Advancing the Science of Climate Change. Accessed November 2024. https://nap.nationalacademies.org/read/12782/chapter/1.
- State of California. 2018. Safeguarding California Plan: 2018 Update. January. Accessed November 2024. https://www.slc.ca.gov/sea-level-rise/safeguarding-california-plan-2018-update/.
- USEPA (U.S. Environmental Protection Agency). 2022. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2020.
- USEPA. 2023. "Climate Change Indicators: Atmospheric Concentrations of Greenhouse Gases." Updated November 1. Accessed November 2024. https://www.epa.gov/climateindicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases.
- USEPA. 2024a. "Causes of Climate Change." Updated April 12. Accessed November 2024. https://www.epa.gov/climatechange-science/causes-climate-change.
- USEPA. 2024b. "Overview of Greenhouse Gases." Updated April 11. Accessed November 2024. https://www.epa.gov/ghgemissions/overview-greenhouse-gases.
- USEPA. 2024c. "Understanding Global Warming Potentials." Updated March 27. Accessed November 2024. https://www.epa.gov/ghgemissions/understanding-global-warming-potentials.
Section 5.7, Hydrology and Water Quality

- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- FEMA (Federal Emergency Management Agency). 2019. FEMA Flood Map Service Center. Accessed November 2024. https://msc.fema.gov/portal/home.
- FEMA. 2020. Flood Zones. Accessed November 2024. https://www.fema.gov/glossary/flood-zones#:~:text=The%20areas%20of%20minimal%20flood,or%20Zone%20X%20(unshaded).
- FEMA. 2023. Know Your Flood Risk: Homeowners, Renters or Business Owners. Accessed November 2024. https://www.fema.gov/flood-maps/know-your-risk/homeowners.
- Project Clean Water. 2022. San Diego County Watersheds. Accessed November 2024. https://projectcleanwater.org/watersheds/.
- RWQCB (Regional Water Quality Control Board). 2021. Water Quality Control Plan for the San Diego Basin. Accessed November 2024. https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/.
- SWRCB (State Water Resources Control Board). 2020. Adopted TMDLs. Accessed November 2024. https://www.waterboards.ca.gov/sandiego/water_issues/programs/tmdls/tmdladopted.html.
- SWRCB. 2022a. 2020–2022 California Integrated Report Map. Accessed November 2024. https://gispublic.waterboards.ca.gov/portal/apps/webappviewer/index.html?id=6cca2a3a1 815465599201266373cbb7b.
- SWRCB. 2022b. TMDL Investigations. Accessed November 2024. https://www.waterboards .ca.gov/sandiego/water_issues/programs/tmdls/tmdlprogress.html.
- USFWS (U.S. Fish and Wildlife Service). 2023. National Wetland Inventory. Wetland Mapper. Accessed November 2024. https://www.fws.gov/wetlands/Data/Mapper.html.
- USGS (U.S. Geological Survey). 2023. National Hydrography Dataset. Accessed November 2024. https://www.arcgis.com/home/webmap/viewer.html?url=https://hydro.nationalmap.gov/a rcgis/rest/services/nhd/MapServer&source=sd.

Section 5.8, Land Use and Planning

- City of San Diego. 1997. City of San Diego Multiple Species Conservation Program Subarea Plan. Final. March. Accessed November 2024. http://www.sandiego.gov/planning/programs/ mscp/pdf/subareafullversion.pdf.
- City of San Diego. 2011. Peninsula Community Plan and Local Coastal Program Land Use Plan. Adopted July 14, 1987. Updated by City Council on June 20, 1989, and January 19, 1999. Last amended May 31. Accessed November 2024. https://www.sandiego.gov/ sites/default/files/legacy//planning/community/profiles/peninsula/pdf/peninsulacp082312.pdf.
- City of San Diego. 2014. La Jolla Community Plan and Local Coastal Program Land Use Plan. August. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ lajollacommunityplanaug2014.pdf.

- City of San Diego. 2015. Ocean Beach Community Plan and Local Coastal Program. November. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ocean_beach_ community_plan-final_document_reduced_0.pdf
- City of San Diego. 2017. Mission Beach Precise Plan and Local Coastal Program Addendum. Adopted May 15. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ mbpp_full_04_02_18.pdf.
- City of San Diego. 2021a. City of San Diego Parks Master Plan. August. Accessed November 2024. https://www.sandiego.gov/planning/parks-master-plan.
- City of San Diego. 2021b. Climate Resilient SD Plan. Accessed November 2024.https://www.sandiego.gov/sites/default/files/crsd_final_plan_with_appendices.pdf.
- City of San Diego. 2022. City of San Diego Climate Action Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/san_diegos_2022_climate_action_plan_0.pdf.
- City of San Diego. 2023a. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- City of San Diego. 2023b. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.

Section 5.9, Noise

- Caltrans (California Department of Transportation). 2004. Transportation- and Construction-Induced Vibration Guidance Manual. Contract No. 43A0049, Task Order No. 18.
- Caltrans. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September.
- City of San Diego. 2022. Noise Abatement and Control Ordinance.
- City of San Diego. 2023a. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego. 2023b. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- FTA (Federal Transit Administration). 2018. Transit Noise and Vibration Impact Assessment Manual. FTA Report No. 0123. Prepared by John A. Volpe, National Transportation Systems Center. September. Accessed November 2024. https://www.transit.dot.gov/ sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact -assessment-manual-fta-report-no-0123_0.pdf.
- SDCRAA (San Diego County Regional Airport Authority). 2010. Montgomery Field Airport Land Use Compatibility Plan. Amended December. Accessed November 2024. https://www.san.org/DesktopModules/Bring2mind/DMX/API/Entries/Download?EntryId =16148&Command=Core_Download&language=en-US&PortalId=0&TabId=807.
- SDCRAA. 2014. San Diego International Airport Airport Land Use Compatibility Plan. Amended May. Accessed November 2024. https://www.san.org/DesktopModules/Bring2mind/ DMX/API/Entries/Download?EntryId=2990&Command=Core_Download&language=en -US&PortalId=0&TabId=807.

Section 5.10, Public Services and Recreation

- City of San Diego. 2022a. San Diego Municipal Code. Accessed November 2024. https://www.sandiego.gov/city-clerk/officialdocs/municipal-code.
- City of San Diego. 2022b. Fiscal Year 2022 Adopted Budget. Fire–Rescue. Accessed November 2024. https://www.sandiego.gov/sites/default/files/fy22ab_v2firerescue.pdf.
- City of San Diego. 2023a. Fiscal Year 2023 Adopted Budget. Police. Accessed November 2024. https://www.sandiego.gov/sites/default/files/fy23ab_v2police.pdf.
- City of San Diego. 2023b. Lifeguard Services Department at a Glance. Accessed November 2024. https://www.sandiego.gov/lifeguards/about/overview.
- City of San Diego. 2023c. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego. 2024. City of San Diego General Plan Public Facilities, Services, and Safety Element. July. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_06_public-facilities_july-2024.pdf.

Section 5.11, Transportation

City of San Diego. 1995. Pacific Beach Community Plan Circulation Element.

- City of San Diego. 2013. City of San Diego Bicycle Master Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/legacy/planning/programs/transportation/mo bility/pdf/bicycle_master_plan_final_dec_2013.pdf.
- City of San Diego. 2014. "Figure 11: Existing and Future Street Classifications." In La Jolla Community Plan and Local Coastal Program Land Use Plan. August.
- City of San Diego. 2015. "Figure 3.3: Functional Street Classifications." In Ocean Beach Community Plan and Local Coastal Program. November 9.
- City of San Diego. 2017. Street Design Manual.
- City of San Diego. 2020. Transportation Study Manual.
- City of San Diego. 2021. Standard Drawings.
- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego. 2024. City of San Diego General Plan Mobility Element. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2024-07/general-plan_03_mobility_july-2024.pdf.
- Google Maps. 2023. Mission Boulevard east of Belmont Park. February.
- MTS (Metropolitan Transit System). 2023. Regional Transit Map. January.
- SANDAG (San Diego Association of Government). 2023. Projects & Programs, Bikeways & Walkways, Bike Map, San Diego Regional Bike Map. Accessed November 2024. https://gis.sandag.org/iBikeMap/index.html.

Section 5.12, Tribal Cultural Resources

- Campbell, Leon G. 1977. "The Spanish Presidio in Alta California during the Mission Period 1769–1784." Journal of the West 16(4):63–77.
- Carrico, Richard L. 1977. Archaeological/Historical Survey of the Oaks North Villa PRD/Bernardo Trails No. 5 Projects. Unpublished manuscript on file at the South Coastal Information Center.
- Carrico, Richard L. 1986. "Before the Strangers: American Indians in San Diego at the Dawn of Contact." In The Impact of European Exploration and Settlement on Local Native Americans. San Diego: Cabrillo Historical Association. 5–12.
- Case, Rob. 2011. Cultural Resources Monitoring Report for the La Jolla Shores Life Guard Station, San Diego, California. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Chartkoff, Joseph L., and Kerry Kona Chartkoff. 1984. The Archaeology of California. Stanford: Stanford University Press.
- Christenson, Lynne E. 1992. "The Late Prehistoric Yuman Settlement and Subsistence System: Coastal Adaptation." In Essays on the Prehistory of Maritime California. Terry L. Jones, ed. Davis: University of California, Davis, Center for Archaeological Research. 217–230.
- City of San Diego. 2022. Land Development Code: Historical Resources Guidelines. Accessed November 2024. https://www.sandiego.gov/sites/default/files/ldmhistorical_dec2022.pdf.
- City of San Diego. 2023a. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- City of San Diego. 2023b. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- Cline, Lora L. 1979. The Kwaaymii: Reflections on a Lost Culture. El Centro: Imperial Valley Museum.
- Cline, Lora L. 1984. Just Before Sunset. Jacumba: J and L Enterprises.
- Costo, Jeanette Henry. 1987. "The Sword and the Cross: The Missions of California." In The Missions of California: A Legacy of Genocide. Rupert Costo and Jeanette Henry Costo, eds. San Francisco: Indian Historian Press. 49–66.
- Donaldson, Wayne, and Eileen Magno. 1997. California Department of Transportation Architectural Inventory/Evaluation Form (P-37-016522). On file with the South Coastal Information Center at San Diego State University, San Diego.
- Erlandson, Jon M., and Roger H. Colton. 1991. "An Archaeological Context for Early Holocene Studies on the California Coast." In Hunter-Gatherers of the Early Holocene Coastal California. Jon M. Erlandson and Roger H, Colton, eds. Los Angeles: University of California, Los Angeles, Institute of Archaeology. 1–10.

- Gallegos, Dennis. 1995. Cultural Resource Phase I Boundary Test for the Jamul Shopping Center Project. Unpublished manuscript on file at the County of San Diego, Planning and Development Services.
- Hale, Micah, Brad Comeau, Adrienne Dorrler, and Adam Giacinto. 2018. Cultural Resources Report for the Newland Sierra Project, San Diego County, California. Unpublished manuscript on file at the County of San Diego, Planning and Development Services.
- Hector, Susan M. 2002. Sunset Cliffs Master Plan Environmental Impact Report, Updated Cultural Resources Impact Assessment. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Jackson, Robert H., and Edward Castillo. 1995. Indians, Franciscans, and Spanish Colonization: The Impact of the Mission System on California Indians. Albuquerque: University of New Mexico Press.
- Kaldenberg, Russell L. 1976. "Paleo-Technological Change at Rancho Park North, San Diego County, California." Master's thesis, San Diego State University.
- Kyle, Carolyn E., Rozana Phillips, and Dennis R. Gallegos. 1998. Cultural Resources Survey for the Coastal Erosion Projects. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Masters, Patricia M., and Dennis R. Gallegos. 1997. "Environmental Change and Coastal Adaptations in San Diego County during the Middle Holocene." In Archaeology of the California Coast during the Middle Holocene. Jon Erlandson and Michael Glassow, eds. Los Angeles: University of California, Los Angeles, Institute of Archaeology. 11–22.
- McCoy, Priscilla. 1999. Department of Parks and Recreation Forms. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Moratto, Michael. 1984. California Archaeology. San Francisco: Academic Press.
- Moriarty, James R. 1967. "Transitional Pre-Desert Phase in San Diego County, California." Science 155:553–556.
- Phillips, George H. 1981. The Enduring Struggle: Indians in California History. San Francisco: Boyd and Fraser Publishing Company.
- Pigniolo, Andrew R., Jose "Pepe" Aguilar, Natalie J. Brodie, Spencer G. Bietz, and Frank R. Dittmer. 2009. Research and Testing at the La Jolla Shores Site (SDM-W-2) and the La Jolla Shores Extension Site (SDM-W-199) for the Residential Block 1J Underground Utility District Project, La Jolla, California. On file at the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew, and Steven H. Briggs. 1990a. Department of Parks and Recreation Forms for CA-SDI-19113/P-37-011913. On file with the South Coastal Information Center at San Diego State University, San Diego.
- Pigniolo, Andrew, and Steven H. Briggs. 1990b. Department of Parks and Recreation Forms for CA-SDI-19116/P-37-011916. On file with the South Coastal Information Center at San Diego State University, San Diego.

- Rogers, Malcolm. 1926. A preliminary Survey of the La Jolla Finds. Manuscript on file at the San Diego Museum of Man.
- Rogers, Malcolm. 1939. San Diego Museum Papers No. 3. San Diego: San Diego Museum of Man.
- Rogers, Malcolm. 1966. Ancient Hunters of the Far West. San Diego: Copley Press.
- Shipek, F.C. 1993. "Kumeyaay Plant Husbandry: Fire Water, and Erosion Management Systems." In Before the Wilderness: Native American Environmental Management. Thomas C. Blackburn and Kat Anderson, eds. Menlo Park: Ballena Press. 78–388.
- Taylor, R.E., and Clement Meighan. 1978. Chronologies in New World Archaeology. New York: Academic Press.
- True, Delbert. L. 1958. "An Early Complex in San Diego County, California." American Antiquity 23(3):255–263.
- True, Delbert. L. 1966. "Archaeological Differentiation of Shoshonean and Yuman Speaking Groups in Southern California." PhD. diss. University of California, Los Angeles.
- True, Delbert. L. 1970. Investigation of a Late Prehistoric Complex in the Cuyamaca Rancho State Park, San Diego County, California. Los Angeles: University of California, Los Angeles, Department of Anthropology, Archaeological Survey Monograph.
- Wahoff, Tanya, and Christy Dolan. 2000. Environmental Assessment for the Rincon San Luiseño Band of Mission Indians, Rincon Casino. Unpublished manuscript on file at the County of San Diego, Planning and Development Services.
- Wallace, William J. 1955. "A Suggested Chronology for Southern California Coastal Archaeology." Southwestern Journal of Anthropology 11:214–230.
- Wallace, William J. 1978. "Post-Pleistocene Archaeology, 9000–2000 B.C." In Handbook of North American Indians. Vol. 8. Robert F. Heizer, ed. Washington, DC: Smithsonian Institution. 25–36.
- Warren, Claude N., and D.L. True. 1961. UCLA Archaeological Annual Survey Reports, 1960–1961. Los Angeles: University of California, Los Angeles.
- Warren, Claude N., D.L. True, and A. Eudy. 1961. "Early Gathering Complexes of Western San Diego County." In University of California, Los Angeles, Archaeological Annual Survey Reports, 1960–1961. Los Angeles: University of California, Los Angeles.
- Williams, Brian. 2010. Archaeological Monitoring for the SDG&E La Jolla DIV, EUG Relocation Project, La Jolla, San Diego County, California. On file with the South Coastal Information Center at San Diego State University, San Diego.

Section 5.13, Utilities and Service Systems

- CalRecycle (California Department of Resources Recycling and Recovery). 2023. Solid Waste Information System Facility/Site Search. Accessed November 2024. https://www2. calrecycle.ca.gov/SolidWaste/Site/Search.
- City of San Diego. 2016. 2015 Urban Water Management Plan. Accessed November 2024. https://www.sandiego.gov/sites/default/files/2015_uwmp_report_0.pdf.
- City of San Diego. 2019. Water Supply Assessment Report Riverwalk Project. Accessed November 2024. https://files.ceqanet.opr.ca.gov/94417-2/attachment/XHWUwHNxlBe3 FNaL8kfAHkJo0l526tNiRKNe9NwintJenYYL_IdJ7UtEDFu8UwZj-ml1Gr-Z3XGiMXzP0.
- City of San Diego. 2021. 2020 Urban Water Management Plan. June. Accessed November 2024. https://www.sandiego.gov/sites/default/files/city_of_san_diego_2020_uwmp_final_6_29 _2021_send.pdf.
- City of San Diego. 2023a. Metropolitan Biosolids Center Improvements. Accessed November 2024. https://www.sandiego.gov/public-utilities/sustainability/pure-water-sd/phase-1-projects/university-city-eastgate-mall/metropolitan-biosolids-center-improvements.
- City of San Diego. 2023b. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- City of San Diego. 2024. Rebates. Accessed November 2024. https://www.sandiego.gov/public-utilities/sustainability/water-conservation/rebates.

Section 5.14, Wildfire

- CAL FIRE (California Department of Forestry and Fire Protection). 2009. Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE. Accessed November 2024. https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/firehazard-severity-zones/fire-hazard-severity-zones-map/upload-4/san_diego.pdf.
- City of San Diego. 2023a. City of San Diego General Plan, as updated. Adopted March 10, 2008. Accessed November 2024. https://www.sandiego.gov/planning/work/general-plan.
- City of San Diego. 2023b. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.

Chapter 6.0, Cumulative Impacts

- CAL FIRE (California Department of Forestry and Fire Protection). 2009. Very High Fire Hazard Severity Zones in LRA As Recommended by CAL FIRE. Accessed November 2024. https://34c031f8-c9fd-4018-8c5a-4159cdff6b0d-cdn-endpoint.azureedge.net/-/media/osfm-website/what-we-do/community-wildfire-preparedness-and-mitigation/firehazard-severity-zones/fire-hazard-severity-zones-map/upload-4/san_diego.pdf.None.
- City of San Diego. 2007. Program Environmental Impact Report for the Draft General Plan. Final. Accessed November 2024. https://www.sandiego.gov/planning/genplan/documents/peir.
- City of San Diego. 2017. Street Design Manual.
- City of San Diego. 2020. Transportation Study Manual.
- City of San Diego. 2021. Standard Drawings.

Chapter 7.0, Other Mandatory Discussion Areas

- City of San Diego. 2023. California Environmental Quality Act Significance Determination Thresholds. Revised January 1991, January 1994, May 1999, April 2001, July 2004, August 2006, January 2007, January 2011, July 2016, December 2020, and September 2022.
- DTSC (California Department of Toxic Substances Control). 2024. EnviroStor: Advanced Search. Accessed November 2024. https://www.envirostor.dtsc.ca.gov/public/search.
- Kennedy, Michael P., and Siang S. Tan. 2008. Geologic Map of the San Diego 30' x 60' Quadrangle, California. California Geological Survey. Accessed November 2024. https://www.conservation.ca.gov/cgs/Documents/Publications/Regional-Geologic-Maps/RGM_003_RGM_003_San_Diego_2008_Plate1of2.pdf.
- SWRCB (State Water Resources Control Board). 2024. GeoTracker: Advanced Search. Accessed November 2024. https://geotracker.waterboards.ca.gov/search.

Chapter 8.0, Alternatives

- Browder, Greg, Suzanne Ozment, Irene Rehberger Bescos, Todd Gartner, and Glenn-Marie Lange. 2019. Integrating Green and Gray: Creating Next Generation Infrastructure. Accessed November 2024. https://www.wri.org/research/integrating-green-and-gray-creating-nextgeneration-infrastructure.
- City of San Diego. 2019. City of San Diego Sea Level Rise Vulnerability Assessment—Draft. December. Accessed November 2024. https://www.sandiego.gov/sites/default/files/sealevel-rise-vulnerability-assessment.pdf.
- City of San Diego. 2020. City of San Diego Climate Change Vulnerability Assessment. February. Accessed November 2024. https://www.sandiego.gov/sites/default/files/climate-changevulnerability-assessment.pdf.
- City of San Diego. 2021. City of San Diego Climate Equity Index. Accessed November 2024. https://www.sandiego.gov/sites/default/files/prbr210715a-item201b.pdf.

- City of San Diego. 2022. City of San Diego Land Development Manual for Historical Resources Guidelines. Page 17. Accessed November 2024. https://www.sandiego.gov/sites/default/ files/ldmhistorical_dec2022.pdf.
- Esraz-Ul-Zannat, Aysin Dedekorkut-Howes, and Edward Alexander Mordan. 2024. A Review of Nature-Based Infrastructures and Their Effectiveness for Urban Flood Risk Mitigation. Accessed November 2024. https://wires.onlinelibrary.wiley.com/doi/full/10.1002/wcc.889.
- The Nature Conservancy. 2015. Urban Coastal Resilience: Valuing Nature's Role, Case Study: Howard Beach, Queens, New York. Accessed November 2024. https://www.nature.org /media/newyork/urban-coastal-resilience.pdf.
- Wright, Andrew. 2021. Nature-Based Solutions are Not Always Enough. This is How We Can Build with Nature More Effectively. Global Center on Adaptation. Accessed November 2024. https://gca.org/nature-based-solutions-are-not-always-enough-this-is-how-we-canbuild-with-nature-more-effectively/.

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