Draft
Environmental Impact Report
for the
Border Field State Park Resilience, Access, and Habitat Restoration Project

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CEQA Lead Agency:

California Department of Parks and Recreation
2797 Truxtun Road, Barracks 26
San Diego, California 92106

Prepared by:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
3838 Camino del Rio North, Suite 370
San Diego, California 92108

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LIST OF ACRONYMS/ABBREVIATIONS

Term	Definition
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
AC	Asphalt Concrete
ADT	Average Daily Traffic
ALUCP	Airport Land Use Compatibility Plan
ANSI	American National Standards Institute
APE	Area of Potential Effects
BFSP	Border Field State Park
BH	Bunker Hill
BMP	Best Management Practice
BP	Years before present
BSSP	Belding's savannah sparrow
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAGN	Coastal California gnatcatcher
CAISO	California Independent Service Operator
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAWC	Californian-American Water Company
CBP	U.S. Customs and Border Protection
CCAA	California Clean Air Act
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDPR	California Department of Parks and Recreation
CEC	California Energy Commission

Term	Definition
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHP	California Highway Patrol
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalence Levels
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CSCC	California State Coastal Conservancy
CURRV	Climate Understanding and Resilience in the River Valley
CVFW	Coastal and Valley Freshwater Marsh
CWA	Clean Water Act
dB	decibels
dBA	A-weighted decibels
DCSS	Diegan coastal sage scrub
DHS	California Department of Health Services
DOC	California Department of Conservation
DPM	Diesel Particulate Matter
DPR	California Department of Parks and Recreation
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMFAC	Emission Factor model
EO	Executive Order
EOP	Emergency Operations Plan
ESA	Environmentally Sensitive Area
FAR	Fire-Affected Rock

Term	Definition
FEMA	Federal Emergency Management Agency
FGC	California Fish and Game Code
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
FUDS	Formerly Used Defense Site
GHG	greenhouse gas
GIS	Geographic Information Systems
HCP	Habitat Conservation Plan
HD	High Density Probability Areas
HSC	Health and Safety Code
I	Interstate
IB	Imperial Beach
IBWC	International Boundary and Water Commission
IEPR	Integrated Energy Policy Report
LBVI	least Bell's vireo
L_{dn}	Day-Night Average (Noise Level)
L_{eq}	Equivalent Noise Level
LOS	Level of Service
LRA	Local Responsibility Area
LTS	Less than Significant Impact
LTSM	Less than Significant Impact with Mitigation
LU	Land Use
LUP	Land Use Plan
MBTA	Migratory Bird Treaty Act
MEC	Munitions and Explosives of Concern
MHPA	Multiple Habitat Planning Area
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MSCP	Multiple Species Conservation Program
MSL	Mean Sea Level

Term	Definition
msl	mean sea level
N/A	Not Applicable
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NI	No Impact
NNG	Non-native grassland
NOAA	National Oceanic and Atmospheric Administration
NOLF	Naval Outlying Landing Field
NOx	nitric oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
O_3	Ozone
OHP	California Office of Historic Preservation
OPC	Ocean Protection Council
OPR	Office of Planning and Research
PM	Program Manager
PM_{10}	Particulate Matter Less than 10 Microns in Diameter
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns in Diameter
ppm	parts per million
PPV	Peak Particle Velocity
PRC	Public Resources Code
Project	Border Field State Park Resilience, Access, and Habitat Restoration Project
PSR	Project-Specific Requirement
PUD	Public Utilities District
RAQS	Regional Air Quality Strategy
ROG	Reactive Organic Gases

Term	Definition
RPS	Renewable Portfolio Standards
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association Of Governments
SAWRF	Southern arroyo willow riparian forest
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCSM	Southern coastal salt marsh
SD	San Diego
SDAPCD	San Diego County Air Pollution Control District
SDFD	San Diego Fire-Rescue Department
SDG&E	San Diego Gas & Electric
SDPD	San Diego Police Department
SDUSD	San Diego Unified School District
SDWA	Safe Drinking Water Act
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLF	Sacred Lands File
SLR	Sea Level Rise
SM	Spooner's Mesa
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SPR	Standard Project Requirement
SR	State Route
SRA	State Responsibility Area
SSC	California Species of Special Concern
STA	Stationing
SU	Significant, Unavoidable
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCR	tribal cultural resource

Term	Definition
TETRP	Tijuana Estuary Tidal Restoration Program
THPO	Tribal Historic Preservation Officer
TMDL	total maximum daily load
TRNERR	Tijuana River National Estuarine Research Reserve
TSCA	Toxic Substances Control Act of 1976
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UXO	Unexploded Ordnance
VdB	vibration decibels
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WMA	Watershed Management Area

EXECUTIVE SUMMARY

This section will include a brief description of the need for action, alternatives, a summary table, which lists all of the potential impacts identified in the Draft Environmental Impact Report (EIR) by topic, along with the corresponding mitigation measures and the level of significance after mitigation, and a description of the decision to be made.

ES.1 Introduction

This summary provides a synopsis of the Draft EIR prepared for the Border Field State Park Project (Proposed Project) in compliance with the California Environmental Quality Act (CEQA). The California Department of Parks and Recreation (CDPR) is the CEQA Lead Agency for the EIR and, as such, has the primary responsibility for evaluating the environmental effects of the Proposed Project and considering whether to approve the Proposed Project in light of these effects.

As required by CEQA, this Draft EIR:

1) describes the Proposed Project, including its location, objectives, and features;
2) describes the existing conditions at the Project Area and nearby environs;
3) analyzes the direct, indirect, and cumulative adverse physical effects that would occur on existing conditions should the Proposed Project be implemented;
4) identifies feasible means of avoiding or substantially lessening the significant adverse effects of the Proposed Project;
5) provides a determination of significance for each impact after mitigation is incorporated; and
6) evaluates a reasonable range of feasible alternatives to the Proposed Project that would meet the basic Project objectives and reduce a Project-related significant impact.

This Executive Summary covers the following topics:

1) Project Description;
2) Areas of Controversy/Issues Raised by Agencies and the Public; and
3) Issues to Be Resolved, including significant environmental effects and the consideration of alternatives to the Proposed Project.

This Draft EIR and its appendices are available for review online at https://www.parks.ca.gov/?page_id=983. In addition, a hardcopy is available for review by the public during business hours at CDPR's San Diego Coast District (4477 Pacific Highway, San Diego, CA 92110) and at the Tijuana Estuary Visitor Center (301 Caspian Way, San Diego, CA 91932).

ES.2 Project Location and Setting

Border Field State Park (BFSP) is located at 1500 Monument Road in the Cities of San Diego and Imperial Beach in the extreme southwest corner of California, and immediately north of the United States-Mexico International Border. The Park is part of a larger unit called the Tijuana River National Estuarine Research Reserve (TRNERR), which consists of mostly unpaved roads that are prone to flooding during rain events. The Project Area encompasses the Monument Road alignment which is an approximately 1.2-mile stretch of the westernmost portion of Monument Road. Monument Road is an existing roadway in the City of San Diego that provides public access to BFSP. The proposed road alignment extends from the upper east-west segment of Monument Road east of the existing kiosk, passes over the Goat Canyon sediment basins, runs along the base of Bunker Hill, and connects to the lower east-west segment of Monument Road. Site elevations along the proposed road alignment range from approximately 45 feet above mean sea level (MSL) at Goat Canyon to approximately 10 feet above MSL at the connection to the lower east-west segment of Monument Road.

ES.3 Project Background

The existing east-west segment of the Monument Road alignment and elevation of the roadway is subjected to seasonal flooding in several locations. The flooding is caused by storm runoff flows from Goat Canyon and Yogurt Canyon. Both Goat Canyon and Yogurt Canyon convey flows from Tijuana, Mexico northerly into the United States. As the only access road through BFSP connecting visitors to Monument Mesa and Friendship Park, Monument Road has been damaged by years of cross-border sedimentation and flooding resulting in road closures for eight (8) months out of the year.

In response to this flooding, CDPR developed the Goat Canyon sediment basins to protect the Tijuana River Valley and Park infrastructure. The sediment basins have successfully protected the area, however; damage to the road from many years of flooding has not been resolved. Efforts to repair the road in 2005 were restricted by the California Coastal Commission over concerns for wetland impacts, and therefore the road has been left in a seasonally flooded condition since that time. Planning and design to establish year-round vehicular access was initiated in 2016 and has remained in the preliminary planning phase due to substantial regulatory and Project cost constraints. Moffat and Nichol (M&N) prepared a Hydrology and Sedimentation Report (M&N 2022a; Appendix B) to identify sedimentation rates from stormwater flows out of Goat Canyon and Yogurt Canyon, to inform roadway and culvert design to prevent seasonal flooding, and for roadway maintenance purposes. Based on available information for Goat Canyon from previous studies conducted, an annual sedimentation rate ranging from 3,466 to 79,145 tons per year was estimated. Sedimentation rates for Yogurt Canyon have not been previously studied but are expected to be much less than that of Goat Canyon as the watershed area of Yogurt Canyon is significantly smaller than Goat Canyon. Based on the sedimentation rate of Goat Canyon and scaling down to the drainage area of Yogurt Canyon, an annual sedimentation rate ranging from 715 to 15,500 tons per year was estimated.

The Project Area is also susceptible to Sea Level Rise (SLR) due to its location along the coastline and the effect of flooding from significant coastal storms. M&N prepared a Sea Level Rise Report (M&N 2022b; Appendix C) summarizing the potential for SLR to impact the Proposed Project based on a review of

existing data and available studies. Previous studies conducted by the TRNERR Climate Understanding & Resilience in the River Valley study and the University of California Irvine's FloodRISE hydraulic and hydrologic model were used in the analysis. At the time of the preparation of the SLR Report, the 2018 State of California Sea Level Rise Guidance published by the California Ocean Protection Council (OPC) represented the most recent state-level guidance on future SLR for the Project (OPC 2018). The OPC Guidance SLR projections indicate:

- A 6 percent chance that SLR will meet or exceed 3 feet (ft) in San Diego by 2080 under a high greenhouse gas (GHG) emissions future.
- A 2 percent chance that SLR will meet or exceed 3 ft in San Diego by 2080 under a low GHG emissions future.

Based on local knowledge of the Project vicinity, the area is not inundated by high tides nor king tides. SLR holds the potential to exacerbate storm flooding of the Project Area. The Sea Level Rise Report determined that the flood boundaries of 1-year and 100-year storms extend further inland as sea levels rise. Under 3.3 ft of SLR, a scenario that is relevant to the 75-year life span of the Project, the existing Monument Road is likely to experience more frequent and higher magnitude flood events.

ES.4 Description of Proposed Project

The Project proposes to improve and relocate portions of Monument Road to address seasonal flooding of the existing roadway, plan for and establish resilience against the future effects of SLR, and restore wetland habitats. CDPR proposes a new alignment of Monument Road, elevating portions of the roadway, installing box culverts and headwall systems, and removing approximately 2,300 ft of existing asphalt road. The Proposed Project would address the main entrance road flooding and SLR resilience and improve public access to BFSP and Monument Mesa. As previously identified, the existing alignment and elevation of the roadway is subjected to seasonal flooding in several locations caused by storm runoff flows from Goat Canyon and Yogurt Canyon, which convey flows from Tijuana, Mexico northerly into the United States. These flows result in both the north-south and east-west portions of the roadway remaining flooded, preventing public access to BFSP and Monument Mesa.

ES.5 Areas of Controversy

Section 15123 of the State CEQA Guidelines requires the summary of an EIR to include areas of controversy known to the Lead Agency, including issues raised by agencies and the public. CDPR prepared and distributed a Notice of Preparation (NOP), in accordance with Section 15082 of the State CEQA Guidelines. The 30-day public review period for public agencies, organizations, and interested individuals to review and comment on the NOP began on April 2, 2025, and ended on May 1, 2025. CDPR also held a public information meeting on April 17, 2025, at the Tijuana Estuary Visitor Center in the City of Imperial Beach.

During this review period, 15 comment letters were received. Many commenters expressed support of the Proposed Project and requested expedited action to restore year-round access to BFSP. The primary issues raised were related to biological resources, geology and soils, hydrology and water quality, hazards

and hazardous materials, public services, and recreation. A summary of all comments received is included in Table 1-1 of Chapter 1.0, and all comment letters are included in Appendix A of this Draft EIR.

ES.6 Project Alternatives

To fully evaluate the environmental effects of projects, CEQA mandates that alternatives to the project be analyzed. Section 15126.6 of the CEQA Guidelines 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. 40 Code of Federal Regulations (CFR) 1502.14 requires agencies to "rigorously explore and objectively evaluate reasonable alternatives to the proposed action." The agency shall consider a "reasonable range of alternatives that will foster informed decision-making."

The following alternatives are analyzed in detail in Chapter 5.0 Alternatives. The primary purpose of the alternatives analysis is to consider and analyze a reasonable range of feasible alternatives in sufficient detail to foster informed decision-making and public participation in the environmental review process. The alternatives to the Proposed Project are summarized below.

Alternative 1 – No Project Alternative

Under the No Project Alternative, the existing Monument Road would remain as is and would maintain the connection from the Park entrance to Monument Mesa.

Alternative 2 – Two-Lane Elevated Road on Fill with Arizona Crossing and Boardwalk

Under Alternative 2, the first 1.2 miles of the two-lane Monument Road, starting from the Park entrance, would be rerouted along the same proposed alignment as the Proposed Project. The last 2,000 ft would be developed to be resilient to sea level rise and flooding using elevated road on fill; however, it would include an Arizona low-water crossing, without any prefabricated creek crossing structures over Yogurt Canyon. An Arizona low-water crossing is a simple type of bridge common in the Southwestern United States, also known as fords. Arizona low-water crossings allow a waterway to pass over the road and are suitable for crossings where overflow would occur rarely enough not to impede vehicular traffic. Like the Proposed Project, the wetland and riparian habitats along the north-south segment of Monument Road would be restored, as well as upland habitats along a portion of the rerouted road south of Goat Canyon. In addition to the elevated roadway, the last 2,000 feet would feature a pedestrian boardwalk with interpretive educational materials and a parking lot built at the east end of the proposed boardwalk.

Alternative 3 – One-Lane Elevated Road with Prefabricated Creek Crossings

Under Alternative 3, the first 1.2 miles of the two-lane Monument Road, starting from the Park entrance, would be rerouted along the same alignment as the Proposed Project. The last 2,000 feet would be

developed to be resilient to sea level rise and flooding using elevated road on fill with the same prefabricated creek crossing structures as the Proposed Project. Like the Proposed Project, the wetland and riparian habitats along the north-south segment of Monument Road would be restored, as well as upland habitats along a portion of the rerouted road south of Goat Canyon. The main difference from the Proposed Project is that the last 2,000-foot stretch of Monument Road would be reconstructed as a one lane road elevated as high as possible within the existing footprint that would be paired with prefabricated creek crossing structures. The one-lane road design would result in a smaller disturbance footprint and less impacts to wetland habitat. However, there would be an increased potential for conflict between vehicles and other multi-modal users.

Alternative 4 – Develop Only Last 2,000 Feet Alternative

Alternative 4 includes the development of only the last 2,000 feet of the two-lane Monument Road with an elevated road on fill paired with prefabricated creek crossing structures. The existing north-south segment would not be removed and would continue to serve as the connection from the park entrance to Monument Mesa. No road realignment and no upland or riparian habitat restoration would occur.

ES.7 Issues to be Resolved by the Lead Agency

This Draft EIR examines the potential environmental effects of the Proposed Project, including information related to existing site conditions, analyses of the types and magnitude of individual and cumulative environmental impacts, and feasible mitigation measures that could reduce or avoid environmental impacts. In accordance with Appendix G of the State CEQA Guidelines and 40 CFR 1502, the potential environmental effects of the Proposed Project were analyzed for the following areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

ES.8 Summary of Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

The California Department of Parks and Recreation has a unique role as Lead Agency, Trustee Agency, and Project Proponent and therefore CDPR's resource professionals take a prominent and influential role during the Project conceptualization, design, and planning process consistent with Section 15004(b)(1) of CEQA. This approach permits CDPR to incorporate Project modifications prior to the start of the public review process of the environmental document, to avoid impacts to a point where clearly no significant effect on the environment would occur.

As part of its effort to avoid impacts, CDPR maintains a list of Project Requirements that are included in a project design to reduce impacts to resources. From this list, Standard Project Requirements (SPRs) are specific standard requirements imposed uniformly by CDPR based on the proposed action. CDPR also makes use of Project-Specific Requirements (PSRs). CDPR develops these project requirements to address impacts for projects that have unique issues, but do not typically standardize these for projects statewide. These features are a part of project design and therefore do not constitute mitigation measures.

Table ES-1 below provides a summary of the aforementioned environmental impacts that could result from the Proposed Project. For each impact, Table ES-1 identifies the significance of the impact without any SPRs, PSRs, or mitigation measures, and the level of significance of the impact after implementation of SPRs, PSRs, or mitigation.

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
3.1 Aesthetics				
Substantial Adverse Effect on a Scenic Vista	The Proposed Project is located within the Tijuana River watershed, a visual resource under the City of Imperial Beach's General Plan. Project development would not have an effect on scenic vistas as all proposed improvements would be underground, at grade, or slightly above grade and would not be visible from a distance. The wetland, riparian, and upland habitats in the Project Area would be restored as part of the Project resulting in an overall continuity of habitats within the Tijuana River watershed.	NI	No mitigation is required.	NI
Substantially Damage Scenic Resources	There are no officially designated or eligibles state scenic highways in the vicinity of the Project. Vegetation impacted by construction would be improved during planned wetland, riparian, and upland habitat restoration. The Project would not substantially damage any scenic resources and Project components would not be visible from the nearest officially designated state scenic highway over 3 miles away.	NI	No mitigation is required.	NI
In Nonurbanized Areas, Substantially Degrade the Existing Visual Character or Quality of Public Views of the Site and Surroundings In Urbanized Areas, Conflict with Applicable Zoning and Other Scenic Quality Regulations	The Proposed Project is located in a non-urbanized area. Construction activities, such as pavement demolition, grading, trenching, brush clearing and grubbing, and installation of Project components, would result in temporary visual changes. Project implementation would restore full-time access to BFSP in an improved condition and would not degrade the existing visual character or quality of public views of the site and its surrounding.	LTS	No mitigation is required.	LTS
Create New Source of Substantial Light or Glare	No new lighting is proposed as part of the Park improvements. The Project is not expected to create a substantial new source of nighttime lighting or daytime glare.	NI	No mitigation is required.	NI
3.2 Agriculture and Forestry Resources				
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance	The Project is located on parcels classified as Other Land and Urban and Built-Up Land. The Proposed Project is not located on land classified as Prime Farmland, Unique Farmland, or Farmland of State Importance and would not result in the conversion of these types of farmland.	NI	No mitigation is required.	NI
Conflict with Existing Zoning for Agricultural Use or Williamson Act contract	The Project Area is zoned in the City of San Diego as Agricultural-Residential (AR-1-1) and in the City of Imperial Beach as Open Space (OS). The Proposed Project aligns with the permitted uses of both cities and would not conflict with existing zoning. The Project Area is not subject to a Williamson Act contract.	NI	No mitigation is required.	NI
Conflict with Existing Zoning or Rezoning of Forest Land, Timberland, or Timberland Production	The Project Area is zoned in the City of San Diego as Agricultural-Residential (AR-1-1) and in the City of Imperial Beach as Open Space (OS). The entirety of the Project Area does not contain any land defined as forest land, timberland, or land zoned Timberland Production (as defined by Government Code Section 51104(g)).	NI	No mitigation is required.	NI
Result in Loss of Forest Land or Conversion to Non-Forest Use	The entirety of the Project Area does not contain any land defined as forest land. Therefore, there would be no loss of forest land or conversion of forest land to non-forest use.	NI	No mitigation is required.	NI

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Other Changes Resulting in Conversion of Farmland to Non-Agricultural Use or of Forest Land to Non-Forest Use	The Project Area is zoned in the City of San Diego as Agricultural-Residential (AR-1-1) and in the City of Imperial Beach as Open Space (OS). The entirety of the Project Area does not contain any farmland or forest land. Therefore, there would be no conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.	NI	No mitigation is required.	NI
3.3 Air Quality				
Conflict with an Applicable Air Quality Plan	The Proposed Project would not exceed the San Diego Air Pollution Control District (SDAPCD) short-term construction standards or long-tern operational standards and therefore would not violate any air quality standards. The Project would not contribute to new violations or delay the timely attainment of air quality standards or interim reductions as contained in the County Regional Air Quality Strategy.	LTS	No mitigation is required.	LTS
Result in a Cumulatively Considerable Net Increase of a Criteria Pollutant	Emissions generated during Project construction and operations would not exceed the SDAPCD significance thresholds or the U.S. Environmental Protection Agency regional conformity determination thresholds for any pollutant.	LTS	No mitigation is required.	LTS
Expose Sensitive Receptors to Substantial Pollutant Concentrations	The Project would not involve construction activities that would result in ozone precursor, carbon monoxide (CO), NOx, PM_{10}, or $PM_{2.5}$ emissions in excess of SDAPCD thresholds which are set to be protective of human health and account for cumulative emissions in the County. Operation of the Proposed Project would not result in the development of any substantial sources of air toxics at nearby sensitive receptors. The Project would not have a high carcinogenic or non-carcinogenic risk during operation. The Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day and there is no likelihood of the Project traffic exceeding CO values and creating a significant CO impact.	LTS	No mitigation is required.	LTS
Create Objectionable Odors	Construction could result in the emission of short-term odors from construction equipment and vehicles (e.g., diesel exhaust) that would be limited in extent at any given time and distributed throughout the Project vicinity during the duration of construction. The Project does not include any land uses identified as typically associated with emissions of objectionable odors.	LTS	No mitigation is required.	LTS
3.4 Biological Resources				
Substantial Adverse Effect on any Candidate, Sensitive, or Special-Status Species	If nesting birds are present in the Project Area, ground-disturbing construction activities could directly affect nesting birds, and other birds protected by the Migratory Bird Treaty Act, and their nests through the removal of habitat in the Project Area, and indirectly through increased noise, vibrations, and increased human activity. Implementation of SPRs BIO-1 through BIO-3 and PSR BIO-4 will ensure impacts to nesting birds will remain less than significant. Construction would impact a total of 0.802 acres of occupied least Bell's vireo habitat. Construction noise may be considered an indirect impact as it may interfere with courtship behavior or cause temporary or permanent abandonment of the nesting territory Work windows could be utilized to minimize these impacts as well. Implementation of SPRs BIO-1 through BIO-3 and PSR BIO-4 will ensure impacts will remain less than significant.	PS	**BIO-1 (SPR): Environmental Awareness Training.** A qualified biologist shall present an education program on the coastal California gnatcatcher, least Bell's vireo, and other listed/sensitive species to all Project employees prior to the start of construction and before new employees begin work on-site. Materials discussed in the program will include, at a minimum, the following topics: (1) species description, general behavior, and ecology, (2) distribution and occurrence near the Project site, (3) species' sensitivity to human activities, (4) legal protection, (5) penalties for violation of State and Federal laws, (6) reporting requirements, and (7) Project conservation measures. The qualified biologist shall document the names, dates, and affiliation of those persons who attend the training. **BIO-2 (SPR): Resource Monitoring.** Prior to construction, a qualified biologist shall conduct a pre-construction survey for all sensitive plants and wildlife within and near the Project Area to include: A survey for special-status plants. Should any special-status plants be found (either individuals or populations), then measures shall be incorporated into operations to prevent/reduce disturbance. At a minimum, temporary fencing or flagging shall be placed around/near the plant(s) to provide a conspicuous, visual barrier. Any other measures deemed necessary by the qualified biologist shall	LTS with Beneficial Effects

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
			also be employed to prevent disturbance to the species and may involve monitoring and/or coordination with the permitting agency (or agencies). A survey for sensitive wildlife. Should sensitive wildlife be found, then measures recommended by the qualified biologist shall be incorporated into the Project to reduce the likelihood of species impacts. A qualified biologist shall be present on-site during all clearing, grubbing, and grading activities to monitor work and ensure conservation measures are appropriately implemented. Such activities will include, the installation/removal of construction boundary materials, vegetation trimming, vegetation removal, and trench excavation/back-fill. In addition, the qualified biologist shall, at his/her discretion, continue to survey activities throughout construction to ensure that impacts to natural resources are avoided/minimized. During vegetation clearing, trimming or removal, and/or ground disturbing work, the qualified biologist shall be on-site to monitor for the presence of special-status species. If any wildlife or plants of concern are discovered during these activities, the qualified biologist shall coordinate with the CDPR Representative regarding appropriate measures to safeguard the health/life of the resource(s) (e.g., flushing, safely relocating away from the site). Should a federally or State listed species be discovered onsite, then the CDPR Representative shall be immediately notified. The CDPR Representative, in coordination with the qualified biologist, shall review/suspend activities and contact the U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW), as appropriate. Following consultation, conservation measures recommended by the USFWS and/or CDFW, in conjunction with CDPR, shall be implemented into the Project. **BIO-3 (SPR): Preconstruction Survey for Nesting Birds.** Any construction-related activities conducted between February 15 to September 15 shall implement the following measures: A nesting bird survey shall be performed by the qualified biologist within and near the Project footprint no more than five (5) days prior to the onset of any activities. Should an active nest/nesting bird be found, then appropriate measures, as determined by the qualified biologist, shall be implemented to minimize impacts. These measures may include, but are not limited to: • Work shall be redirected to other locations within the Project area by the CDPR Representative. • Protection measures shall be implemented, such as staking/flagging near the nest site, establishing a minimum "no work" buffer, and/or installing temporary fencing. • Work shall not start or resume in the area of concern until receipt of written approval from the CDPR Representative. **BIO-4 (PSR): Work Windows.** All Project-related work occurring on the North-South Segments (i.e., between Station (STA) 120+00 to STA 167+84 and 0+00 to 28+77) shall be completed between September and January, to the maximum extent possible, to avoid /minimize impacts to sensitive/listed avian species. All Project-related work occurring on the East-West Segment (i.e., between STA 100+00 to STA 120+00) shall be completed between February to October (bird nesting season), as these areas were not documented as being occupied and, therefore, are less likely to support sensitive/listed species.	

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Substantial Adverse Effect on Riparian Habitat or Other Sensitive Natural Community	Project impacts may include permanent impacts associated with the conversion of existing natural vegetation communities to structures or pervious surfaces. Temporary impacts include those associated with construction access and staging areas. However, since the Project will involve the implementation of a restoration component, the end result of the access improvements will be a net-wide gain of all native habitat types analyzed in the above sections. Implementation of SPRs BIO-5 through BIO-7 will ensure impacts to sensitive habitats will remain less than significant	PS	**BIO-5 (PSR): Resource Fencing.** Sensitive habitat near the Project boundaries shall be designated Environmentally Sensitive Areas and strictly avoided. No encroachment (i.e., workers, equipment, materials) shall be allowed in these locations at any time. Sensitive vegetation or resources shall be marked and protected by temporary fencing (e.g., orange plastic fencing, silt fencing) or other acceptable method. Work limits shall be clearly marked in the field and confirmed by the qualified biologist/biological monitor prior to the start of operations. All staked/fenced boundaries shall be maintained in good repair throughout construction. **BIO-6 (SPR): Equipment Fueling and Storage.** All storage and staging areas shall only be allowed on existing developed or disturbed locations (e.g., paved surfaces) that have been reviewed and approved by CDPR, in coordination with the qualified biologist and Project archaeologist. All areas used for stockpiling shall be kept free from trash and other waste. No Project-related items shall be stored outside approved staging areas at any time. The changing of oil, refueling, and other actions (e.g., washing of concrete or paint) that could result in the release of a hazardous substance shall be restricted to approved/designated areas that are a minimum of 50 feet from any sensitive habitat/Environmentally Sensitive Areas, culvert, or drainage. Such sites shall be surrounded with berms, sandbags, or other barriers to further prevent the accidental spill of fuel, oil, or chemicals. Any discharges shall be immediately contained, cleaned up, and properly disposed off-site. All construction equipment and vehicles shall be inspected for leaks immediately prior to the start of work, and regularly thereafter until the equipment and/or vehicles are removed from the park. Should any oils or fluids be observed leaking from vehicles or heavy equipment, then a drip pan shall be placed below the leak to prevent hazardous materials from spilling onto the ground, seeping into the soil, or entering nearby habitat. All equipment shall be cleaned, fueled, and repaired (other than emergency repairs) outside park boundaries, whenever possible. Contaminated water, sludge, spill residue, or other hazardous compounds shall be disposed of outside the park, at a lawfully authorized destination. All construction equipment used for the Project shall be clean and free of soil and plant material before arrival on-site and before leaving the park to prevent the spread of invasive plants. The qualified biologist shall periodically inspect vehicles, equipment, and boots to ensure that no invasive species leave the site or are introduced into the park. **BIO-7 (SPR): Work Limits.** Work shall be limited to the construction footprint, as outlined in the Project Plans and directed by the State's Representative. Access routes, staging areas, and the total footprint of disturbance shall be the minimum number or size necessary to complete the Project and will be selected and placed to avoid impacts to sensitive habitats and resources.	LTS with Beneficial Effects
Substantial Adverse Effect on State or Federally Protected Wetlands	The Proposed Project would temporarily impact 1.175 acres and permanently impact 0.925 acres of U.S. Army Corps of Engineers (USACE) jurisdictional habitat. The Project would also temporarily impact 1.568 acres and permanently impact 1.476 acres of CDFW, Regional Water Quality Control Board, and California Coastal Commission jurisdictional habitat. Impacts would be less than significant with the implementation of the restoration component of the Project. Impacts to all wetland communities will be offset through the creation, restoration, or enhancement of similar, higher quality wetlands within the Park to standards requested by agencies during the permitting process. Implementation of PSR BIO-5 and SPRs BIO-6 and BIO-7 would ensure impacts to sensitive habitat/resources will remain less than significant.	PS	See BIO-5 through BIO-7 as described above.	LTS with Beneficial Effects

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Substantial Interference with the Movement of any Native Resident or Migratory Fish or Wildlife Species or Established Native Resident or Migratory Wildlife Corridors or Impede Use of Native Wildlife Nursery Sites	Yogurt Canyon may provide some limited function as a wildlife corridor within the lower east-west segment of the Monument Road; however, the canyon is filled at its southern boundary within the U.S. by the Border Area Infrastructure Project and is disconnected from the portion of the canyon within Mexico. With the restoration component of the Project, previously fragmented patches of habitat will be connected, thereby resulting in a net benefit to native and migratory wildlife moving through the park. Implementation of PSRs BIO-8 and BIO-9 would ensure impacts will remain less than significant.	LTS	**BIO-8 (PSR): Temporary Fencing.** Temporary fencing shall be installed during construction parallel to the wildlife corridor at Yogurt Canyon to discourage wildlife from accessing the construction areas. After construction is complete, the fencing shall be removed. **BIO-9 (PSR): Open Trenches and Excavations.** Areas of excavation (e.g., pits, trenches, drilling holes) shall be covered or backfilled overnight and/or during periods of inactivity. Routes of escape from excavated pits and trenches shall also be installed for wildlife that could potentially become entrapped. These locations shall be regularly inspected throughout construction, whenever areas of excavation are uncovered, and immediately prior to filling. Should any entrapped wildlife be discovered, then the CDPR Representative shall be promptly contacted. Work at the excavation site shall be temporarily suspended until the entrapped animal can be safely relocated or released by the qualified biologist. If any deceased wildlife is discovered in an excavated area, then the CDPR Representative shall be promptly contacted. Work at the site shall be temporarily suspended until the animal can be examined by the qualified biologist. Following review, appropriate measures, as directed by the CDPR Representative, shall be implemented to prevent future loss.	LTS
Conflict with Local Policies or Ordinances Protection Biological Resources	Wetland and upland restoration proposed under this Project would be consistent with the USACE policy of "no net loss" of wetlands. Additionally, the Proposed Project would comply with all local policies or ordinances. The project will result in creation of wetland habitat and would result in a net gain, therefore, impacts would be less than significant	LTS	No mitigation is required.	LTS with Beneficial Effects
Conflict with an Adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or Other Local, Regional, or State HCP	The Project lies within the City of San Diego's Multiple Species Conservation Program (MSCP), but does not fall under the jurisdiction of the City and is therefore not subject to the MSCP regulations. However, the Project has taken the guidelines set forth in the MSCP into consideration to align with other habitat and species preservation efforts under the City's MSCP Subarea Plan for the Tijuana Estuary and Tijuana River Valley. MSCP covered species have been included in this review and addressed with respect to potential impacts. The Restoration Plan, currently being developed, also follows the MSCP guidelines and ultimately exceeds the requirements of the program; resulting in a net benefit and gain to sensitive habitat within BFSP. CDPR will also be formally consulting with the USFWS and CDFW for all federally and State listed species within the Project Study area; therefore, take authorization under the City of San Diego's MSCP will not be necessary. Specific avoidance and minimization measures will be determined in coordination with these agencies to reduce the potential for impacts on special status MSCP species. Given that the Project would result in a net gain or increase of native habitat that could support MSCP covered species, impacts would be less than significant with implementation of the restoration component.	LTS	No mitigation is required.	LTS with Beneficial Effects
3.5 Cultural Resources				
Substantial Adverse Change in Significance of a Historical Resource	One known historical resource intersects with the Project Area of Potential Effects (APE): CA-SDI-22220, Monument Road. The route of this road has changed many times throughout its history, and the surface treatment has varied from unimproved dirt to gravel to asphalt paving. These changes in route and surface materials reflect the fluid nature of this road, making its route a non-character defining or significant feature. CDPR has determined that the roadway is not eligible for listing on the California Register of Historical Resources or National Register of Historic Places under any Criterion, The Project is not anticipated to cause significant impacts to the significance of the historic road.	NI	No mitigation is required.	NI

Substantial Adverse Change in Significance of an Archaeological Resource	The Project is not anticipated to cause a substantial adverse change in the significance of any of the five archaeological resources recorded within or near the Project APE. With the accelerated rate of sedimentation in the area, it is likely that most excavations necessary for the Project will take place within sediment deposited in the last 20 to 30 years without reaching depths where known cultural resources would be encountered. However, not all areas accumulate sediment equally. There is potential that unanticipated subsurface cultural deposits or features, such as precontact shell lens, shell midden, and/or hearth features, may be encountered during Project work anywhere in the Project Area. The potential is especially high in the alluvial area in the vicinity of the previously recorded sites CA-SDI-13485 and CA-SDI-16047. Implementation of Mitigation Measure CUL-1 and SPRs CUL-2 through CUL-5 below would reduce the level of potential impact to less than significant.	PS	**CUL-1 (SPR): Monitoring and Inadvertent Discovery Plan.** A Monitoring and Inadvertent Discovery Plan is to be prepared by the lead CDPR archaeologist and reviewed by the consulting tribes and U.S. National Park Service. The Monitoring and Inadvertent Discovery Plan shall include, but not be limited to, the following measures: If any potentially significant cultural resources are encountered during project work, work shall cease in the immediate vicinity until cultural resource specialists and tribal representatives can record and evaluate the resource and recommend appropriate treatment measures consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Avoidance is CDPR's preferred treatment method. **CUL-2 (PSR): Environmentally Sensitive Area Fencing.** Environmentally Sensitive Area fencing shall be installed to protect existing features of the archaeological sites adjacent to the Project Area. The Environmentally Sensitive Area fencing locations will be documented in the Monitoring and Inadvertent Discovery Plan. **CUL-3 (MM): Excavation Limits.** In the vicinity of CA-SDI-13485 and CA-SDI-16047, the maximum depth of project excavation shall be constrained to 3 feet below current ground surface to ensure avoidance of known significant, intact cultural deposits. **CUL-4 (SPR): Training of Construction Personnel.** A training session for Project construction personnel shall be conducted by a qualified archaeologist and Kumeyaay cultural monitor prior to the start of ground-disturbing activities. The training session shall include a review of communication protocols, types of cultural resources that might be encountered, cultural resources responsibilities, protection procedures, and avoidance measures. **CUL-5 (SPR): Cultural Monitoring.** An archaeological monitor and Native American (Kumeyaay) cultural monitor shall be present for all ground disturbing activities associated with this Project to identify any cultural resources that may be present subsurface in the Project Area. **CUL-6 (SPR): Human Remains Encounter Plan.** In the event that human remains are encountered, work will cease immediately in the area of the find and the Project manager/site supervisor will notify the appropriate CDPR personnel. Any human remains and/or funerary objects will be left in place or returned to the point of discovery and covered with soil. The CDPR Superintendent (or authorized representative) will notify the County Medical Examiner, in accordance with Section 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). If a Native American monitor is on-site at the time of the discovery, the monitor will be responsible for notifying the appropriate Native American authorities. The County Medical Examiner will make the determination of whether the human bone is of Native American origin. If the County Medical Examiner determines the remains represent Native American interment, the Native American Heritage Commission (NAHC) in Sacramento and/or tribe will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (Public Resources Code [PRC] Section 5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination. If it is determined that the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives will occur as necessary to define additional site mitigation or future restrictions.	LTSM
Disturb any Human Remains	No known human remains have been identified within the APE of the Project, so no significant impacts are anticipated. However, human remains in archaeological context have been previously identified within 0.25 mile of the Project Area and there is a potential that unanticipated human remains may be encountered during Project work. Implementation of SPR CUL-5 would reduce the level of potential impact to less than significant.	PS	See CUL-6 as described above.	LTS. SPRs incorporated.

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
3.6 Energy				
Result in Significant Environmental Impacts from Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources	The Project's gasoline fuel consumption during the one-time construction period is estimated to be 1,007 gallons, which would increase the annual countywide gasoline fuel use by 0.0001 percent. Additionally, the Project is estimated to consume 927,736 gallons of diesel fuel, which would be 0.5203 percent of the County's annual diesel fuel consumption. As such, Project construction would have a nominal effect on local and regional energy supplies. During operations, the annual electricity consumption due to operations would be 800,000 kilowatt-hours resulting in an imperceivable (0.0062 percent) in the typical annual electricity consumption attributable to all nonresidential uses in San Diego County. However, this is potentially a conservative estimate. The Project is estimated to generate a maximum of approximately 915 daily trips. This would equate to a consumption of approximately 62,497 gallons of automotive gasoline per year, which would lead to a minimal (0.0057 percent) increase in the annual countywide automotive gasoline consumption. The Project is estimated to consume approximately 8,338 gallons of automotive diesel fuel per year, which would lead to a minimal (0.0051 percent) increase in the annual countywide automotive diesel consumption. Therefore, fuel consumption associated with the vehicle trips generated by the Project during operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.	LTS	No mitigation is required.	LTS
Conflict with State or Local Plans for Renewable Energy or Energy Efficiency	Electricity for the Project would be provided by San Diego Gas & Electric (SDG&E), whose 2022 Integrated Resource Plan builds on existing State programs and policies that support the 2023 Integrated Energy Policy Report (IEPR) goals of improving electricity, natural gas, and transportation fuel energy use in the State. SDG&E is consistent with the IEPR and the Project would procure its energy from SDG&E.	LTS	No mitigation is required.	LTS
3.7 Geology and Soils				
Substantial Adverse Effect, Including Risk of Loss, Injury, or Death involving: i. Rupture of Known Earthquake Fault ii. Strong Seismic Ground Shaking iii. Seismic-Related Ground Failure (liquefaction) iv. Landslides	The Project Area does not intersect with an established Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo fault zone is the Newport-Inglewood-Rose Canyon fault zone, located 9 miles northwest of the Project Area. BFSP is an existing park that has had visitors and park maintenance staff onsite. The proposed improvements to the Project Area would not result in an increased risk to people or structures from fault rupture and would not increase the potential for fault rupture. The potential for liquefaction or seismically induced settling in the Project Area is considered high by the City of San Diego due to shallow groundwater, major drainages, and hydraulic fills. Liquefaction is also a threat in the City of Imperial Beach in the event of moderate or major seismic activity due to soil structure and the City's high water table. The Project would not introduce new habitable structures that would expose people to liquefaction. Landslides are not considered a significant hazard in the vicinity of the Project Area. Limited landslides may occur at the small cliffs in BFSP during a more severe earthquake. The Proposed Project would not disturb substantial slopes or other ground supporting features that could create unstable geologic conditions. It would not have the potential to induce or increase the risk of landslides.	LTS	No mitigation is required.	LTS
Substantial Soil Erosion or Loss of Topsoil	Project construction would involve ground-disturbing activities that could expose soils to the effects of wind or water erosion. Construction activities would result in the disturbance of an area greater than 1-acre and would temporarily increase erosion, runoff, and sedimentation. The Project Proponent would be required to obtain and comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, and implement dust control measures, which would include construction Best Management Practices (BMPs) to control and limit sedimentation and erosion.	LTS	No mitigation is required.	LTS

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Located on Unstable Geologic Unit or Soil Potentially Resulting in Landslide, Lateral Spreading, Subsidence, Liquefaction, or Collapse	Impacts related to liquefaction and landslides, such as lateral spreading, would be less than significant as the Project would not introduce any new habitable structures that would expose people to substantial adverse effects from seismic-related ground failure. Subsidence is not a significant problem in the City of Imperial Beach and there are no historical or current recorded instances of subsidence in the Project Area. The Proposed Project would have the east-west segment undergo aa settling period to allow for pore water drainage and soil consolidation; thereby helping to reduce the extent of future settlement.	LTS	No mitigation is required.	LTS
Located on Expansive Soil	Soils within the Project Area have expansive properties; however, construction activities would not create substantial risks to life or property as no permanent habitable structures would be constructed.	LTS	No mitigation is required.	LTS
Soils Incapable of Adequately Supporting Use of Septic Tanks or Alternative Wastewater Disposal Systems	The Proposed Project would not include the use of septic tanks or alternative wastewater disposal systems.	NI	No mitigation is required.	NI
Destroy a Unique Paleontological Resource, Site, or Geologic Feature	The Project Area is characterized as Late Quaternary Alluvium and underlain by the San Diego Formation. The Late Quaternary Alluvium deposits are relatively young and are assigned low paleontological resources sensitivity. The San Diego Formation has rich fossil beds with diverse assemblages of marine organisms and is assigned high paleontological resource sensitivity. It is possible, though unlikely, that paleontological resources might be encountered during excavations below the ground surface in the Project Area. Implementation of Mitigation Measure GEO-1 would reduce impacts to less than significant.	PS	**GEO-1 (MM): Unanticipated Paleontological Discovery.** Although full-time monitoring is not warranted based on the low sensitivity to produce paleontological resources (i.e., fossil remains), a Worker's Environmental Awareness Program shall be given to all personnel associated with the Project prior to ground disturbance in case any unanticipated paleontological resources are discovered during excavation activities. If an unanticipated discovery is made, the contractor shall notify CDPR and cease excavation within 50 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional shall evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g., fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.	LTS
3.8 Greenhouse Gas Emissions				
Generate Greenhouse Gas (GHG) Emissions that may have a Significant Impact on the Environment	Project construction would result in the generation of approximately 853 metric tons of carbon dioxide equivalent (CO_2e) over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Operation-generated emissions would total approximately 504 metric tons of CO_2e, which would not exceed the numeric brightline threshold of 900 metric tons of CO_2e annually. This threshold is based on a capture rate of 90 percent of land use development projects, which in turn translates into a 90 percent capture rate of all GHG emissions.	LTS	No mitigation is required.	LTS

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Conflict with an Applicable Plan, Policy, or Regulation for Reducing Greenhouse Gas Emissions	The Proposed Project-generated GHG emissions would not surpass the California Air Pollution Control Officers Association GHG significance threshold, which was developed in consideration of statewide GHG reduction goals. The Proposed Project's relocation of portions of Monument Road is intended to improve the ecological health and hydrologic function of the Tijuana River watershed, while also addressing chronic seasonal flooding by repositioning and elevating the road to maintain consistent public access. Together, these efforts to restore natural habitat and improve infrastructure resilience are consistent with the City of San Diego's Climate Action Plan (CAP) goals related to carbon sequestration. The Project's restoration work within the estuarine landscape directly aligns with the City of Imperial Beach's CAP goal to enhance and conserve estuarine and wetland ecosystems.	LTS	No mitigation is required.	LTS
3.9 Hazards and Hazardous Materials				
Create a Significant Hazard Through the Routine Transport, Use, or Disposal of Hazardous Materials	The Proposed Project would not transport, use, or dispose of any hazardous materials beyond those used during construction and maintenance, such as for fueling and servicing construction equipment onsite. These activities would be short-term, would occur within designated staging areas strategically placed to minimize impacts to waterways and vegetated areas, and would be subject to federal, state, and local health and safety requirements.	LTS	No mitigation is required.	LTS
Create a Significant Hazard Through Reasonably Foreseeable Upset or Accident Conditions	Potential impacts that may result from upset or accidents during Project construction include accidental release of materials such as hydraulic fluid, fuel, oil, grease, and lubricants. Quantities of these materials would generally be limited. Implementation of BMPs required by the NPDES Construction General Permit would include containment and spill response measures. Construction activities would be short-term, would occur within designated staging areas strategically placed to minimize impacts to waterways and vegetated areas, and would be subject to federal, state, and local health and safety requirements. BFSP is an existing recreational park and operation of the Project would not generate or require storage for hazardous materials within the Project Area.	LTS	No mitigation is required.	LTS
Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste Within One-Quarter Mile of an Existing or Proposed School	The Project is not located within 0.25 mile of an existing or proposed school. The nearest school is Mar Vista Academy, located approximately 2.1 miles north of the Project Area.	NI	No mitigation is required.	NI
Create a Significant Hazard to the Public or Environment from being Located on a Site that is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5	According to a review the EnviroStor database, there are four military evaluation sites within 0.5 mile of the Project Area; however, all sites are inactive as of 2005 and encountering aboveground or subsurface contamination during construction due to these sites is not anticipated. GeoTracker did not identify any leaking underground storage tanks in the Project Area. A list of solid waste disposal sites with waste constitutes above hazardous waste levels outside the waste management unit was also checked. No records were listed. The list of cease-and-desist orders and clean up and abatement orders did not include the Project Area. The list of hazardous facilities subject to corrective action does not include the Project Area.	NI	No mitigation is required.	NI

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Result in a Safety Hazard for People Residing or Working in the Project Area if Located Within an Airport Land Use Plan or Within Two Miles of a Public Airport or Public Use Airport	The Project Area is located approximately 1.2 miles south of the Naval Outlying Landing Field (NOLF) in the City of Imperial Beach. According to the NOLF Airport Land Use Compatibility Plan, the Project Area is within Airport Influence Area Review Area 2. Within Review Area 2 only airspace protection and overflight policies and standards apply. Additionally, the Project Area is located outside of all Safety Compatibility Zones. The Proposed Project would not construct any structures that would result in a safety hazard for people working in or visiting the Project Area	LTS	No mitigation is required.	LTS
Impair Implementation of or Physically Interfere with an Adopted Emergency Response Plan or Emergency Evacuation Plan	BFSP is currently closed to the public and does not create a need for implementing an emergency response plan or emergency evacuation plan. Once constructed, the Project would not interfere with any interstates, highways, or prime arterials that would serve as an emergency evacuation route.	NI	No mitigation is required.	NI
Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Wildland Fires	The Project is located within a Very High Fire Hazard Severity Zone (FHSZ). The Project does not include any habitable structures and Project occupants would be limited to park visitors. Restoration as part of the Project would introduce new potential sources of ignition during construction activities; however, an increase in riparian bank habitats would effectively create more inundated areas less susceptible to catching fire. Overall restoration activities would reduce fuel ignition and fire hazards.	LTS	No mitigation is required.	LTS
3.10 Hydrology and Water Quality				
Violate Water Quality Standards or Waste Discharge Requirements or Degrade Surface or Ground Water Quality	Construction activities would involve the use of heavy equipment and construction activities could potentially loosen existing surface soils and sediments, increasing the possibility of erosion during storm events. Water used for dust suppression has potential to generate runoff that could transport sediments and dissolved solids. The use of construction equipment onsite may involve the accidental release of fuel, oils, brake dust, lubricants, antifreeze, and other potentially hazardous substances at the Project construction site. The Project would be subject to compliance with the NPDES General Permit for Stormwater Discharge Associated with Construction and Land Disturbance Activities (Construction General Permit). The Construction General Permit would include the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Current segments of the road in the Project Area are seasonally flooded with sewage contaminated water and mud. The Project would relocate and elevate a segment of Monument Road to reduce sedimentation and flooding and would restore the surrounding, degraded wetlands around the road segment proposed for removal. After construction is complete and final stormwater management facilities are in place, the implemented runoff controls would maintain or improve the existing runoff conditions within the Project Area.	LTS	No mitigation is required.	LTS
Substantially Decrease Groundwater Supplies or Interfere with Groundwater Recharge	Construction-related water requirements would be associated with dust suppression and soil compaction during ground-disturbing activities. Restoration activities would not substantially decrease groundwater supplies such that the Project would impede sustainable groundwater management of the basin. The Proposed Project would increase the amount of impervious surface; however, much of the Project Area will remain permeable. The north-south alignment of Monument Road would be removed to allow for restoration of the surrounding wetland habitat. The Project would not substantially interfere with groundwater recharge.	LTS	No mitigation is required.	LTS

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Substantially Alter Existing Drainage Pattern of the Site or Area, which would: i. Result in Substantial Erosion or Siltation ii. Increase Rate or Amount of Surface Runoff Resulting in Flooding iii. Create Runoff Water Exceeding Capacity of Stormwater Drainage Systems iv. Impede or Redirect Flood Flows	Construction activities could potentially loosen existing surface soils and sediments, increasing the possibility that erosion might occur during storm events. Water for dust suppression during construction has the potential to generate runoff that could transport sediments and dissolved solids. The SWPPP prepared for the Project would include site-specific BMPs to minimize erosion onsite and reduce erosion and stormwater runoff. The amount of surface runoff as a result of the Proposed Project would not substantially increase in a manner that would result in on- or offsite flooding. The proposed culvert design is expected to allow more sediment to pass beneath Monument Road than existing conditions, thus reducing the sediment deposition rate south of Monument Road and contributing to a reduction in onsite flooding. Existing stormwater flows flood the Project Area with sewage contaminated water and mud. The Project would not create additional sources of polluted runoff and project-specific BMPs would be implemented for stormwater pollution control during construction. Project components would reduce sedimentation deposition and runoff flows from Goat and Yogurt canyons. All Project components would maintain the natural drainage pattern and would improve flood flows.	LTS	No mitigation is required.	LTS
In Flood Hazard, Tsunami, or Seiche Zones, Release of Pollutants due to Project Inundation	The Federal Emergency Management Agency Flood Insurance Rate Maps show that the Project Area is located in Zones A and AE of the Special Flood Hazard Areas (200-year and 100-year flood zone) and Area of Minimal Flood Hazard. The north-south segment of Monument Road currently experiences frequent flooding conditions and would elevate the east-west segment of the southern portion of Monument Road above the base flood elevation. The Project Area west of the existing north-south Monument Road alignment is within the tsunami hazard area. The City of Imperial Beach lies within the low-lying shoreline susceptible to tsunamis, however it is improbable that a damaging tsunami would strike the coast of southern California. There is no historical precedent for large damaging seiches in the San Diego region.	LTS	No mitigation is required.	LTS
Conflict with or Obstruct Water Quality Control Plan or Sustainable Groundwater Management Plan	The Project Area is located within the Tijuana Valley Hydrologic Area. Neither the nature of the Project nor the type of development proposed would be likely to conflict with the Basin Plan or obstruct implementation of its provisions. By adhering to conditions stipulated in the SWPPP and NPDES permit, water quality impacts would not result in violations to, conflict with, or obstructions of the Basin Plan. The Project does not include groundwater extraction and would not generate a demand for groundwater. The Project is located within the Coastal Plain of the San Diego groundwater basin which is designated as a low-priority basin by the State and is not one of the groundwater basins in the County where a sustainable groundwater management plan is adopted.	NI	No mitigation is required.	NI

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Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
3.11 Land Use and Planning				
Physically Divide an Established Community	The Project would be constructed within an existing State Park and the surrounding area is primarily used for open space and agriculture. The nearest populated community is approximately 2.8 miles northeast of the Project Area. The Project would not physically divide or restrict access to the nearest community, the Otay Mesa-Nestor Community Planning area or any other community.	NI	No mitigation is required.	NI
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 Proposed Project is consistent with applicable policies from the County of San Diego Local Coastal Program Land Use Plan, Tijuana River Valley Local Coastal Program Land Use Plan, City of San Diego General Plan, and the City of Imperial Beach Land Use Plan. Table 3.11-1 in the Land Use section details the policy consistency.	LTS	No mitigation is required.	LTS
3.12 Mineral Resources				
Loss of Availability of Known Mineral Resource of Value to the Region and State Residents	Portions of the Project Area are classified as Mineral Resource Zone 2. Sand and gravel deposits, designated as construction materials regionally significant to the County of San Diego, occur along the Tijuana River that flows north to the Project Area. Mineral extraction is not permitted within units of the State Park System and is protected as a State Park from activities of mineral extraction, and the Project would not result in a loss of availability of a known mineral resource.	NI	No mitigation is required.	NI
Loss of Availability of Locally Important Mineral Resource Recovery Site	As previously stated, mineral extraction is not permitted within units of the State Park System and therefore the Project Area is protected as a State Park from activities of mineral extraction. Implementation of the Proposed Project would have no impact on the availability of locally-important mineral resources.	NI	No mitigation is required.	NI
3.13 Noise				
Result in Generation of a Substantial Temporary or Permanent Increase in Ambient Noise Levels in Excess of Local General Plan Standards or Noise Ordinance, or Applicable Standards of Other Agencies	Construction noise associated with the Project would be temporary and would be associated with the operation of offroad equipment and construction vehicle traffic on area roadways. The nearest sensitive receptor is a single-family residence located approximately 0.81 mile east of the Project Area. The Project's contribution of construction noise combined with the ambient noise environment would not exceed the 75 A-weighted decibels (dBA) City of San Diego construction noise threshold during any phase of construction. The maximum number of Project construction trips would not exceed 205 daily trips total. The Project would not double existing traffic on Monument Road (2,347 daily vehicles); therefore, the Project would not result in a perceptible increase in traffic noise. The Project is not expected to generate more than 915 daily vehicle trips during operations. The Project would not double the current traffic volumes on nearby roadways (2,347 daily vehicles) and any increase in traffic noise would not be a perceptible increase in noise levels overall. Project improvements may increase park visitation and recreational activity; however, these uses are already established in BFSP. Any increase in activity would be consistent with what is typical for a regional park. The Project is not expected to generate noise levels higher than what currently occurs in the area.	LTS	No mitigation is required.	LTS

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Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Result in Generation of Excessive Groundborne Vibration or Groundborne Noise Levels	Construction vibration levels would not exceed 0.3 peak particle velocity at the nearest sensitive receptor, which is approximately 0.81 miles from the Project Area. Project operations would accommodate heavy-duty trucks (horse trailers); however, these vehicles would not generate groundborne vibrations that would result in excessive vibration levels. Groundborne vehicle impacts during operations would be negligible.	LTS	No mitigation is required.	LTS
Expose People Residing or Working in the Proposed Area to Excessive Noise Levels if Located within the Vicinity of a Private Airstrip or an Airport Land Use Plan or within 2 Miles of a Public Airport	The Project is located 1.36 miles south of the Imperial Beach Naval Outlying Landing Field. The Project is not within the 65 dBA Community Noise Equivalence Level (CNEL) noise contour and would not expose those visiting the Project Area to excessive aviation noise levels.	NI	No mitigation is required.	NI
3.14 Population and Housing				
Induce Substantial Unplanned Population Growth by Proposing New Homes or Extension of Roads or Other Infrastructure	The Proposed Project would improve the existing Monument Road to restore and maintain year-round access to BFSP and improve the health of the Tijuana River watershed. This would not induce substantial unplanned population growth either directly or indirectly. CDPR employs staff to maintain BFSP. No onsite housing is offered for employees and overnight camping is not allowed in the Park. Construction workers would commute to the Project Area from local and regional towns and cities, rather than relocate for the duration of construction.	NI	No mitigation is required.	NI
Displace Substantial Numbers of People or Housing	Construction and operation of the Project would not result in the displacement of existing homes, necessitating the need to construct replacement housing elsewhere. No people would be displaced.	NI	No mitigation is required.	NI
3.15 Public Services				
Substantial Adverse Physical Impacts from New or Altered Governmental Facilities to Maintain Performance Objectives for any of Public Services: • Fire Protection • Police Protection • Schools • Parks • Other Public Facilities	Construction and operation of the Project would not generate a need for new or expanded fire protection services or facilities. No new residences, buildings, structures, or facilities are proposed. The Project would not result in any population growth or substantial new operational activities that would require additional police protection services. No long-term operational workforce is proposed as part of the Project. The Project would not increase residential population such that a new or expanded school is required. The temporary increase of workers in the area is not expected to impact the use of existing Border Field State Park since it has been closed to public access due to flooding. Implementation of the Project would not result in the need for new or expanded park facilities.	LTS	No mitigation is required.	LTS

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Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
3.16 Recreation				
Increase the Use of Existing Neighborhood and Regional Parks or Other Recreational Facilities such that Deterioration of the Facility would Occur	BFSP is currently closed to public access due to seasonal flooding. The Proposed Project would restore and enhance existing recreational facilities to address flooding issues. The proposed improvements would allow the park to reopen to visitors. There would be a less than significant impact on other existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated.	LTS	No mitigation is required.	LTS
Include Recreational Facilities or Require Construction or Expansion of Recreational Facilities that would Adversely Effect the Environment	Once constructed, the proposed park improvements would accommodate coastal and inland recreational visitors and provide an improved and more cohesive experience. Since the Proposed Project involves restoration and enhancement of recreational facilities and would not result in substantial additional employees or population, no additional recreational facilities would be required to be constructed or expanded as a result of the Proposed Project.	LTS	No mitigation is required.	LTS
3.17 Transportation				
Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle, and Pedestrian Facilities	Construction and operation of the Proposed Project would not generate significant traffic; however, associated equestrian and road improvements would provide additional and improved coastal access within the Project Area. These circulation improvements would not induce substantial additional trips but would encourage multi-modal transportation, safe from flooding hazards. Therefore, the proposed improvements are consistent with adopted transportation plans and policies and impacts.	LTS	No mitigation is required.	LTS
Conflict or be Inconsistent with CEQA Guidelines Section 15064.3(b)	CEQA Guidelines Section 15064.3, subdivision (b) outlines that Vehicle Miles Traveled (VMT) is the most appropriate measure of transportation impacts and states that VMT refers to the amount and distance of automobile travel attributable to a project. The Proposed Project would not result in any changes to the land uses or transportation system within BFSP and no increase in VMT would occur. While the proposed park improvements may encourage access throughout BFSP, they would not create substantial new recreational opportunities compared to pre-closure conditions that would entice people to travel to the area and increase VMT. BFSP entrance would undergo minor redesign, however no new entrances to the Project Area would be constructed.	LTS	No mitigation is required.	LTS
Substantially Increase Hazards due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., Farm Equipment)	The Project would construct a new 30-foot-wide base road over the existing north-south alignment of unpaved road; elevate the existing east-west Monument Road segment to provide resiliency from sea level rise; install box culverts and headwall systems underneath elevated road segments to manage storm runoff from Goat and Yogurt canyons; and install driveway and parking lot improvements at the equestrian parking lot to further minimize wetland impacts. The proposed road improvements and installation of new road infrastructure would not increase hazards due to a design feature or incompatible uses because the Proposed Project would be designed and constructed in compliance with the California Department of Transportation (Caltrans) Highway Design Manual.	LTS	No mitigation is required.	LTS
Result in Inadequate Emergency Access	The Proposed Project's roadway elements would improve overall access throughout BFSP and would be designed based on the current Caltrans Highway Design Manual to accommodate a standard 45-foot bus template, improving access for emergency vehicles. Construction and operational activities would not impact emergency access as BFSP is currently closed to public access due to hazards from flooding.	LTS	No mitigation is required.	LTS

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Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
3.18 Tribal Cultural Resources				
Substantial Adverse Change in Significance of a Tribal Cultural Resource that is: i. Listed or Eligible for Listing in California Register of Historical Resources ii. A Resource Determined to be Significant Under PRC 5024.1. Consider Significance of Resource to California Native American Tribes	While the NAHC Sacred Lands File search was positive for the general area, the Project APE does not overlap the sacred site area. Tribal consultation throughout the project planning process indicates that the entire Project Area is sensitive for tribal cultural resources. Known tribal cultural resources include archaeological sites CA-SDI-222, Isolate P-37-02061, and the buried precontact components of CA-SDI-13485 and CA-SDI-16047. There is also the potential that additional un-identified tribal cultural resources are present within the Project Area.	PS	**TCR-1 (PSR):** An additional records search of ethnographic information held by the Campo Band of Diegueño Mission Indians shall be completed to ensure that all potential tribal cultural resources potentially present in or near the Project Area have been identified prior to the Project start. **TCR-2 (MM):** In the vicinity of CA-SDI-13485 and CA-SDI-16047, the maximum depth of Project excavation shall be constrained to 3 feet below current ground surface to ensure avoidance of known significant, intact tribal cultural resources. **TCR-3 (SPR):** A Kumeyaay cultural monitor and an archaeological monitor shall be present for all ground-disturbing activities associated with this Project to identify any tribal cultural resources that may be present subsurface in the Project Area. **TCR-4 (SPR):** If any potentially significant tribal cultural resources are encountered during Project work, work shall cease in the immediate vicinity until cultural resource specialists and tribal representatives can record and evaluate the resource and recommend appropriate treatment measures. Avoidance is the preferred treatment method for tribal cultural resources. **TCR-5 (PSR):** No artifact collection shall occur as part of this Project. **TCR-6 (PSR):** It is recommended that all soil/sediment removed during grading and trenching be kept within Border Field State Park and replaced as close as possible to its point of origin. If material from within an archaeological site boundary is redeposited outside of the site, the redeposit location(s) shall be recorded on DPR 523 site record update(s). **TCR-7 (SPR):** A DPR 523 site record or site record update form shall be prepared for any cultural resources newly identified or updated during the course of the Project.	LTSM
3.19 Utilities and Service Systems				
Result in Relocation or Construction of New or Expanded Water, Wastewater Treatment, or Stormwater Drainage, Electric Power, Natural Gas, or Telecommunications Facilities	During construction, water would be primarily used for dust suppression and soil compaction during ground-disturbing activities. Water is expected to be brought in by truck during construction and would not result in a long-term demand. The Project would not require or result in the relocation or construction of new or expanded water facilities. A minimal amount of wastewater would be generated from the construction of the Project. The Project would not require connection to any septic systems or sewer infrastructure. Temporary sanitary facilities such as portable restrooms would be provided during construction and would not require a water supply. The Project would include minimal excavation and grading during site preparation; however, the Project would be designed so the control of runoff would be maintained or improved over the runoff conditions currently found at the Project Area prior to construction. The Project would adhere to County stormwater requirements and NPDES permit requirements. Construction of the Project would not displace existing electrical facilities and would tie into existing facilities. Relocation of electrical facilities would not be required. Therefore, construction and installation of the new electrical infrastructure would potentially cause a temporary environmental effect on electrical power, the disturbance would be minimal and short-lived. No natural gas pipelines or telecommunication facilities are present within the Project Area. These facilities would not be required for the construction of the Project.	LTS	No mitigation is required.	LTS

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Have Sufficient Water Supplies to Serve the Project during Normal, Dry, and Multiple Dry Years	Short-term construction activities would require minimal water and are not expected to have adverse impacts to the existing water system or cause a demand that would result in the construction of new water treatment facilities or the expansion of existing facilities. Water is expected to be brought in by truck during construction. In addition, the construction contractor would comply with all State and local water conservation regulations and construction site best management practices would be implemented to reduce water use where feasible and ensure no inefficient water use occurs during construction.	LTS	No mitigation is required.	LTS
Adequate Capacity of Wastewater Treatment Provider to Serve the Project's Projected Demand	Wastewater treatment within the Project Area is provided by onsite wastewater treatment facilities and there are no current sewer connections serving the Project Area. The Project does not include habitable structures, and Project occupants would be limited to park visitors. No wastewater would be generated, and the septic system would continue to be utilized throughout the Project Area.	NI	No mitigation is required.	NI
Generate Solid Waste in Excess of State or Local Standards	Construction activities associated with the Proposed Project would generate solid waste as a result of culvert removal, curb removal, guard rail removal, clearing and grubbing brush and debris disposal. Generation of the construction debris and waste material would be short-term in nature and would not have the capability to substantially affect the capacity of regional landfills. The Project would also generate operational solid waste as a result of daily operations of visitor services. All waste within the Project vicinity is transported to the Otay Landfill, located approximately 9 miles from the Project Area. The landfill has the capacity to accommodate the Project's operational waste.	LTS	No mitigation is required.	LTS
Comply with Federal, State, and Local Management and Reduction Statutes and Regulations Related to Solid Waste	Construction activities would result in solid waste generation from culvert removal, curb removal, guard rail removal, clearing and grubbing brush and debris disposal. The proposed Project would comply with all statutes and regulations related to solid waste including California Green Building Standards Code Section 5.408, which require recycling or reuse of at least 50 percent of nonhazardous construction and demolition waste from nonresidential construction operations. Operation of park facilities would all be subject to federal, state, and local regulations to minimize the amount of waste material entering local landfills, including Assembly Bill (AB) 341 and AB 1826, which would reduce solid waste generated by these uses through implementation of recycling and organic waste recycling programs. These facilities would also replace existing similar uses and do not include any land uses that would generate substantial quantities of solid waste in conflict with federal, state, or local reduction requirements.	LTS	No mitigation is required.	LTS
3.20 Wildfire				
Substantially Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan	According to the County's Multi-Jurisdictional Hazard Mitigation Plan and County of San Diego Operational Area Emergency Operations Plan, the Project is not located within an identified evacuation route. Relocation of the north-south segment of Monument Road and elevation of the east-west segment result in a new aggregate-surfaced pavement that would be designed to accommodate large emergency response vehicles, such as fire trucks, to service BFSP and Monument Mesa. The Project does not include any development that would impair the use of nearby roadways or designated evacuation routes. Further, the Project does not include any habitable structures nor would the Project result in population growth in the region, which could affect emergency response.	LTS	No mitigation is required.	LTS

Table ES-1. Project Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

Issue	Impact	Significance Before Measures	SPRs, PSRs, and Mitigation Measure(s)	Significance After Measures
Exacerbate Wildfire Risks and Expose Project Occupants to Pollutant Concentrations from Wildfire or Uncontrolled Spread of Wildfire	The Project is located within a Very High FHSZ and topography of the Project Area exhibits a diverse coastal topography with salt marshes and sand dune formations. Within the Project Area, Goat Canyon and Yogurt Canyon exhibit steep hillsides and would be susceptible to additional risk associated with the rapid spread of wildfire. The Project does not include habitable structures, and Project occupants would be limited to park visitors. Habitat restoration of upland habitat could increase the spread of wildfire on and offsite. Restoration of the Project Area would introduce new potential sources of ignition during Project construction activities, as well as when final restoration conditions are achieved. However, an increase in riparian bank habitats would effectively create more inundated areas less susceptible to catching fire. Thus, restoration activities would further reduce the fuel ignition and fire hazards.	LTS	No mitigation is required.	LTS
Require Installation or Maintenance of Associated Infrastructure that may Exacerbate Fire Risk or Impact the Environment	The Proposed Project would demolish the existing pavement along the southern east-west segment of Monument Road, and design and construct a new aggregate-surfaced pavement, and a small section of asphalt concrete, along the proposed road alignment. The proposed improvements to the existing roadway, Monument Road, would be designed to reduce flooding and sediment deposition. The proposed design of Monument Road would accommodate trucks with horse trailers, large tour buses, and large emergency response vehicles, such as fire trucks. The proposed road widths (12 feet travel lanes) are designed based on the current Caltrans Highway Deign Manual. Therefore, the Project would result in improved access by fire and emergency vehicles. The Project would remove above grade fixtures and trench utilities underground. The new electrical lines would introduce new potential sources of ignition to the Project Area; however, the new electrical lines and water main would be placed underground, continuing power and service to the Project Area. The installation of utilities would additionally require clearing and grubbing of existing vegetation within the area. Therefore, the Project would not result in increased fire risks that could result in temporary or ongoing impacts to the environment.	LTS	No mitigation is required.	LTS
Expose People or Structures to Significant Risks (Downslope Flooding or Landslides, Post-Fire Slope Instability, Drainage Changes)	The Project does not include habitable structures, and Project occupants would be limited to park visitors. No overnight camping is permitted in the park. The Proposed Project would not disturb substantial slopes or other ground supporting features that could create unstable geologic conditions. It would not have the potential to induce or increase the risk of landslides. The Project would address seasonal flooding within the Project Area, which is caused by storm runoff flows from the nearby drainages of Goat Canyon and Yogurt Canyon. Roadway improvements would allow more sediment to pass beneath Monument Road than existing conditions, thus reducing the sediment deposition rate south of Monument Road and contributing to a reduction in flooding.	LTS	No mitigation is required.	LTS

Notes: NI = No Impact; LTS = Less than Significant; PS = Potentially Significant; SU = Significant and Unavoidable; SPR = Standard Project Requirement; PSR = Project Specific Requirement; MM = Mitigation Measure

1.0 INTRODUCTION

1.1 Purpose and Use of the EIR

This Draft Environmental Impact Report (EIR), which evaluates the environmental effects of the Border Field State Park (BFSP) Resilience, Access, and Habitat Restoration Project (Project; Proposed Project), has been prepared by the California Department of Park and Recreation (CDPR) in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (14 California Code of Regulations [CCR] Section 15000 et seq.).

CEQA was enacted by the California legislature in 1970. As noted under State CEQA Guidelines Section 15002, CEQA has four basic purposes:

1. Inform governmental decision-makers and the public about the potential significant environmental effects of proposed activities.
2. Identify the ways in which environmental damage can be avoided or significantly reduced.
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

An EIR is an informational document intended to inform members of the public and agency decision-makers of the significant environmental effects of a proposed project, identify feasible ways to reduce the significant effects of a proposed project, and describe a reasonable range of feasible alternatives to a project that would reduce one or more significant effects and still meet a proposed project's objectives. In instances where significant impacts cannot be avoided or mitigated, a proposed project may nonetheless be carried out or approved if the approving agency finds that economic, legal, social, technological, or other benefits outweigh the unavoidable significant environmental impacts.

CDPR has prepared this Draft EIR to identify and evaluate the potential environmental impacts associated with implementation of the Proposed Project. CDPR proposes to improve and relocate portions of Monument Road to address seasonal flooding of the existing roadway, plan for and establish resilience against the future effects of Sea Level Rise (SLR), and restore degraded wetland, riparian, and upland habitats.

1.2 Lead Agency

CEQA defines a *lead agency* as the public agency which has the principal responsibility of carrying out or approving a project that may have a significant effect upon the environment. This Draft EIR has been prepared by CDPR as CEQA Lead Agency in accordance with CEQA (PRC Sections 21000 et seq) and the State CEQA Guidelines (14 CCR Section 15000 et seq).

As the CEQA Lead Agency, CDPR has discretionary approval of the Proposed Project. The intent of this Draft EIR is to enable CDPR's key decision-makers, responsible agencies, and interested parties to understand the potential environmental effects of the Proposed Project.

Lead Agency Contact:

California Department of Parks and Recreation
Southern Service Center
2797 Truxtun Road, Barracks 26
San Diego, CA 92106
Contact: Lucas Serna
enviro@parks.ca.gov

1.3 Responsible Agencies

CEQA defines a *responsible agency* as a public agency, other than the lead agency, that is responsible for carrying out or approving a project (PRC Section 21069). The discretionary approval of the Proposed Project rests solely with CDPR. Other agencies that also have some authority or responsibility to issue discretionary permits for the Proposed Project are designated as responsible agencies. Potential responsible agencies for the Proposed Project may include the following:

- The California Department of Fish and Wildlife (CDFW) would be a Responsible Agency for any facility that entails construction within Waters of the State for which a Lake or Streambed Alteration Agreement is required pursuant to California Fish and Game Code Section 1602.
- The San Diego Regional Water Quality Control Board (RWQCB) would be a Responsible Agency for any facility that entails construction within Waters of the U.S. for which a Water Quality Certification is required pursuant to Section 401 of the Clear Water Act.
- The U.S. Army Corps of Engineers (USACE) would be a Responsible Agency for any facility that entails construction within Waters of the U.S. pursuant to Section 404 of the Clear Water Act.
- The California Coastal Commission (CCC) would be a Responsible Agency for any facility that may require a Coastal Development Permit.
- The San Diego Air Pollution Control District (SDAPCD) would be a Responsible Agency for any facility that may require a fugitive dust control plan, permit to construct, or permit to operate.

1.4 CEQA Overview

1.4.1 Environmental Review Process

During the preparation of an EIR, the CEQA review process consists of the following components in chronological order:

1) Public circulation of the Notice of Preparation (NOP) and a 30-day public scoping period
2) Preparation of the Draft EIR

3) Public circulation of the Notice of Completion/Notice of Availability and Draft EIR for a 45-day public review period

4) Preparation of the Final EIR and Response to Comments received on the Draft EIR

5) Filing of a Notice of Determination once the EIR is approved

1.4.1.1 Notice of Preparation

The state and federal processes begin similarly, with the filing of specified announcements that an environmental analysis is being prepared. Under CEQA, the EIR process is initiated by filing a NOP with the State Clearinghouse in the Governor's Office of Land Use and Climate Innovation, thus indicating that a Draft EIR will be prepared.

CDPR distributed the NOP for a comment period beginning on April 2, 2025, and ending on May 21, 2025. A public information meeting was held on April 17, 2025, at the Tijuana Estuary Visitor Center in the City of Imperial Beach.

Table 1-1 below summarizes the comments regarding the NOP. Fifteen comment letters were received by mail and email. Appendix A includes copies of the comment letters received.

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
Native American Heritage Commission (NAHC) (letter dated April 8, 2025)	The NAHC notes that Assembly Bill (AB) 52 and Senate Bill (SB) 18 may be applicable to the Project and both have tribal consultation requirements. If the Project is subject to National Environmental Policy Act, then Section 106 tribal consultation requirements may also apply. The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project as early as possible to avoid inadvertent discoveries of Native American human remains and to protect tribal cultural resources. The letter also summarizes portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.	CDPR notes the tribal consultation requirements applicable to the Project under AB 52. Pursuant to AB 52, CDPR is required to engage in formal government-to-government consultation with any tribes requesting consultation. A summary of tribal consultation efforts is provided in Section 3.18 Tribal Cultural Resources.
County of San Diego, Department of Environmental Health and Quality (letter dated April 16, 2025)	The County's Vector Control Program requests that the Draft EIR address potential impacts from possible mosquito breeding sources created by the Project and requests the Project be designed and constructed to minimize those impacts. Vector Control Program notes construction-related activities can create depressions that hold standing water and become a mosquito breeding source. Vector Control Program requests that habitat remediation be consistent with guidelines for preventing mosquito habitat creation. Vector Control Program notes it has the authority to order the abatement of mosquito breeding that occurs during construction or after project completion. The letter provides links to the County's Guidelines for Determining Significance for Vectors and to the State's Department of Public Health Best Management Practices (BMPs) for Mosquito Control.	The Project proposes to remove, upgrade, and relocate portions of Monument Road to address seasonal flooding in the north-south and lower east-west segments. The road realignment and installation of culverts would reduce flooding and standing water, thus reducing the potential for mosquito breeding sources.

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
Friends of Friendship Park (email dated April 20, 2025)	This letter expresses support for one of the Project's purposes of providing public access to BFSP. The letter summarizes the Park's role in the California State Parks system. The commenter states the EIR should include information about the history and significance of Friendship Park. The commenter also requests that Friendship Park is not referred to as Friendship Circle as this name has no historical precedent and is not used by community members on either side of the Border. The commenter states the pedestrian and equestrian use throughout BFSP should remain open during and after construction for access to the beach and Friendship Park.	CDPR thanks the commenter for supporting the Proposed Project. Information about the history of Friendship Park is provided in Section 2.0 Project Description. Proposed equipment access and staging will utilize the upper east-west segment of Monument Road, which is the main road into BFSP. Therefore, for the safety of visitors, pedestrian and equestrian trails will not be open during construction.
City of Imperial Beach (email dated April 21, 2025)	The City supports the Project goals outlined in the NOP, including the realignment of Monument Road and establishment of year-round access to BFSP. The letter notes that seasonal flooding and sediment accumulation make BFSP inaccessible for much of the year and states the Project offers a long-term solution that can enhance visitor experience, reduce maintenance burdens, improve emergency access, and protect sensitive habitats through better infrastructure design.	CDPR thanks the commenter for supporting the Proposed Project.
Nathan Trotter, Imperial Beach resident (email dated April 21, 2025)	The commenter requests that dogs be allowed along the access road to Monument Mesa. The commenter states there is less risk from dogs than either horses or State Border Patrol vehicles. They suggest signage, public outreach, and restrictions during tern and plover nesting seasons. The commenter suggests contacting other State Park managers for CDPR that permit dogs to see what problems they have faced. The commenter states these problems are negligible. The commenter requests expedited Project construction and states the Park has been inaccessible for too long and needs to be reopened.	Dogs are allowed in the parking lot on Monument Mesa, the picnic area, and are permitted on leash on the park road to Monument Mesa. Dogs are not allowed on the trails or on the beach. CDPR notes the commenter's request for expedited construction. Construction of the Proposed Project is anticipated to begin Spring 2026 and take approximately 12 months to complete.

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
Environmental Center of San Diego (email dated May 4, 2025)	This letter expresses strong support for the Proposed Project and urges expedited action to ensure year-round public access to BFSP. The commenter requests that the Draft EIR include the cultural and historical significance of Friendship Park, including the Binational Friendship Garden and Monument Circle. The commenter requests CDPR to continue referring to the park as Friendship Park. The commenter requests that pedestrian and equestrian trails remain open throughout construction to allow for public use and connection to the park and beach. The commenter requests regular public updates on the Project timeline, such as through the Tijuana River National Estuarine Research Reserve (TRNERR) quarterly newsletter.	CDPR thanks the commenter for supporting the Proposed Project. Information about the history of Friendship Park is provided in Section 2.0 Project Description. Proposed equipment access and staging will utilize the upper east-west segment of Monument Road, which is the main road into BFSP. Therefore, for the safety of visitors, pedestrian and equestrian trails will not be open during construction. Information about the Proposed Project is available on the CDPR CEQA notices website (https://www.parks.ca.gov/?page_id=983) as well as the TRNERR website (https://tijuanaestuary.org/about/public-notices/).
California Department of Fish and Wildlife (CDFW) (letter dated May 6, 2025)	CDFW recommends that if the Project wishes to pursue a Restoration Management Permit (RMP) then the EIR should incorporate additional habitat "uplift" to meet the RMP threshold which states Projects must have a substantial net benefit to native species or habitat above and beyond restoring baseline conditions. CDFW states the Project Area contains habitat which may support nesting or foraging for Crotch's bumble bee. CDFW recommends adding information regarding the protection status of Crotch's bumble bee; conducting biological surveys during flying season; and including avoidance, minimization, and mitigation measures for Crotch's bumble bee. CDFW states the Project Area contains suitable habitat for least Bell's vireo (LBVI) and notes documented occurrences from the California Natural Diversity Database. CDFW recommends protocol level surveys to determine presence or absence of the species and notes the EIR should provide full disclosure of the presence of LBVI and the Project's potential impact on LBVI.	Analysis regarding biological permits, sensitive species, surveys, and potential impacts to biological resources is discussed in Section 3.4 Biological Resources. The proposed equestrian area improvements are located in the western portion of the Project Area, away from LBVI territories. All 15 detected LBVI territories are located within the 500-foot buffer of the proposed realignment area or access routes, located in the eastern portion of the Project Area. Construction would impact a total of 0.802 acres of occupied LBVI habitat. Implementation of Standard Project Requirements BIO-1 through BIO-3 and Project-

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
	CDFW notes the Project Area supports California Endangered Species Act (ESA) listed species (LBVI) and California ESA–candidate species (Crotch's bumble bee). CDFW recommends a take authorization under California ESA prior to Project implementation. CDFW states the presence of horse stalls has the potential to attract brown-headed cowbirds, which are known to exploit anthropogenic food sources. This species can have significant negative impacts on native avian populations, including sensitive species present in the Project Area (LBVI). CDFW recommends that the Draft EIR evaluate and discuss the likelihood of increased cowbird presence, the potential impact on nearby native bird species, and CDPR's effort to manage cowbirds. CDFW states the Draft EIR must include a discussion of any inconsistencies with provisions of the City of San Diego's Multiple Species Conservation Program Subarea Plan. CDFW states the Draft EIR should provide an adequate, complete, and detailed disclosure about the effects which the Project is likely to have on the environment. CDFW recommends a complete description of the Proposed Project and Project alternatives. CDFW recommends to select Project designs and alternatives to avoid or minimize impacts to biological resources, to consider establishing setbacks from sensitive biological resources, and reducing a development footprint to retain unobstructed spaces for vegetation and wildlife. CDFW recommends a biological resources assessment and impact analysis of the flora and fauna within and adjacent to the Project Area. This includes botanical field survey visits throughout the growing season, floristic-based mapping, focused species-specific surveys, and wildlife and rare plant survey. CDFW recommends the Draft EIR discuss direct and indirect impacts expected to affect biological resources with specific measures to offset such impacts. The Draft EIR should address lighting, noise, wildlife corridors, drainage patterns, surface flows, soil erosion, land use and zoning designations, and cumulative impacts on biological resources.	Specific Requirement BIO-4 will ensure impacts to LBVI remain less than significant. Through ongoing, annual protocol surveys for LBVI and CAGN, occurrences of the Brown-Headed Cowbird are being tracked within BFSP.

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
	CDFW recommends avoidance of vegetation clearing during peak avian breeding season and provides mitigation language if Project construction is necessary during the bird breeding season. CDFW notes the Draft EIR should include compensatory mitigation measures for the Project's significant impacts to biological resources. They also note that any areas identified as mitigation lands should include measures to protect the targeted habitat values in perpetuity. CDFW notes they generally do not support the use of translocation or relocation as the primary mitigation strategy for unavoidable impacts to endangered, rare, or threatened plants and animals. CDFW notes that a Scientific Collecting Permit would be necessary if there is a plan to capture and relocate wildlife. CDFW provides information about Lake and Streambed Alteration Agreements (LSAA) and includes a link to CDFW's LSAA website. CDFW encourages avoidance of wetland resources as a primary mitigation measure and discourages the development or type conversion of wetlands to uplands. A project should include mitigation measures to assure a "no net loss" of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. CDFW also recommends avoidance of water practices and structures that use excessive amounts of water, and minimization of impacts that negatively affect water quality, to the extent feasible. CDFW recommends CDPR provide a native plant palette for the Project and disclose and evaluate the Project's landscaping plan in the Draft EIR for potential impacts on biological resources.	

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
Maria Teresa Fernandez (email dated May 16, 2025)	The commenter recounts 20 years of walking along the closed Monument Road which was often flooded. The commenter provides experiences traveling to Friendship Park, including falling while traversing muddy paths, falling off a bicycle while navigating flooded areas, and observing families attempting to cross the same terrain. They note the mud and water makes it difficult to reach Friendship Park. The commenter notes that the spread of polluted water to new areas led to the closure of BFSP and the reduced access to the Park. The commenter asks for an estimated completion date for the repairs that will allow vehicular access again. The commenter is interested in accessibility plans for BFSP users once the road is fixed and which users will be able to access the road (such as bicyclists, horse riders, hikers, walkers, runners, bird watchers, native plant observers, surfers, and others).	CDPR notes the difficulty experienced by the commenter over the last 20 years while navigating the flooded and muddy paths in BFSP. The Proposed Project will address seasonal flooding of the roadway through the proposed realignment of Monument Road, elevation of portions of the roadway, and installation of box culverts and headway systems. Construction of the Proposed Project is anticipated to begin Spring 2026 and take approximately 12 months to complete. The improved Monument Road will be accessible to pedestrians and vehicles.
Outdoor Outreach (letter dated May 20, 2025)	The commenter expresses support for the Proposed Project and supports the expedited implementation of the Project to ensure year-round access to BFSP. The letter notes the Park's closure for 20 months due to flooding has deprived local residents of one of the few accessible public parks in the region. The commenter notes the Project will address long-standing access issues by rerouting the road out of the wetlands. The commenter also notes the cultural, historical, and ecological significance of BFSP and Friendship Park. The commenter requests that the Draft EIR include comprehensive information about the cultural and historical significance of Friendship Park, including Binational Friendship Garden, Monument Circle, and the adjacent beach area. The commenter requests CDPR to use the long-standing name of "Friendship Park" rather than "Friendship Circle". The commenter requests access to pedestrian and equestrian trails during and after construction as the trails provide an alternative route to Monument Mesa and the beach. The commenter urges CDPR to accelerate the timeline for completing the EIR, securing permits, and beginning construction.	CDPR thanks the commenter for supporting the Proposed Project. CDPR acknowledges that seasonal flooding of the roadway has resulted in the closure of BFSP that has restricted public access. Information about the history of Friendship Park is provided in Section 2.0 Project Description. Proposed equipment access and staging will utilize the upper east-west segment of Monument Road, which is the main road into BFSP. Therefore, for the safety of visitors, pedestrian and equestrian trails will not be open during construction. Construction of the Proposed Project is anticipated to begin Spring 2026 and take approximately 12 months to complete.

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
Tijuana River Valley Equestrian Association (email dated May 20, 2025)	The commenter expresses support for the realignment of Monument Road, habitat restoration, and improved equestrian staging area. The commenter suggests additional improvements for the equestrian area, including (1) one or two standpipes with potable water so equestrians can fill water buckets for horses (2) signage to remind visitors to clean up after their animals and haul out manure (3) signage instruction non-equestrian vehicles to use parking spaces up on Monument Mesa.	CDPR thanks the commenter for supporting the Proposed Project. The suggestion for additional equestrian area improvements does not relate to any environmental concern to be addressed in the CEQA document. However, it is noted here for the consideration of decision-makers.
Tijuana River Valley Equestrian Association (email dated May 20, 2025)	This letter provides an additional comment to a previously submitted letter (see above). The commenter requests renovation or replacement of the restroom near the equestrian staging area. They note that horses are not allowed on Monument Mesa (nearest current restroom) and it is impractical to unhitch their horse trailers to drive up to Monument Mesa for a restroom. They also note the walk up the hill to Monument Mesa is long and steep.	Renovations to the restroom near the equestrian staging area is outside the scope of this project.
Daniel Watman (email dated May 21, 2025)	The commenter expresses agreement with the Friends of Friendship Park letter emailed to CDPR on April 20, 2025. The commenter expresses support for fixing Monument Road and habitat restoration. The commenter notes frequent road closures over 20 years and asks what future measures will be taken so future mitigation needs are taken care of in a more reasonable timeline. The commenter states that there should be improved cross-border coordination and open, regular communication with environmental and governmental partners in Mexico.	CDPR thanks the commenter for supporting the Proposed Project. The Proposed Project would remove, upgrade, and relocate portions of Monument Road to maximize resilience of the road from the effects of future SLR and address seasonal flooding of the roadway. Coordination with Mexico's government to address historic, current, and future cross-border flows is an ongoing effort.

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
John Gabaldon (email dated May 21, 2025)	The commenter expresses agreement with Tijuana River Valley Equestrian Association's emails dated May 20, 2025.	This comment is noted.
Sierra Club, San Diego Chapter (letter dated May 21, 2025)	The commenter urges swift action to restore public access to BFSP. The commenter states the Park's frequent closure is due to the low elevation of the access road through the wetlands and worsening of cross-border flooding. The commenter states there is a need to raise the road and enable year-round access. The commenter notes that BFSP's closure restricts access to Friendship Park. The commenter requests CDPR to complete the EIR, secure all necessary permits, and begin construction as soon as possible. The commenter requests regular public updates on the Project's timeline and suggests using the TRNERR quarterly newsletter or other appropriate channels.	CDPR notes the commenter's request for swift action to restore park access. Proposed Project features will relocate the existing north-south segment of Monument Road and elevate the east-west segment of Monument Road to maintain consistent public access. Construction of the Proposed Project is anticipated to begin Spring 2026 and take approximately 12 months to complete. Information about the Proposed Project is available on the CDPR CEQA notices website (https://www.parks.ca.gov/?page_id=983) as well as the TRNERR website (https://tijuanaestuary.org/about/public-notices/).
Surfrider Foundation (letter dated May 21, 2025)	The letter introduces the Surfrider Foundation and its advocacy to solve the transboundary pollution issue in the Tijuana River Watershed that has resulted in an over 3-year beach closure at BFSP. The commenter expresses support for the Project's objectives of coastal resilience and access improvements. The commenter requests the Draft EIR to consider water quality, air quality, hydrology, geology and soils, and hazardous materials. The commenter requests information regarding the following items: • Plans for stormwater conveyances, diversions, etc.	CDPR thanks the commenter for supporting the Proposed Project. The Draft EIR includes analysis for hydrology and water quality (Section 3.10), air quality (Section 3.3), geology and soils (Section 3.7), and hazards and hazardous materials (Section 3.9). Discussions of stormwater conveyance, diversions, flood flows, culverts, and sea level rise resiliency

Table 1-1. Summary of Comments Received in Response to the Notice of Preparation

Commenter/ Agency	Area of Controversy/Summary of Content	Response
	• Impact of stormwater conveyances, diversions, etc. on flows • Will increased or decreased flows affect the performance of the proposed box culverts • Culvert stormwater capacity, maintenance requirements, likelihood of overwhelming culverts • Potential for culverts to increase the amount of untreated wastewater that flows into the Tijuana River Valley and ocean near BFSP • Detailed location of each culvert and explanation on why certain locations were chosen The commenter requests the Draft EIR consider the following questions and items in the public services, recreation, and transportation sections: • What levels of rain will prompt closures of the new accessways? • How resilient is the design to sea level rise? • Utilize the Ocean Protection Council (OPC) 2024 Sea Level Rise Guidance manual and provide an analysis of sea level rise resiliency over a 75-year project life • Bilingual signage along the proposed access routes to inform the public of water and air quality concerns and their potential impact on human health. Include similar information on relevant websites and at the Tijuana Estuary Visitor Center. The commenter requests the Draft EIR's biological resources section to include an analysis and/or recommendations for BMPs to avoid impacts to wildlife during construction and at Project buildout.	are provided in Section 3.10 Hydrology and Water Quality. Additionally, a description of the proposed culverts is provided in Section 2.0 Project Description. Locations of proposed culverts are provided in the site plans (Appendix I). The SLR Report prepared for the Proposed Project utilized OPC's 2018 State of California SLR Guidance manual as it was the most recent state-level guidance on future SLR at the time of report preparation. Section 3.4 Biological Resources provides an analysis of potential impacts to biological resources and provides Standard Project Requirements and Project-Specific Requirements to address construction-related impacts. The suggestion for signage is unrelated to any environmental concern to be addressed in the CEQA document. However, it is noted here for the consideration of decision-makers.

1.4.1.2 Draft EIR

CDPR is distributing this Draft EIR for comment to the public agencies and interested groups, in addition to any others that have requested to be on the Project mailing list. The Draft EIR is also available for public review electronically on CDPR's website: https://www.parks.ca.gov/?page_id=983 and available for review at the following physical location(s):

Department of Parks and Recreation, San Diego Coast District
4477 Pacific Highway
San Diego, CA 92110

and

Department of Parks and Recreation, Tijuana Estuary Visitor Center
301 Caspian Way
San Diego CA 91932

A period of 45 days has been established for public review of the Draft EIR for the Proposed Project, starting November 24, 2025 through January 9, 2026. Agencies, organizations, and individuals are invited to comment on the information presented in the Draft EIR during this period. Specifically, comments are requested on the scope and adequacy of the environmental analysis presented in this Draft EIR and not on the prior Initial Study. All comments on the Draft EIR should be sent to the following contact:

Lucas Serna, Associate Park & Recreation Specialist
Department of Parks and Recreation, Southern Service Center
2797 Truxtun Road, Barracks 26
San Diego, CA 92106
Email: enviro@parks.ca.gov

1.4.1.3 Final EIR

Following the 45-day public review period, CDPR will prepare responses to all comments and will compile these comments and responses into the Final EIR. The Decision-Making Body will consider the information in the Draft and Final EIR during Project review and when deciding on the Proposed Project. The Final EIR will need to be certified as complete by the Decision-Making Body prior to deciding on the Proposed Project.

1.5 Organization of the Draft EIR

The Draft EIR is organized as follows:

- *Executive Summary*. This section provides a summary of the major conclusions of the Draft EIR, areas of controversy, and the issues to be resolved and how to comment on the Draft EIR, which includes the listing of the responsible agencies, lead agency contact information, a one paragraph abstract of the Draft EIR, and the date by which Draft EIR comments must be received.

- *Chapter 1. Introduction.* This chapter provides general background on the Project; identifies the purpose and need for action including the Project objectives; describes the roles of agencies having discretionary approval and authorities regulating various aspects of the Project; and summarizes the public involvement process for the Project.
- *Chapter 2. Project Description.* This chapter provides a description of the Project location, Project objectives, and the elements of the Proposed Project.
- *Chapter 3. Environmental Impact Analysis.* This chapter describes the regulatory setting, affected environment (existing conditions), and impact analysis approach for each environmental resource. Each resource section also contains a comprehensive analysis and assessment of impacts (direct, indirect, and cumulative) of the Proposed Action/Proposed Project and other alternatives.
- *Chapter 4. Other Environmental Considerations.* This chapter describes other topics mandated by federal requirements and CEQA, including a description of unavoidable significant adverse impacts, any significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts.
- *Chapter 5. Alternatives.* This chapter describes the alternatives development and screening process conducted for the Project. It also presents a range of reasonable Project alternatives that address the stated purpose and need for the Project, including the Proposed Action/Proposed Project and No Action/No Project Alternative. It also identifies and explains why some alternatives were considered but not analyzed in detail. This chapter compares alternatives and describes the preferred alternative and the Environmentally Superior Alternative pursuant to CEQA requirements.
- *Chapter 6. List of Preparers and Persons Consulted.* This chapter provides a list of preparers, which includes CDPR and consultants. This chapter also identifies the persons, groups, agencies, and other governmental bodies that were consulted or that contributed to the preparation of the EIR and lists agencies, organizations, and persons to whom the EIR will be sent or has been sent.
- *Chapter 7. References.* This chapter provides the references used in preparing the EIR.
- *Appendices.* This chapter contains information that supplements or supports the analyses in the body of the EIR.

1.6 Anticipated Permits and Approvals

This Draft EIR may also be used by other public agencies to issue approvals and permits related to the Proposed Project. Table 1-2 provides a list of the anticipated agency approvals required to implement the Proposed Project. The types of actions that these agencies, as well as other agencies not included on this list, may take in connection with this Draft EIR include, but may not be limited to, the following:

- Approve, adopt, or amend applicable plans, policies, or programs
- Make findings of consistency
- Approve and issue permits

- Approve agreements
- Provide authorization and approval of funding
- Provide service

Table 1-2. Required Permits and Approvals

Agency	Permit or Approval
Federal	
U.S. Army Corps of Engineers (USACE)	• Section 404 Nationwide Permit 14 and 27 (33 U.S. Code [USC] 1344)
State Historic Preservation Officer/Tribal Historic Preservation Officer (SHPO/THPO)	• Section 106 Consultation with SHPO/THPO (36 Code of Federal Regulations 800)
U.S. Fish and Wildlife Service (USFWS)	• Section 7 Consultation under the Endangered Species Act (16 USC 1531-1544)
State	
California Coastal Commission	• Coastal Development Permit
California Department of Fish and Wildlife	• Section 1602 Streambed Alteration Agreement • Incidental Take Permit under Section 2081 of the California ESA • Restoration Management Permit (Covers 1602 and ITP)
Regional Water Quality Control Board (RWQCB), San Diego Region (Region 9)	• Water Quality Certification under Section 401 of the Clean Water Act
State Lands Commission	• Notification/approval under existing lease
Regional/Local	
San Diego Air Pollution Control District (SDAPCD)	• Authority to Construct/Permit to Operate
San Diego County Department of Parks and Recreation	• Issue Right of Entry
City of San Diego	• Flood Impact Coordination (No Rise Certification)
City of Imperial Beach	• Flood Impact Coordination (No Rise Certification)

1.7 Technical Studies

The analysis contained in this EIR is supported by the following Project-specific technical reports:

- Hydrology and Sedimentation Report, Border Field State Park Renovations for Public Use (May 2022) (Moffatt & Nichol [M&N] 2022a; Appendix B)

- Sea Level Rise Report, Border Field State Park Renovations for Public Use (May 2022) (M&N 2022b; Appendix C)
- Air Quality & Greenhouse Gas Emissions Assessment for the Border Field State Park Resilient Access and Habitat Restoration Project (June 2025) (ECORP Consulting, Inc. 2025; Appendix D)
- Biological Technical Report for the Border Field State Park Resilience, Access, and Habitat Restoration Project (2025) (Nordby Biological Consulting [Nordby] et al. 2025; Appendix E)
- Cultural Resources Assessment Report for the Resilience, Access, and Habitat Restoration Project at Border Field State Park (2025) (CDPR 2025b)
- Note: Due to the sensitive nature of cultural resources and their records and documentation, which are restricted from public distribution by state and federal law, the Draft EIR appendices do not include the cultural resources report.
- Geotechnical Investigation, Border Field State Park Renovations (October 2023) (NOVA Services 2023; Appendix F)

The results of these studies are discussed in Section 3.3 Air Quality, Section 3.4 Biological Resources, 3.5 Cultural Resources, 3.6 Energy, 3.7 Geology and Soils, 3.8 Greenhouse Gas Emissions, 3.10 Hydrology and Water Quality, and Section 3.18 Tribal Cultural Resources

2.0 PROJECT DESCRIPTION

2.1 Project Location and Setting

Border Field State Park is located at 1500 Monument Road in the cities of San Diego and Imperial Beach in the extreme southwestern corner of California, immediately north of the U.S./Mexico International Border. The Park is part of the larger TRNERR, which is approximately 2,500 acres in size. Monument Road, stretching over 1.2 miles, is BFSP's sole public access entrance road. The Project, as proposed, consists of a road alignment that begins roughly 1,100 feet east of the existing entrance kiosk, passes over the Goat Canyon sediment basins, runs along the base of Bunker Hill, and connects to the lower east-west segment of Monument Road. Site elevations along the proposed alignment range from approximately 45 feet above msl at Goat Canyon to approximately 10 feet above msl at the connection to the lower east–west segment of Monument Road. Figure 2-1 shows the Project Area location and vicinity. See Table 2-1 and Figure 2-2 for the Assessor's Parcel Numbers (APNs) within the Project Area.

Table 2-1. Project Area APNs

662-020-19-00	663-020-01-00
662-020-23-00	663-020-09-00
662-020-24-00	663-020-12-00
662-030-07-00	663-020-15-00

2.2 Project Background

2.2.1 Border Field State Park

Border Field State Park is located 15 miles south of San Diego at the most southwestern corner of the United States. Prior to its establishment as a park, the area was historically used for military activities since the early 1900s. The Navy leased land at Border Field in 1929 for summer fleet air exercises and as an emergency landing field, and by 1942 the area was designated as Border Field Naval Operating Base (Hughes 2010; USACE 2015; Van Wormer 2005). Onsite gunnery operations ceased in 1961. In 1971, the 372-acre property was turned over to the State of California, the Navy-era buildings were demolished, and the area became BFSP (Bevil 2002; USACE 2015; Van Wormer 2005). More historical information on Border Field State Park is provided in Section 3.5 *Cultural Resources* of this DEIR.

Managed by CDPR, BFSP now provides visitors with scenic views of the beach and Tijuana Estuary, hiking trails, picnic areas, horse corrals, barbecues, interpretive displays, and restrooms. As BFSP is located within the TRNERR, the Park also contains important wildlife habitat, such as sand dunes and salt marshes, for critically threatened and endangered bird species. Visitors can enjoy activities such as hiking, biking, horseback riding, photography, and bird-watching within the Park and can also utilize the trails to access the beach (California State Parks 2025a).

2.2.1.1 Monument Mesa

Monument Mesa is a picnic area located in the southwest corner of BFSP near the international border. This 4-acre area provides views of the ocean, estuary, and Playas de Tijuana, Mexico. A paved parking area is also available at this location (TRNERR 2025).

Monument Mesa holds Border Monument #285 which was erected in 1851 and marks the exact location where the United States and Mexico agreed to draw the international border. The monument is 15 feet tall and made of Italian marble installed on a mortared brick base (Van Wormer 2005; Hughes 2008). Today, access to Border Monument #285 is restricted due to the fences at the international border; however, the monument can be accessed through Mexico's Playas de Tijuana neighborhood (California State Parks 2025a).

Monument Mesa is also considered an important site for the Kumeyaay as it is centrally located in their territory, which is divided by the international border. More historical and cultural information on Monument Mesa is provided in Section 3.5 *Cultural Resources* of this DEIR.

2.2.1.2 Friendship Park

Once a part of Monument Mesa, Friendship Park was a bi-national park divided by the international border. Friendship Park featured a paved circle around Border Monument #285 and was a popular place for friends and relatives to visit each other through the border fence. Under the Secure Fence Act of 2006, which authorized the seizure of land along the international border and subsequent construction of additional border fencing, ownership of the area containing Friendship Park was transferred to the Department of Homeland Security (DHS). Following the acquisition, DHS's 2008/09 Border Infrastructure Project constructed a 130-foot-wide double fence corridor along the international border, restricting access to Friendship Park on the U.S. side. U.S. Customs and Border Patrol (CBP) now manages the corridor area and adjacent patrol road. As of February 2020, the U.S. side of Friendship Park is closed to the public per CBP order (TRNERR 2012, 2025a). Friendship Park, known as El Parque de la Amistad in Mexico, is accessible through Mexico's Playas de Tijuana neighborhood.

Friendship Park is no longer within BFSP boundaries and will not be affected by construction or operation of the Proposed Project.

2.2.2 Tijuana Estuary

The Tijuana Estuary is located at the southwest corner of the United States where the Tijuana River drains an approximately 1,700-square-mile watershed, a large portion of which is located within Mexico. The Tijuana Estuary is the largest, most intact coastal wetland in the region and provides habitat for sensitive, threatened, and endangered plants and animals, including resident and migratory wildlife. Disturbances to the estuary in recent history include an increased volume of frequently contaminated freshwater inputs, sedimentation, trash, and impacts from activities associated with the United States Customs and Border Protection, the United States military, and agricultural uses. It is estimated that over 2,500 acres of estuarine wetland and high marsh existed in the area in the mid-1800s but have since experienced significant negative effects to the structure and function of the wetland habitat and native wildlife species

that depend on this ecosystem. Overall, an approximately 50 percent decrease in subtidal and mudflat, and a 42 percent decrease in salt marsh have occurred in the last 150 years (AECOM 2023).

According to the California State Coastal Conservancy (CSCC), a key element in the restoration of the Tijuana Estuary has been to return the estuary to its historic state when tidal flushing was self-maintaining. The estuary's tidal prism, or volume of water in an estuary between mean high tide and mean low tide, has significantly decreased since 1852, which caused the entrance channel to become unstable and susceptible to closure. The entrance channel closed in 1984, causing the elimination of tidal flows and a change in the estuary's hydrologic systems. Reduced circulation resulted in water quality deterioration, changes in salinity, increased algal blooms, habitat reduction for biological species, and public nuisance problems, such as odors and mosquitos (CSCC 1991). Restoration projects, such as the Tijuana Estuary Tidal Restoration Program (TETRP), were implemented in the early 2000s to increase tidal marsh and willow-dominated riparian habitat to benefit the estuary's biological resources, especially endangered species habitat, water quality, and surface water hydrology. The TETRP is designed to increase salt marsh habitat and restore tidal flushing to areas of the estuary that have been silted-in over the past few decades (CSCC 1991).

The TETRP II Phase I Project has been designed to restore coastal wetlands and associated native uplands within the southern arm of the Tijuana Estuary on portions of both BFSP and the Tijuana Slough National Wildlife Refuge. Specifically, the TETRP II Phase I Project was designed to restore approximately 82 to 87 acres within the study area to increase the tidal prism of the estuary by restoring habitat structure and function to salt marsh, mudflat, and tidal channels, as well as transitional and upland habitats that have been degraded over the past several decades.

Within BFSP, the Tijuana Estuary is bisected by Monument Road, an asphalt road running north-south through the estuary to provide public access to the Park. This segment of the road is seasonally flooded by polluted stormwater runoff from Goat Canyon, Yogurt Canyon, and local overland flow.

2.2.3 Seasonal Flooding

Monument Road is subject to seasonal flooding in several locations. Within the southern portion of the alignment, flooding is caused by storm runoff flows from Goat Canyon and Yogurt Canyon. Both Goat Canyon and Yogurt Canyon convey flows from Tijuana, Mexico northerly into the United States. As the only access road through BFSP connecting visitors to Monument Mesa, Monument Road has been damaged by years of cross-border sedimentation and flooding resulting in road closures for eight (8) months out of the year and more recently for even longer periods of time. Currently, BFSP remains temporarily closed. Failure of the Hollister Street Pump Station in June 2024 has resulted in trans-boundary flows through BFSP. The roads and trails may be flooded with sewage contaminated water and mud. Out of precaution and public safety, the park is closed to hiking, biking, equestrian activity, and vehicles until further notice. CDPR is actively working to increase access to the park unit.

In response to this flooding, CDPR developed the Goat Canyon sediment basins to protect the Tijuana Estuary and other Park infrastructure. The sediment basins have successfully protected the estuary since 2005; however, damage to the road from many years of flooding has not been resolved. Efforts to repair Monument Road in 2005 were determined to be infeasible due to CCC concerns regarding wetland

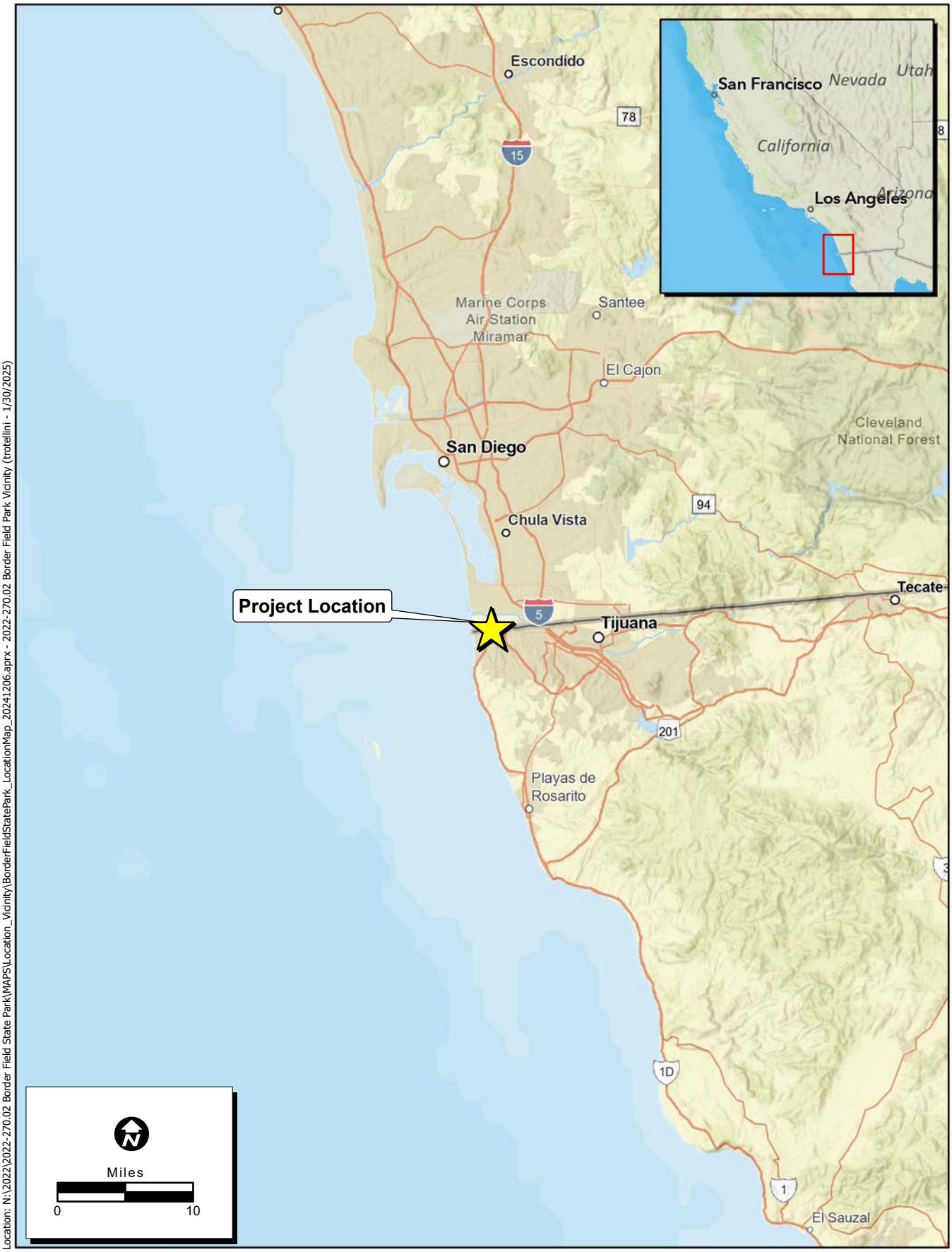
impacts and associated mitigation that would be required; therefore, the road has remained in a seasonally flooded condition since that time. Planning and design to establish year-round vehicular access was initiated in 2016 and long-remained in the preliminary planning phase due to substantial regulatory and Project cost constraints. Erosion and sedimentation associated with trans-border canyons and trans-boundary flows are recognized as critical physical factors that contribute to the loss of habitat within the Tijuana Estuary, as well as tidal prism reduction. Existing sediment basins in Goat Canyon remain effective but require periodic maintenance and sediment removal. M&N's Hydrology and Sedimentation Report identifies sedimentation rates from stormwater flows out of Goat Canyon and Yogurt Canyon to inform roadway and culvert design for preventing seasonal flooding and for roadway maintenance purposes. Based on the sedimentation rate of Goat Canyon and scaling down to the drainage area of Yogurt Canyon, an annual sedimentation rate ranging from 250 to 15,500 tons per year was estimated (M&N 2022a; Appendix B).

2.2.4 Sea Level Rise

The Project Area is also susceptible to SLR due to its location along the coastline and the effect of flooding from significant coastal storms. The Sea Level Rise Report prepared for the Proposed Project summarizes the potential for SLR to impact the Project Area based on a review of existing data and available studies (M&N 2022b; Appendix C). Previous studies conducted by the TRNERR's Climate Understanding and Resilience in the River Valley Project and UCI's FloodRISE hydraulic and hydrologic model were used in the analysis. At the time of the preparation of the SLR Report, OPC's 2018 State of California Sea Level Rise Guidance represented the most recent state-level guidance on future SLR for the Project (OPC 2018). The OPC Guidance SLR projections indicate:

- A 6 percent chance that SLR will meet or exceed 3 feet in San Diego by 2080 under a high greenhouse gas (GHG) emissions future.
- A 2 percent chance that SLR will meet or exceed 3 feet in San Diego by 2080 under a low GHG emissions future.

The Project Area is not inundated by high tides nor king tides. SLR does, however, have the potential to exacerbate storm flooding of the Project Area. The Sea Level Rise Report determined that the flood boundaries of 1-year and 100-year storms extend further inland as sea levels rise. Under 3.3 feet of SLR, a scenario that is relevant to the 75-year life span of the Project, the existing Monument Road is likely to experience more frequent and higher magnitude flood events, which is reflected by the steadily expanding closure period. It should be noted that since August 2023, the Park has been closed to the public due to storm damage from Hurricane Hilary that contributed to failures of the South Bay International Wastewater Treatment Plant infrastructure resulting in an early seasonal closure. Subsequent storms through the winter of 2023 compounded the initial damage to the park and extended the closure.



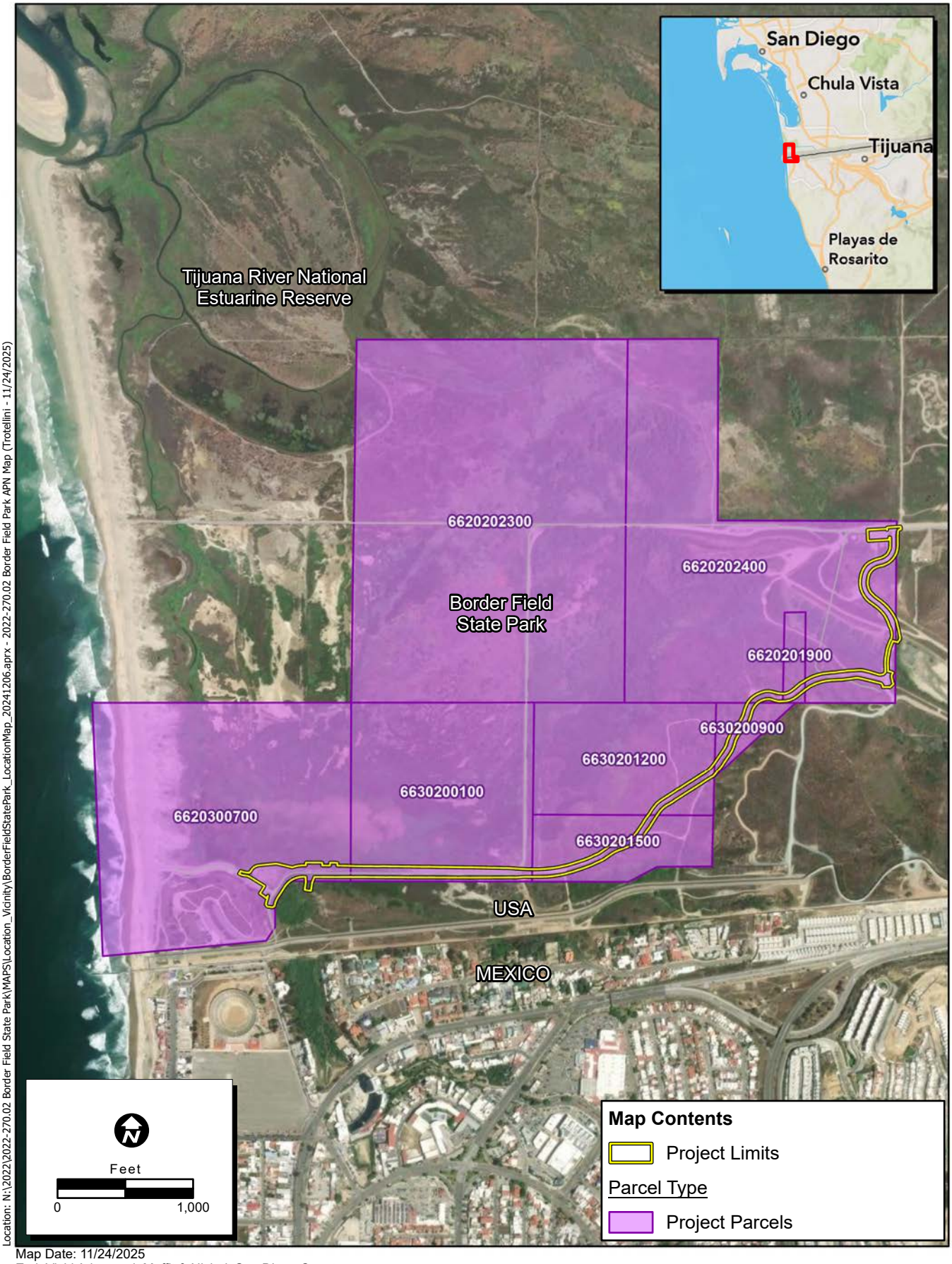
Location: N:\2022\2022-270.02 Border Field State Park\MAPS\Location_Vicinity\BorderFieldStatePark_LocationMap_20241206.aprx - 2022-270.02 Border Field Park Vicinity (trotellini - 1/30/2025)

Map Date: 1/30/2025
Sources: Esri, Vivid Advanced, Moffit & Nichol

Figure 2-1: Vicinity Map

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project



Location: N:\2022\2022-270.02 Border Field State Park\MAPS\Location_Vicinity\BorderFieldStatePark_LocationMap_20241206.aprx - 2022-270.02 Border Field Park APN Map (Trotellini - 11/24/2025)

Map Date: 11/24/2025
Esri, Vivid Advanced, Moffit & Nichol, San Diego County

Figure 2-2 Project Area APNs

2.3 Project Purpose and Objectives

CDPR proposes to remove, upgrade, and relocate portions of Monument Road to improve the health and function of the Tijuana Estuary watershed; maximize the resilience of Monument Road from the effects of future SLR; and address seasonal flooding of the existing roadway to improve coastal public access to BFSP. Flooding prevents public access to BFSP and Monument Mesa, which is caused by storm runoff flows primarily from the nearby drainages of Goat Canyon and Yogurt Canyon that convey flows from Tijuana, Mexico, northerly into the United States. These flows result in continual flooding of both the north-south and east-west portions of the existing roadway.

The Project proposes to improve the health and function of the watershed by removing the existing 2,370-foot asphalt segment of Monument Road, which runs north-south through the park, and restoring the surrounding, degraded wetlands. The Project also proposes to improve public coastal access to BFSP, including Monument Mesa, by upgrading the road and relocating portions of Monument Road. The improvements would largely elevate segments of Monument Road above the base flood elevation, thus establishing resilience against the future effects of SLR, while restoring degraded wetland habitats. The Project would include the realignment of a segment of Monument Road and installation of box culverts and headwall systems.

Upon implementation, the Proposed Project would achieve the following objectives:

- Resilience:
  - Increase Monument Road's, and therefore BFSP's, resilience against annual flooding and long-term coastal sea level rise.
  - Improve hydrologic connectivity for waters flowing from the Goat Canyon and Yogurt Canyon drainages.
- Access:
  - Restore and maintain safe, year-round multi-modal access to key areas of BFSP, including the Monument Mesa Day Use Area and the Park's shoreline.
- Habitat Restoration:
  - Improve biological connectivity and habitat areas for migratory, sensitive, threatened, and endangered plants and wildlife by restoring areas of degraded wetland, riparian, and upland habitats.

2.4 Existing and Future Land Use

The Project is located within the cities of San Diego and Imperial Beach on parcels with a land use designation of Park, Open Space, & Recreation and Public Facility, and is surrounded by Park, Open Space, & Recreation land uses. See Table 2.2 below. Additionally, the Proposed Project lies within the Coastal Overlay Zone. Table 2-2 below shows the land use and zoning designations of the Project Area and surrounding area.

Table 2-2. Surrounding Land Uses

Area	City	Land Use Designation	Zoning Designation	Existing Land Uses
Project Area	San Diego	Park, Open Space, & Recreation	Agricultural – Residential (AR-1-1)	State Park
	Imperial Beach	Public Facility (PF)	Public Facility (PF)	State Park
North	San Diego	Park, Open Space, & Recreation	Agricultural – Residential (AR-1-1) Open Space – Floodplain (OF-1-1)	State Park
	Imperial Beach	Open Space (OS)	Open Space (OS)	State Park Naval Airport
East	San Diego	Park, Open Space, & Recreation	Agricultural – Residential (AR-1-1)	State Park
	Imperial Beach	–	–	State Park
South	San Diego	Park, Open Space, & Recreation	Agricultural – Residential (AR-1-1)	State Park
	Imperial Beach	Public Facility (PF)	Public Facility (PF)	State Park
West	San Diego	Park, Open Space, & Recreation	Agricultural – Residential (AR-1-1)	State Park
	Imperial Beach	Public Facility (PF)	Public Facility (PF)	State Park

Source: City of San Diego 2024; City of Imperial Beach 2021

2.5 Project Characteristics

2.5.1 Habitat Restoration

The Project includes restoration of wetland, riparian, and upland habitats within BFSP that has been fragmented or degraded by construction of Monument Road and by ongoing deposition of sediment. Restoration of the various habitats within the park, including southern coastal salt marsh, willow riparian forest, mulefat scrub, and Diegan coastal sage scrub meet the Project's critical objective of improving and increasing habitat for sensitive, threatened, and endangered plants and animals, including resident and migratory wildlife.

Restoration activities would consist of restoring degraded habitats to a condition that is structurally and functionally improved over that of pre-project conditions. In addition, restoration goals would include the management/control of non-native species into the restoration areas and Tijuana Estuary, and improved habitat quality for wildlife usage, including foraging, nesting and breeding.

A Restoration Plan is currently being prepared with full details regarding restoration activities. Activities would include restoration site preparation, implementing restoration planting, and then monitoring the growth and development of the planted areas. This would include soil testing; plant and seed procurement; plant and seed installation; installation of protection measures and erosion control materials; and irrigation system setup and testing. Following implementation, an establishment period would begin focusing on the maintenance of planted and seeded areas, along with routine reporting to verify that performance criteria are being met. At the close of the establishment period, and after

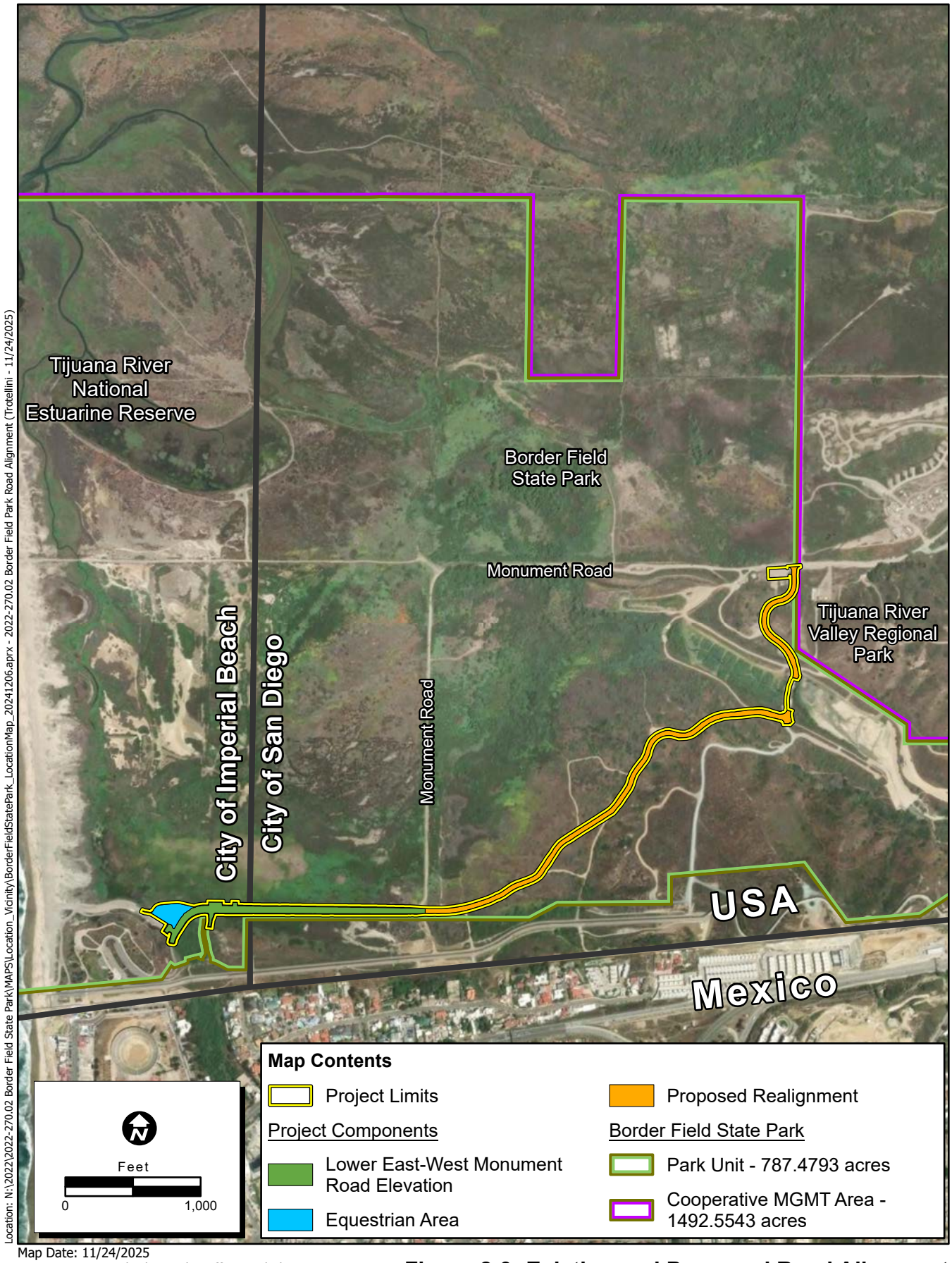
acceptance of the initial restoration work, a maintenance, monitoring, and reporting period would take place. The Restoration Plan will include performance criteria for each habitat type to evaluate the development of the plant communities.

The existing north-south alignment of Monument Road is a primary area that has been selected/targeted for restoration. At this location, the restoration efforts would include the removal of the existing north-south asphalt segment that bisects a key area of willow riparian forest, and restoration of this fragmented area to an improved contiguous coastal wetland habitat that would benefit sensitive riparian bird species. The road footprint would be backfilled with clean fill material to match the existing grade. Restoration along the road alignment would integrate with the Park's TETRP; a phased 250-acre salt marsh restoration plan adjacent to Monument Road.

2.5.2 Roadways

As shown in Figure 2-3, the Proposed Project would consist of the following road components and associated facilities discussed in subsequent sections:

- *Proposed Realignment*. Construction of a new 30-foot-wide Class II base road over the existing unpaved road that starts to the east of the existing entrance kiosk on Monument Road, passes over the Goat Canyon sediment basins, runs along the base of Bunker Hill, and connects to the existing east-west segment of Monument Road. This portion of the road is 4,670 feet long. The total length of the Class II base road, including a portion in the proposed east-west roadway, is 6,000 feet.
- *Proposed Lower East-West Monument Road Elevation*. Creation of approximately 625 feet of elevated Asphalt Concrete (AC) roadway on Class II base road and installation of box culverts and headwall systems. Each box culvert is a precast approximately 7-foot-wide by 3-foot-high reinforced concrete box. The existing lower east-west segment of Monument Road would be elevated approximately 5 feet above its existing grade to accommodate the box culverts and headwall systems, and elevated approximately 4 feet above existing grade for the roadway segment west of the culvert crossing, which provides access to Monument Mesa.
- The proposed realignment and proposed elevation of the lower east-west segment of Monument Road are classified in the Caltrans Highway Design Manual as low-volume rural roads. Both components would have a gravel surface, while a short section of road, from the new culverts and further west, would have AC pavement. These roadways would have two 12-foot-wide travel lanes and two shoulders (2-feet-wide and 4-feet-wide) and would accommodate a standard 45-foot bus template with a 125-foot minimum curve radius. The roadways are designed based on the current Caltrans Highway Design Manual. The proposed roadway elevations are based on SLR, water surface elevations, and the sedimentation rates of Goat Canyon and Yogurt Canyon. The design speed and posted speed limit within the Project limits is 20 miles per hour. Figure 2-3 below depicts the roadways components from the BFSP entrance to the base of Monument Mesa.



Location: N:\2022\2022-270.02 Border Field State Park\MAPS\Location_Vicinity\BorderFieldStatePark_LocationMap_20241206.aprx - 2022-270.02 Border Field Park Road Alignment (Trotellini - 11/24/2025)

Map Date: 11/24/2025
Sources: Esri, Vivid Advanced, Moffit & Nichol

Figure 2-3: Existing and Proposed Road Alignment

2.5.3 New Park Entrance

The Proposed Project includes the installation of an automated pay machine alongside the proposed realignment of Monument Road. The existing entrance would be repurposed in-place for other park operations.

2.5.4 Utilities

The existing 6-inch water main, electrical/telephone line, and electrical pull boxes along the north-south segment of Monument Road would remain in place. However, above grade fixtures would be removed or undergrounded as part of the habitat restoration.

New electrical lines and 6-inch water mains are proposed to be trenched within the new roadway alignment.

2.5.5 Culverts

The Project proposes the installation of seven precast culverts at three locations beneath Monument Road near the proposed maintenance driveway near Yogurt Canyon. The box culverts would be 7-feet-wide by 3-feet-high and would span across the proposed 30-foot-wide roadway. A single box culvert is proposed just west of where the asphalt concrete roadway transitions to gravel pavement.

Three consecutive box culverts are proposed immediately east of where Monument Road intersects with the proposed maintenance driveway, and another three consecutive box culverts are proposed at the intersection of Monument Road and the proposed maintenance driveway. The proposed culverts would be underlain by a 2-foot-thick layer of coarse aggregate wrapped in filter fabric. Remedial excavations below the aggregate layer need not be performed.

The heights of culverts beneath Monument Road are limited by the existing ground surface elevation and the permissible road height. The maximum culvert height was determined to be 3 feet to limit the number of culverts required to convey 100-year flows beneath Monument Road while enabling the economical use of standard box culvert sizes. Culvert dimensions were also determined using the sedimentation rates of Goat Canyon and Yogurt Canyon.

2.5.6 Equestrian Staging Area

The Proposed Project includes improvements to the existing equestrian staging area that would reduce impacts to the surrounding wetlands and improve accessibility to the facilities. Improvements include the construction of an aggregate surface equestrian parking lot off Beach Access Road near the terminus of Monument Road. The parking lot would provide two AC pavement driveways, one from Monument Road and another from the Beach Access Road. The parking lot would include four equestrian parking stalls and eight horse corrals.

2.6 Construction

2.6.1 Timing

Construction is anticipated to begin March 2026 and take approximately 12 months to complete.

2.6.2 Proposed Activities

The Roadway component of the Proposed Project would demolish the existing pavement along the lower east-west segment of Monument Road, and design and construct a new aggregate-surfaced pavement, and a small section of asphalt concrete, along the proposed road alignment. The road would be designed to accommodate trucks with horse trailers, large tour buses, and large emergency response vehicles, such as fire trucks. Construction of the new road would involve placing up to approximately 6 feet of fill and constructing single and triple box culverts beneath the lower east-west leg of Monument Road. The total length of road improvements would be about 1.2 miles. The existing north-south segment would be abandoned and removed and would no longer provide access to the lower east-west segment of Monument Road leading to Monument Mesa. The road realignment starts to the east of the existing entrance kiosk on Monument Road, passes over the Goat Canyon sediment basins, runs along the base of Bunker Hill, and would connect to the existing east-west segment of Monument Road. Additionally, the proposed renovations of the park would include a new automated pay machine and improvements to BFSP's equestrian area. Earthwork for the new automated pay machine is anticipated to consist of remedial and fine grading, foundation excavations, and trenching for underground utilities.

After construction of the roadway is completed, restoration efforts would take place within the former north-south segment of Monument Road and additional upland and wetland restorations areas that would be determined in the Restoration Plan.

Construction activities would also include culvert removal, curb removal, guard rail removal, clearing and grubbing brush, debris disposal, culvert installation, painting and striping, curb installation, and guard rail installation.

Anticipated construction equipment and materials may include the following:

- Portable air compressor
- Vibratory soil compactor
- Portable concrete mixer
- Articulated frame motor grader
- Front end loader
- Dozer
- Backhoe
- Excavator

- Generator set
- Forklift
- Rough terrain crane
- Dump truck
- Gooseneck trailer
- Water tanker
- Earth auger

2.6.3 Site Access and Staging

The primary access routes to the Project Area would be via Monument Road from the north and the south. Two staging areas are proposed: (1) in the lower beach parking lot below Monument Mesa and/or (2) the informal dirt parking lot west of the new proposed entrance to BFSP (Figure 2-3).

2.7 Project Requirements (Standard Project Requirements and Project-Specific Requirements)

Under CEQA guidelines, CDPR has a unique role as both the Lead Agency and a Trustee Agency. The Lead Agency is a public agency that has the primary responsibility for carrying out or approving a project and for implementing CEQA. A Trustee Agency is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California. CDPR takes this distinction with responsibility to ensure that its actions protect both cultural and natural resources on all projects.

However, CDPR is also the Project Proponent. Because of its unique role as Lead Agency and Trustee Agency, as well as the Project Proponent, CDPR's resource professionals take a prominent and influential role during the Project conceptualization, design, and planning process consistent with Section 15004(b)(1) of CEQA. Their early involvement during the planning process enables environmental considerations to influence Project programming and design. This approach permits CDPR under CEQA Section 15065(b)(1), to incorporate Project modifications prior to the start of the public review process of the environmental document, to avoid impacts to a point where clearly no significant effect on the environment would occur.

As part of its effort to avoid impacts, CDPR also maintains a list of Project Requirements that are included in a project design to reduce impacts to resources. From this list, Standard Project Requirements (SPRs) are assigned, as appropriate to all projects. These features are standard and do not constitute mitigation measures. For example, projects that include ground-disturbing activities, such as trenching would always include SPRs addressing the inadvertent discovery of archaeological artifacts. However, for a project that replaces a roof on an historic structure, ground disturbance would not be necessary; therefore, SPRs for ground disturbance would not be applicable and CDPR would not assign it to the project.

CDPR also makes use of Project-Specific Requirements (PSRs). CDPR develops these project requirements to address impacts for projects that have unique issues, but do not typically standardize these for projects statewide. These features are a part of project design and therefore do not constitute mitigation measures. As part of the Initial Study review process, CDPR will utilize both SPRs and PSRs.

3.0 ENVIRONMENTAL IMPACT ANALYSIS

This chapter provides an assessment of environmental consequences, also referred to as "impacts" or "effects" that would result from implementation of the Proposed Project or an alternative to the Project pursuant to CEQA. These analyses consider direct and indirect impacts of the Proposed Project and alternatives, including both short-term impacts during the construction period, and long-term impacts during operation and maintenance of the Project. This chapter also identifies project-specific mitigation measures where they would serve to reduce or avoid an adverse effect and makes significance determinations for the purposes of CEQA. These determinations will be based upon existing technical studies and reports related to the Project. This DEIR also includes a review of local/regional plans and ordinances, as well as consultation with representatives from responsible agencies to conduct the environmental analysis.

The environmental issue areas evaluated in the Draft EIR are:

1. Aesthetics
2. Agricultural Resources and Forestry
3. Air Quality
4. Biological Resources
5. Cultural Resources
6. Energy
7. Geology and Soils
8. Greenhouse Gas Emissions
9. Hazards and Hazardous Materials
10. Hydrology and Water Quality
11. Land Use and Planning
12. Mineral Resources
13. Noise
14. Population and Housing
15. Public Services
16. Recreation
17. Transportation
18. Tribal Cultural Resources
19. Utilities and Service Systems
20. Wildfire

Types of Effects

This EIR characterizes how the Proposed Project and each alternative could potentially result in direct, indirect, and/or cumulative effects on the environment under each of the environmental issue areas addressed. For the purposes of this analysis, the terms "effect" and "impact" are used synonymously and may be either beneficial or detrimental. The terms "direct effects," "indirect effects," and "cumulative effects" are defined below.

- *Direct Effects:* CEQA Guidelines Section 15358 defines "effects" and "impacts" synonymously to include direct or primary effects, which are caused by a project and occur at the same time and place.

- *Indirect Effects:* Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems (40 CFR 1508.8(b)).
- *Cumulative Effects:* Cumulative effects result from the incremental impacts of an action when combined with similar impacts of other past, present, and reasonably foreseeable actions, including those resulting from impacts that may be individually insignificant but collectively significant over a period of time. Cumulative effects are addressed in Chapter 4.0.

Impacts may be short-term, such as those isolated to a construction period, or long-term, such as operations and maintenance activities.

- *Short-term effects* occur only for a short period of time after implementation of a management action; for example, construction noise impacts from construction activities would be considered short-term in nature.
- *Long-term effects* occur for an extended period after implementation of a management action; for example, operational noise during facility operations (e.g., sediment removal) would be a long-term impact, as it would last for as long as the facility is in operation.

Section 1502.16 of the CEQA regulations forms the scientific and analytic basis for the comparisons of alternatives.

Significance Determinations

CEQA Significance Criteria

Significance criteria are based on those identified in Appendix G of the CEQA Guidelines (14 CCR Sections 15000–15387). CEQA defines a significant impact on the environment as "a substantial, or potentially substantial, adverse change in the environment" (PRC Section 21068), and the Guidelines further clarify that a significant impact is a substantial adverse change "in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance" (Section 15382). These are general definitions, and CEQA requires agencies to use their best judgment to determine whether an impact is significant. The lead agency must base its decision in light of the whole record and must consider the impact's setting: "For example, an activity which may not be significant in an urban area may be significant in a rural area" (CEQA Guidelines Section 15064(a)(1), (b)).

Consistent with CEQA statute and guidelines, CEQA determinations regarding an impact's significance in this Draft EIR are made on the basis of high-quality, credible scientific information and professional judgment. Where a significant impact is reasonably expected to occur, this analysis discloses that information. All impact determinations are projections based on the expectation that the described impacts, or lack thereof, will occur if the proposed Project is approved and implemented.

The categories used to designate impact significance for the purposes of CEQA are:

- *No Impact*. There would be no impact if there is no potential for impacts, or if the environmental resource does not occur within the Project Area or the area of potential effect. For example, there would be no impact related to tree removal if no tree removal is proposed in the Project Area.
- *Less than Significant*. This determination applies if there is a potential for some limited impact, but not a substantial adverse (or beneficial) effect that qualifies under the applicable significance criterion as a significant impact.
- *Less than Significant Impact with Mitigation Incorporated*. This determination applies if the Project would result in an adverse effect that exceeds/qualifies under the applicable significance criterion, but feasible mitigation is available that would eliminate any adverse impact or reduce it to a less-than-significant level.
- *Less than Significant with SPRs and PSRs Incorporated*. This determination applies if the Project would result in an adverse effect that exceeds/qualifies under the applicable significance criterion, but standard project requirements or project specific requirements are included in the Project design. These requirements would eliminate any adverse impact or ensure a less-than-significant impact level. These requirements are a part of project design and therefore do not constitute mitigation measures.
- *Significant and Unavoidable*. This determination applies if the Proposed Project would result in an adverse effect that exceeds/qualifies under the applicable significance criterion and even with mitigation implemented to lessen the impact, if available, the residual effect would remain significant. Therefore, the impact would be significant and unavoidable.

3.1 Aesthetics

3.1.1 Introduction

This section discusses impacts associated with the potential for the Project to degrade the existing visual character or quality of the Project Area and its surroundings through changes in the existing landscape. Aesthetic resources are generally considered to include areas that are visible to the general public and considered visually attractive; relevant baseline environmental conditions and regulatory environment are described in this section.

3.1.2 Environmental Setting

3.1.2.1 Regional Setting

The San Diego region is composed of three general physiographic subregions (Southern California coast, Southern California mountains and valleys, and Colorado desert) spanning approximately 4,200 square miles. The region is bordered by Orange and Riverside Counties to the north, Imperial County to the east, the U.S./Mexico border to the south, and the Pacific Ocean to the west. Elevations in the region span from sea level at the coast to 6,500 feet above mean sea level in the mountains.

The Southern California coast subregion contains state parks, beaches, wetlands, ecological reserves, foothills, and mesas with river valleys and narrow canyons. Several rivers run from the mountain area and through the Southern California coast subregion, flowing into intermittent drainages or the Pacific Ocean. The mountains in the Southern California mountains and valleys subregion are generally steep and covered with conifer and broadleaf trees, granitic boulders, meadows, and chaparral vegetation. The eastern portion of the San Diego region is the Colorado desert subregion. The terrain includes mountains, alluvial fans, and desert floor (San Diego County 2021).

State Scenic Highway

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. The California Department of Transportation (Caltrans) can designate a highway as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view.

The nearest officially designated state scenic highway is State Route 75 from Avenida del Sol to Imperial Beach, located approximately 3.18 miles north of the Project Area. Interstate 5 from the International Border to the junction with State Route (SR) 75 is an eligible state scenic highway, located approximately 2.45 miles northeast of the Project Area (Caltrans 2025).

3.1.2.2 Local Setting

Border Field State Park is located at 1500 Monument Road in the cities of San Diego and Imperial Beach in the extreme southwest corner of California, and immediately north of the United States-Mexico International Border.

The southern portion of the City of San Diego is bordered by the City of Chula Vista to the north, unincorporated communities to the east, the U.S./Mexico border to the south, and the City of Imperial Beach to the west. Visual and scenic resources in and near south City of San Diego include the Tijuana River Estuary and Otay Mountain.

The City of Imperial Beach is bordered by a U.S. Naval Communication Station (within the City of Coronado) and San Diego Bay to the north, the City of San Diego to the east, the U.S./Mexico border to the south, and the Pacific Ocean to the west. Visual and scenic resources in the City of Imperial Beach include the Pacific Ocean, the Tijuana River Estuary, Ream Field, the City beach, and the salt evaporation ponds and South San Diego Bay (City of Imperial Beach 2024).

Visual Character of the Project Area

The Project Area is located within BFSP, which is comprised of sand dunes and salt marshes and provides scenic views of the beach and estuary. Elevations of the alignment range from approximately 10 feet above msl to 45 feet above msl. The TRNERR can be viewed from several vantage points, including the Mesa bluff-top in BFSP. The bluff-top also provides a panoramic view of the coastline from the beach below to the Cities of Imperial Beach and Coronado (City of Imperial Beach 2024). Distant views of Otay Mountain can also be seen from various points throughout BFSP.

The Project Area includes an existing 1.2-mile stretch of Monument Road which is subject to seasonal flooding in several locations. Monument Road had been damaged by years of cross-border sedimentation and flood waters containing sewage contaminated water and mud. The north-south segment of Monument Road runs through degraded wetlands in the Tijuana Estuary. The Project also consists of a road alignment that begins east of the existing entrance kiosk, passes over Goat Canyon sediment basins, runs along the base of Bunker Hill, and connects to the southern east-west segment of Monument Road.

3.1.3 Regulatory Setting

3.1.3.1 Federal

National Scenic Byways Program

The National Scenic Byways Program, a part of the Federal Highway Administration (FHWA), recognizes, preserves, and enhances selected roads throughout the United States as All-American Roads or National Scenic Byways based on one or more archaeological, cultural, historic, natural, recreational, and scenic qualities. According to the FHWA's America's Byways website, there are no officially designated National Scenic Byways in the vicinity of the Project Area (FHWA 2025).

3.1.3.2 State

California Scenic Highway Program

State scenic highways are those that are either officially designated as state scenic highways by the Caltrans or are eligible for such designation. The scenic designation is based on the amount of natural

landscape visible by motorists, the scenic quality of the landscape, and the extent to which development intrudes on the motorist's enjoyment of the view (Caltrans 2025).

3.1.4 Impact Analysis

3.1.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, long-term operation, and long-term maintenance using appropriate technical analysis and the impact significance criteria.

3.1.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project and alternatives. The following significance criteria for aesthetics were derived from Appendix G of the CEQA Guidelines. Impacts to aesthetics are considered significant if the Proposed Project would:

1) cause substantial adverse effects on a scenic vista;
2) cause substantial damage to scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings, within a state scenic highway;
3) in non-urbanized areas, 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) or in urbanized areas conflict with applicable zoning and other regulations governing scenic quality; or
4) create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

3.1.4.3 Impact Discussion

Threshold 1: Would the project have a substantial adverse effect on a scenic vista?

No Impact. The Project Area consists of a state park surrounded by other open space and public facility land uses. The Project Area is located within the Tijuana River Estuary, which is considered a visual/scenic resource under the City of Imperial Beach's General Plan. Project components include the removal of the north-south segment of Monument Road which necessitates the construction of a new approximately 4,670 foot Class II base gravel access road over an existing unpaved roadway over Goat Canyon to connect to the east-west segment of Monument Road to the south where Monument Road provides access to Monument Mesa; construction of 1,950 feet of road (625 feet of asphalt concrete and 1,325 feet of Class II gravel base) along the southern east-west segment of Monument Road which would be elevated approximately five feet to accommodate the construction of three new box culverts and headwall systems for anticipated storm flows and to address coastal flooding hazards; and improve the

existing equestrian parking lot with new asphalt concrete driveways, equestrian parking stalls, and horse corrals near the terminus of Monument Road.

Views of the Tijuana River Estuary from public viewsheds within the City of Imperial Beach are oriented to the south and southeast and the proposed improvements of the Project would occur at a distance of over a mile and would not be readily visible. The preservation of scenic vistas would be maintained during both Project construction and operation. The installation of Project-related infrastructure in the Project Area would have minimal to no effect on scenic vistas as all proposed improvements would be underground, at grade, or slightly above grade and would be minimally visible from a distance. The wetland, riparian, and upland habitats in the Project Area would be restored as part of the Proposed Project resulting in an overall continuity of habitats within the Tijuana River Estuary viewshed.

These views would not be impeded by any of the Proposed Project's components. Therefore, less-than-significant impact would occur.

Threshold 2: Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. According to Caltrans, there are no officially designated or eligible state scenic highways in the vicinity of the Project Area. The nearest officially designated state scenic highway is SR-75 from Avenida del Sol to Imperial Beach, located approximately 3.18 miles north of the Project Area (Caltrans 2025). There are no significant rock outcroppings or historic buildings in the Project Area. Vegetation would be impacted by construction; however, restoration of wetland, riparian, and upland habitats is planned for areas where these habitats are currently degraded. The Proposed Project would not substantially damage any scenic resources and Project components would not be visible from the nearest officially designated state scenic highway over 3 miles away. Therefore, the Project would not result in impacts to scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. No impact would result.

Threshold 3: Would the project in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact. The Proposed Project is located in a non-urbanized area on parcels with a land use designation of Park, Open Space & Recreation and Public Facility and is surrounded by other Park, Open Space, & Recreation uses. Public views of the Project Area are available from other vantage points within BFSP. Distant views are available from the beach area within the City of Imperial Beach located to the west and northwest of the Project Area. The Project Area is currently subject to international transboundary stormwater flows that cause roads and trails to be flooded seasonally with sewage contaminated water and mud. Out of precaution and public safety, the park is currently closed to hiking, biking, equestrian activity, and vehicles until further notice.

Construction

Development of the Proposed Project would include construction activities such as culvert, curb, and guard rail removal; pavement demolition; grading; trenching for underground utilities; brush clearing and grubbing; installation of Project components; and painting and striping. Construction staging is proposed in two areas, including the lower beach parking lot below Monument Mesa and the informal dirt parking lot west of the new proposed entrance to BFSP. Construction of the Project is expected to occur over approximately 12 months. These visual changes would be transient and short term in nature, and the park is currently closed to the public; therefore, impacts would be less than significant.

Operation

The Project Area is currently subject to international transboundary stormwater flows that cause roads and trails to be flooded seasonally with sewage contaminated water and mud and BFSP is currently closed throughout the year. The Proposed Project would improve flood resiliency, provide infrastructure improvements to improve safety and accessibility, and would provide restoration for degraded wetland, riparian, and upland habitat. Project implementation would allow Monument Road to be open year-round as it would address seasonal flooding effects on existing roads. Removal of the existing north-south segment of Monument Road which experiences continual flooding and installing new culverts along the east-west segment would allow water flows to follow a more natural path and reduce flooding adjacent to and on the roadways. Project implementation would restore year-round access to BFSP in an improved condition and would minimally degrade the existing visual character or quality of public views of the site and its surroundings. Impacts would be less than significant.

Threshold 4: Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

No Impact. Currently, there are no significant sources of light or glare existing within the Project Area. As the Project includes no lighting elements, and the materials necessary for the project are generally non-reflective, it will not create a substantial new source of nighttime lighting and is not expected to create daytime glare. During times when the park and access roads were open, vehicles were allowed to traverse to road to reach the western terminus at Monument Mesa and this condition would not change once Project construction is complete. No new lighting is proposed as part of the park improvements. No impact would occur.

3.1.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.1.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.2 Agriculture and Forestry Resources

3.2.1 Introduction

This section discusses impacts associated with the potential for the Project to affect agricultural and forestry resources within and near the Project Area.

3.2.2 Environmental Setting

"Forest land" is defined by Public Resources Code (PRC) Section 12220(g) as "…land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

"Timberland" is defined by PRC Section 4526 as "…land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."

"Timberland zoned Timberland Production" is defined by PRC Section 51104(g) as "…an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision h."

Farmland is concentrated in the northern part of the County. In the City of San Diego, agriculture accounts for approximately 2 percent of the City's existing land uses (City of San Diego 2024). No land within the City of Imperial Beach is designated for agricultural use (City of Imperial Beach 2024). According to the California Department of Conservation (DOC) Important Farmland Finder, the Project Area is classified as Other Land. The surrounding area consists of Other Land, Urban and Built-Up Land, and Farmland of Local Importance. The Project Area is not under a Williamson Act Contract (DOC 2025).

3.2.3 Regulatory Setting

3.2.3.1 Federal

There are no applicable federal regulations for this issue area.

3.2.3.2 State

There are no applicable State regulations for this issue area.

3.2.3.3 Local

There are no applicable local regulations for this issue area.

3.2.4 Impacts Analysis

3.2.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.2.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for agriculture and forestry resources were derived from Appendix G of the CEQA Guidelines. Impacts to agriculture and forestry resources are considered significant if the Proposed Project would:

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

6) conflict with existing zoning for agricultural use, or a Williamson Act contract;

7) conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));

8) result in the loss of forest land or conversion of forest land to non-forest use; or

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

3.2.4.3 Impact Discussion

Threshold 1: Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The Project is located on parcels with a land use designation of Park, Open Space, & Recreation in the City of San Diego and Open Space (OS) in the City of Imperial Beach, and is surrounded by Park, Open Space, & Recreation land uses (City of San Diego 2024; MapGeo 2025). According to the DOC California Important Farmland Finder, a majority of the Project Area is classified as Other Land, and the portion near the equestrian parking lot is classified as Urban and Built-Up Land (DOC 2025). The Other Land designation is for vacant and nonagricultural land surrounded on all sides by urban development and parcels greater than 40 acres. The Urban and Built-Up Land designation is for land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately 6 structures to a 10-

acre parcel. The Proposed Project would not be located on land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. No impact would occur.

Threshold 2: Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The Project Area is located in BFSP, which is zoned in the City of San Diego as Agricultural-Residential (AR-1-1) and by the City of Imperial Beach as Open Space (OS) (City of San Diego 2024; MapGeo 2025). Permitted uses under the City of San Diego's AR-1-1 zone include active recreation, passive recreation, and natural resources preservation. The City of Imperial Beach's Open Space (OS) zone applies to the Tijuana River Valley and includes land in use as or intended for future use as marine and wildlife preserves, permanent open space or landscaped areas, natural resource or environmentally sensitive lands such as the Tijuana River Estuary and drainage or flood control channels, creeks, rivers, estuaries, watercourses, watersheds, and reservoirs. The Proposed Project aligns with the permitted uses of both cities and would not conflict with existing zoning. The Project Area is not subject to a Williamson Act contract (DOC 2024). The Proposed Project would not conflict with zoning for agricultural use or a Williamson Act Contract. No impact would occur.

Threshold 3: Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

No Impact. As identified above, the Project Area is located in BFSP, which is zoned in the City of San Diego as Agricultural-Residential (AR-1-1) and under the City of Imperial Beach as Open Space (OS) (City of San Diego 2024; MapGeo 2025). The Project Area is not zoned as forest land, timberland, or timberland zoned timberland production. No impact would occur.

Threshold 4: Would the Project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As described above, the Project Area is not zoned for forest land, timberland, or timberland production. Therefore, the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. No impact would occur.

Threshold 5: Would the Project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project Area is zoned under the City of San Diego as Agricultural-Residential (AR-1-1) but is currently not used for an agricultural use. The AR-1-1 zone permits active recreation, passive recreation, and natural resources preservation, therefore the existing BFSP is a permitted use. The Proposed Project would not change the land use. As previously described, the Project Area is located on land classified as Other Land and Urban and Built-Up Land and does not include any farmland or forest land. Therefore, the Proposed Project would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

3.2.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.2.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.3 Air Quality

3.3.1 Introduction

This section describes the existing conditions and applicable laws and regulations for air quality and health risk. The section also discusses the potential of the Proposed Project and alternatives to increase air emissions in the region. Impacts to air quality are considered significant if the Proposed Project or alternatives would (1) conflict with or obstruct implementation of the applicable air quality plan; (2) result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard; (3) expose sensitive receptors to substantial pollutant concentrations; or (4) result in other emissions adversely affecting a substantial number of people.

The analysis is based on the following technical document included as an appendix:

- Air Quality and Greenhouse Gas Emissions Assessment (ECORP 2025; Appendix D).

3.3.2 Environmental Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the San Diego Air Basin (SDAB), which encompasses the Project Area, pursuant to the regulatory authority of the SDAPCD.

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that influence the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project Area.

3.3.2.1 San Diego Air Basin

Border Field State Park is located in the cities of San Diego and Imperial Beach in the extreme southwest corner of California and immediately north of the United States-Mexico International Border. The park is located in San Diego County, which is within the SDAB. The topography in the SDAB varies greatly, from beaches on the west to mountains and desert on the east. Much of the topography in between consists of mesa tops intersected by canyon areas. The region's topography influences air flow and the dispersal and movement of pollutants in the basin. The mountains to the east prevent air flow mixing and prohibit dispersal of pollutants in that direction.

Regional climate and local meteorological conditions influence ambient air quality. The climate of the SDAB is dominated by a semi-permanent high-pressure cell located over the Pacific Ocean. This cell, called the Pacific High-Pressure Cell (or Zone) influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. The high-pressure cell also creates two types of temperature inversions that may act to degrade local air quality. Subsidence inversions occur

during the warmer months as descending air associated with the Zone meets cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. The other type of inversion, a radiation inversion, develops on winter nights, when air near the ground cools through radiation and the air aloft remains warm. The shallow inversion layer formed between these two air masses can also trap pollutants. During mild Santa Ana wind conditions, ambient air quality in the SDAB is affected by air quality in the South Coast Air Basin (the metropolitan areas of Los Angeles, Orange, San Bernardino, and Riverside counties). Air pollutants, specifically the components of smog, are transported to the County during relatively mild Santa Ana weather conditions. Winds blowing toward the southwest transport the polluted air from the South Coast Air Basin over the ocean. The sea breeze brings this air onshore into the County. When the transported smog is at ground level, the highest ozone (O_3) concentrations are measured at coastal and near-coastal monitoring sites. However, when the blown-in smog cloud is elevated, coastal sites may be passed over, and the transported O_3 is measured farther inland.

3.3.2.2 Criteria Air Pollutants

Criteria air pollutants are pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter less than 10 microns in diameter (PM_{10}), and fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), and sulfur dioxide (SO_2) are local pollutants because they tend to accumulate in the air locally. Particulate matter (PM) is also considered a local pollutant in certain scenarios. Health effects commonly associated with criteria pollutants are summarized in Table 3.3-1.

Table 3.3-1. Summary of Criteria Air Pollutants Sources and Effects

Pollutant	Major Manufactured Sources	Human Health and Welfare Effects
Carbon Monoxide (CO)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitric Oxides (NO_x)	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
Ozone (O_3)	Formed by a chemical reaction between Reactive Organic Gases (ROG) and nitrous oxides in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints, and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.

Table 3.3-1. Summary of Criteria Air Pollutants Sources and Effects

Pollutant	Major Manufactured Sources	Human Health and Welfare Effects
Particulate Matter ($PM_{2.5}$ & PM_{10})	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Sulfur Dioxide (SO_2)	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.

Source: California Air Pollution Control Offices Association 2013

Notes: PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter;

Carbon Monoxide

Carbon Monoxide, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO is a byproduct of motor vehicle exhaust, which contributes more than 66 percent of all CO emissions nationwide. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions. These emissions can result in high concentrations of CO, particularly in local areas with heavy traffic congestion. CO concentrations can vary greatly over comparatively short distances. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances (i.e., up to 600 feet or 185 meters) of the source. Despite an overall downward trend in concentrations and emissions of CO, some metropolitan areas still experience high levels of CO. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. Other sources of CO emissions include industrial processes and fuel combustion in sources such as boilers and incinerators.

CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. The health threat from CO is most serious for those who suffer from cardiovascular disease. Healthy individuals are also affected but only at higher levels of exposure. Exposure to CO can cause chest pain in heart patients, headaches, and reduced mental alertness. High CO concentrations can aggravate cardiovascular disease and impair central nervous system functions. Exposure to elevated CO levels is associated with visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, difficulty performing complex tasks, and, with prolonged enclosed exposure, death.

Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous

compounds collectively called nitric oxides. Motor vehicle emissions are the main source of nitric oxides (NO_x) in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and nitrogen dioxide (NO_2), attribute to the formation of O_3 and $PM_{2.5}$. Epidemiological studies have also shown associations between NO_x concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

Ozone

Ozone is a secondary pollutant, meaning it is not directly emitted. It is formed when Volatile Organic Compounds (VOC) also known as Reactive Organic Gases (ROGs) and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. Sunlight and hot weather cause ground-level O_3 to form. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

Particulate Matter

Particulate matter includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM_{10}) and smaller than or equal to 2.5 microns in diameter ($PM_{2.5}$). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM_{10} generally settles out of the atmosphere rapidly and is not readily transported over large distances. $PM_{2.5}$ is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SO_x), and VOCs. $PM_{2.5}$ can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

In the western U.S., there are sources of PM_{10} in both urban and rural areas. PM_{10} and $PM_{2.5}$ are emitted from stationary and mobile sources, including diesel trucks and other motor vehicles; power plants; industrial processes; wood-burning stoves and fireplaces; wildfires; dust from roads, construction, landfills, and agriculture; and fugitive windblown dust. Because particles originate from a variety of sources, their chemical and physical compositions vary widely.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high $PM_{2.5}$ and PM_{10} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM_{10} and $PM_{2.5}$. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

Sulfur Dioxide

Main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. It can also yellow plant leaves and erode iron and steel. Other health effects that have been associated with longer-term exposures to high concentrations of SO_2, in conjunction with high levels of particulate matter, include aggravation of existing cardiovascular disease, respiratory illness, and alterations in the lungs' defenses. It is also a major precursor to $PM_{2.5}$, which is a significant health concern and a main contributor to poor visibility.

Lead

Sources of lead include leaded gasoline; the manufacturing of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and, in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance including intelligence quotient performance, psychomotor performance, reaction time, and growth.

3.3.2.3 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TAC) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is

expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis. Carcinogenic TACs can also have noncarcinogenic health hazard levels.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as Diesel Particulate Matter (DPM). In 1998, the State identified DPM as a TAC based on its potential to cause cancer, birth defects, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children, whose lungs are still developing, and the elderly, who may have other serious health problems. Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's $PM_{2.5}$ air quality problems. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions.

3.3.2.4 Diesel Exhaust

As noted above, the California Air Resources Board (CARB) identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (i.e., heavy-duty, light-duty), engine operating conditions (i.e., idle, accelerate, decelerate), fuel formulations (i.e., high/low sulfur fuel), and the year of the manufacture of the engine. More than 90 percent of DPM is less than 1 microgram (µm) in diameter (about 1/70 the diameter of a human hair) and thus is a subset of $PM_{2.5}$ (CARB 2024c). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

3.3.2.5 Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or *hot spots*, are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized

that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years.

3.3.2.6 Ambient Air Quality

CARB has established and maintains a network of sampling stations (called the State and Local Air Monitoring Stations network) that work in conjunction with local air pollution control districts and air quality management districts to monitor ambient pollutant levels. Air quality data statistics from the Chula Vista (80 E. J Street, Chula Vista) ambient air monitoring station were used as representative of the air quality in the immediate vicinity of the Project Area. The Chula Vista monitoring station is located approximately 6.83 miles northeast of the Project Area and is the closest station to the site and monitors ambient concentrations of O_3 and $PM_{2.5}$. Local air monitoring sources have not recorded data on PM_{10} in the area. O_3 and $PM_{2.5}$ are the pollutant species most potently affecting the Project region. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered generally representative of ambient concentrations in the development area. Table 3.3-2 summarizes the ambient monitoring data obtained for 2021 through 2023.

Table 3.3-2. Summary of Ambient Air Quality Data – Chula Vista

Pollutant Scenario	2021	2022	2023
O_3			
Max 1-hour concentration	0.084 ppm	0.078 ppm	0.082 ppm
Number of days exceeding CAAQS (0.09 ppm)	0	0	0
Max 8-hour concentration (state)	0.067 ppm	0.067 ppm	0.074 ppm
Max 8-hour concentration (federal)	0.066 ppm	0.066 ppm	0.074 ppm
Number of days exceeding CAAQS (0.070 ppm)	0	0	1
Number of days exceeding NAAQS (0.070 ppm)	0	0	1
$PM_{2.5}$			
Max 24-hour concentration (federal)	24.9 µg/m^3	16.2 µg/m^3	25.5 µg/m^3
Number of days exceeding NAAQS (35 µg/m^3)	0	N/A	0

Sources: CARB 2024a

Notes: µg/m^3 = micrograms per cubic meter; CAAQS = California Ambient Air Quality Standards; CARB = California Air Resources Board; N/A = Not Available; NAAQS = National Ambient Air Quality Standards; O_3 = Ozone; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; ppm = parts per million

The USEPA and CARB designate air basins or portions of air basins and counties as being in *attainment* or *nonattainment* for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10} and $PM_{2.5}$ and those based on annual averages or arithmetic mean) are not to be exceeded more than once per

year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. Table 3.3-3 below presents both sets of ambient air quality standards (i.e., national and state) as well as attainment status for each of these standards within the SDAB.

Table 3.3-3. Attainment Status of Criteria Pollutants in the San Diego Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Severe Nonattainment
PM_{10}	Nonattainment	Unclassifiable
$PM_{2.5}$	Nonattainment	Unclassified/Attainment
CO	Attainment	Moderate Maintenance
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment

Source: CARB 2023; U.S. Environmental Protection Agency (USEPA) 2025a

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 standard and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$ (CARB 2023).

3.3.2.7 Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors are residences, schools, hospitals, daycare centers, convalescent homes, and parks. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the Project Area is a single-family residence located northeast of the Project Area at the intersection of Monument Road and Saturn Boulevard, approximately 0.81 mile distant from the eastern boundary of the linear Project Area.

3.3.3 Regulatory Setting

3.3.3.1 Federal

Federal Clean Air Act

The federal Clean Air Act (CAA) was enacted in 1970 to protect and enhance the quality of the nation's air resources. The CAA and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide (CO_2) is an air pollutant covered by the CAA; however, no NAAQS have been established for CO_2.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect public health and welfare. They are designed to protect those *sensitive receptors* most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation.

U.S. Environmental Protection Agency General Conformity

General Conformity ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain national standards for air quality. Established under the CAA (section 176(c)(4)), the General Conformity rule plays an important role in helping states improve air quality in those areas that do not meet the NAAQS. Under the General Conformity rule, federal agencies must work with state and local governments in a nonattainment or maintenance area to ensure that federal actions conform to the air quality plans established in the applicable state or tribal implementation plan. The overall purpose of the General Conformity rule is to ensure that:

- Federal activities do not cause or contribute to new violations of NAAQS;
- Actions do not worsen existing violations of the NAAQS; and
- Attainment of the NAAQS is not delayed.

The General Conformity process begins with an "applicability analysis," whereby it must be determined how and to what degree the Conformity Rules apply. According to USEPA's General Conformity Guidance: Questions and Answers (USEPA 1994), before any approval is given for a Federal Action to go forward, the federal agency must apply the applicability requirements found at 40 CFR Section 93.153 to the Federal Action and/or determine on a pollutant-by-pollutant basis, whether a determination of General Conformity is required. During the applicability analysis, the federal agency determines the following:

- Whether the action will occur in a nonattainment or maintenance area;
- Whether one or more of the specific exemptions apply to the action;
- Whether the federal agency has included the action on its list of presumed-to-conform actions;
- Whether the total direct and indirect emissions are below or above *de minimis* levels; and/or
- Where a facility has an emissions budget approved by the State or Tribe as part of the State Implementation Plan or Tribal Implementation Plan, the federal agency determines that the emissions from the proposed action are within the budget.

The General Conformity Rule allows for exemptions for emissions that are not reasonably foreseeable, will not result in an increase in emissions, are below *de minimis* limits, are the result of emergency actions, are included in stationary source air permits, are for routine maintenance and repair of existing structures, or are included in a transportation conformity determination undertaken by Federal Highway Administration or Federal Transit Administration (40 CFR 93.153(c)).

A conformity determination would be required if the annual emissions of nonattainment pollutants generated by the Proposed Project were to exceed the General Conformity de minimis thresholds. The *de minimis* limits represent a level of emissions that the USEPA has determined will have only *de minimis* impacts to the air quality of an area and are thus exempted from the General Conformity Rule. If the overall predicted increase in emissions of a criteria pollutant due to a federal action in a nonattainment area exceeds the *de minimis* limits as shown in Table 3.3-4, the lead federal agency is required to make a conformity determination.

Table 3.3-4. Federal General Conformity *De Minimis* Thresholds

Pollutant	Area Type	Tons Per Year
Ozone (VOC or NO_x)	Serious nonattainment	50
	Severe nonattainment	25
	Extreme nonattainment	10
	Other areas outside of ozone transport region	100
Ozone (NO_x)	Marginal and moderate nonattainment inside an ozone transport region	100
	Maintenance	100
Ozone (VOC)	Marginal and moderate nonattainment inside an ozone transport region	50
	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
CO, SO_2 and NO_2	All nonattainment and maintenance	100
PM_{10}	Serious nonattainment	70
	Moderate nonattainment and maintenance	100

Table 3.3-4. Federal General Conformity *De Minimis* Thresholds

Pollutant	Area Type	Tons Per Year
$PM_{2.5}$	All nonattainment and maintenance	100
Lead	All nonattainment and maintenance	25

Source: USEPA 2025b

Notes: CO = carbon monoxide; NOx = nitric oxides; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; SO_2 = sulfur dioxide; USEPA = U.S. Environmental Protection Agency; VOC = Volatile Organic Compound;

3.3.3.2 State

California Clean Air Act

The California Clean Air Act allows the state to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (e.g., hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies 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. 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 in 1991 and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, 2004, 2009, 2016 and most recently in 2022. The RAQS outlines the SDAPCD's plans and control measures designed to attain the state air quality standards for O_3. The

SDAPCD has also developed the SDAB's input to the SIP, which is required under the federal CAA for pollutants that are designated as being in nonattainment of federal air quality standards for the basin.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth, to project future emissions and then establish the strategies necessary for the reduction of emissions through regulatory controls. The RAQS and the SIP utilized the *2021 Regional Plan* prepared by the SANDAG to project future growth in the air basin. The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin. The plan also includes rules and regulations that have been adopted by the SDAPCD to control emissions from stationary sources. Stationary source control measures are developed by the SDAPCD with the goal of setting limits on the amounts of emissions from various types of sources and/or requiring specific emissions control technologies. In order to implement control measures, a permit system is used to impose controls on new and modified stationary sources and to ensure compliance with regulations by prescribing specific operation conditions or equipment on a source.

The SDAPCD adopted the *2020 Plan for Attaining the National Ozone Standards*, which was voted for approval by the District Board in early October 2020. The plan was submitted to CARB for their approval, and then submittal to the USEPA as a revision to the California SIP for attaining the O_3 standards. The *2020 Plan for Attaining the National Ozone Standards* demonstrates how the region will further reduce air pollutant emissions in order to attain the current NAAQS for O_3 by specified dates. SANDAG was also involved in the preparation of the *2020 Plan for Attaining the National Ozone Standards* through the collection and review of the data necessary to generate comprehensive emission inventories, including socio-economic projections and industrial and travel activities.

Tanner Air Toxics Act & Air Toxics "Hot Spot" Information and Assessment Act

CARB's Statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics *Hot Spots* Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the *Hot Spots* Act was amended by Senate Bill 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

3.3.3.3 Local

San Diego Air Pollution Control District

In addition to the RAQS and 2020 Plan for Attaining the National Ozone Standards, the SDAPCD has the primary responsibility for controlling emissions from construction activity throughout the SDAB. In December 2005, the SDAPCD adopted the *Measures to Reduce Particulate Matter* in the SDAB. This document identifies fugitive dust as the major source of directly emitted particulate matter in the SDAB, with mobile sources and residential wood combustion as minor contributors. Data on $PM_{2.5}$ source apportionment indicates that the main contributors to $PM_{2.5}$ in the SDAB are combustion organic carbon, and ammonium sulfate and ammonium nitrate from combustion sources. The main contributors to PM_{10} include resuspended soil and road dust from unpaved and paved roads, construction and demolition sites, and mineral extraction and processing. Based on the report's evaluation of control measures recommended by CARB to reduce particulate matter emissions, the SDAPCD adopted Rule 55, the Fugitive Dust Rule, in June 2009. The SDAPCD requires that construction activities implement the measures listed in Rule 55 to minimize fugitive dust emissions. Rule 55 requires the following:

1. No person shall engage in construction or demolition activity in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
2. Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall be minimized by the use of any of the equally effective track-out/carry-out and erosion control measures listed in Rule 55 that apply to the project or operation. These measures include track-out grates or gravel beds at each egress point; wheel-washing at each egress during muddy conditions; soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; watering for dust control; and using secured tarps or cargo covering, watering, or treating of transported material for outbound transport trucks. Erosion control measures must be removed at the conclusion of each workday when active operations cease, or every 24 hours for continuous operations.

There are other SDAPCD rules and regulations, not detailed here, which may apply to the Proposed Project, but are administrative or descriptive in nature. These include rules associated with fees, enforcement and penalty actions, and variance procedures. The following additional rules and regulations would apply to the construction of the Project:

- *Rule 50 Visible Emissions*: Establishes limits to the opacity of emissions within the SDAPCD.
- *Rule 51 Nuisance*: Prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or which endanger the comfort, repose, health, or safety of any such persons or the public; or which cause injury or damage to business or property.
- *Rule 52 Particulate Matter*: Establishes limits to the discharge of any particulate matter from non-stationary sources.

- *Rule 54 Dust and Fumes*: Establishes limits to the amount of dust or fume discharged into the atmosphere in any single hour.
- *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.
- *Rule 67.7 Cutback and Emulsified Asphalts*: Prohibits the sale and use of cutback and emulsified asphalt materials for the paving, construction or maintenance of parking lots, driveways, streets, and highways which exceed the County standards for the percent by volume of VOC that evaporate into the atmosphere under temperate conditions.

3.3.4 Impacts Analysis

This section evaluates the potential air quality impacts associated with the construction and operation of the Proposed Project and its four alternatives. The Proposed Project involves the realignment and elevation of Monument Road, installation of culverts and associated drainage infrastructure, removal of degraded roadway segments, and upgrades to an existing parking lot primarily associated with equestrian use. These improvements are intended to enhance SLR resiliency, address chronic flooding, and improve access to BFSP. More specifically, the Proposed Project would consist of the following road components:

- *Proposed North-South Realignment.* Construction of a new 30-foot-wide Class II base road over the existing unpaved road that starts to the east of the existing entrance kiosk on Monument Road, passes over the Goat Canyon sediment basins, runs along the base of Bunker Hill, and connects to the existing east-west segment of Monument Road. This portion of the road is 4,670 feet long. The total length of the Class II base road including a portion in the proposed east-west roadway is 6,000 feet.
- *Proposed East-West Roadway Elevation.* Creation of approximately 625 feet of elevated AC roadway on Class II base road and installation of three box culverts and headwall systems. Each box culvert is a precast 7-foot-wide by 3-foot-high reinforced concrete box. The road would be elevated 5 feet above its existing grade to accommodate the box culverts and headwall systems and elevated 4 feet above existing grade for the roadway segment west of the culvert crossing.
- *Yogurt Canyon Culvert and Access Road.* Installation of three proposed box culverts with headwall system and improvements to the existing roadway segment that provides access to Monument Mesa. The road would be elevated 5 feet above existing grade to accommodate the box culvert structure and elevated 4 feet above existing grade for the roadway segment west of the culvert crossing.

The proposed north-south realignment and proposed elevation of the east-west segment of Monument Road are classified in the Caltrans Highway Design Manual as low-volume rural roads. Both components would have a gravel surface, while a short section of road, from the new culverts and further west, would have AC pavement. Construction of the new road would involve placing up to approximately 6 feet of fill and constructing single and triple box culverts beneath the southern east-west leg of Monument Road. Construction activities would also include culvert removal, curb removal, guard rail removal, clearing and

grubbing brush, debris disposal, culvert installation, painting and striping, curb installation, and guard rail installation.

These roadways would have two 12-foot-wide travel lanes and two shoulders (2-feet-wide and 4-feet-wide) and would accommodate a standard 45-foot bus template with a 125-foot minimum curve radius. The roadways are designed based on the current Caltrans Highway Design Manual. The proposed roadway elevations are based on sea level rise, water surface elevations, and the sedimentation rates of Goat Canyon and Yogurt Canyon. The total length of road improvements would be about 1.3 miles, and the design speed and posted speed limit within the Project limits is 20 miles per hour.

In addition to the road segment realignment and proposed elevation redesign, the Proposed Project includes improvements to an existing staging area (including the construction of an aggregate surface equestrian parking lot off Beach Access Road near the terminus of Monument Road), a minor redesign of the existing entrance parking lot (including the proposed installation of an automated pay machine alongside the proposed north-south realignment), and relocation and installation of utilities (new electrical lines and 6-inch water mains are proposed to be trenched within the new roadway alignment). Earthwork for the new automated pay machine is anticipated to consist of remedial and fine grading, foundation excavations, and trenching for underground utilities.

The primary access routes to the Project Area would be via Monument Road from the north and the south. Two staging areas are proposed: (1) in the lower beach parking lot below Monument Mesa and/or (2) the informal dirt parking lot west of the new proposed entrance to BFSP. Construction is anticipated to begin March 2026 and take approximately 12 months to complete.

Anticipated construction equipment and materials may include the following: portable air compressor, vibratory soil compactor, portable concrete mixer, articulated frame motor grader, front end loader, dozer, backhoe, excavator, generator set, forklift, rough terrain crane, dump truck, gooseneck trailer, water tanker, and an earth auger.

3.3.4.1 Methodology

CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for San Diego County and Project information provided in the Project Site Plan; including road component length and width (for both demolition and realignment), box culvert dimensions, and parking lot area square footage. Additionally, construction haul truck emissions associated with the removal of the existing road segment material and excavation for utility placement were included in the CalEEMod emissions modeling. In addition to using CalEEMod San Diego County model defaults for proposed construction equipment, equipment was added manually to Proposed Project construction modeling to align with the Project Applicant's equipment list. The Proposed Project construction timeline was updated to match the Project Applicant's estimation.

The Project proposes upgrades to an existing state park. Currently, Monument Road is subject to seasonal flooding in several locations, which often leads to extended closures. Upon completion, enhanced

accessibility could lead to an increase in operational emissions compared to existing conditions. To conservatively estimate the potential increase in air quality emissions, the full 418-acre extent of BFSP is modeled in CalEEMod and analyzed as if operating as a city park, ensuring a comprehensive and conservative assessment of operational emissions. It is important to note that the CalEEMod model does not specifically accommodate the operational characteristics of a state park with roadway realignment, due to limitations in the available land use categories. Modeling calculations of operational mobile source emissions are informed by San Diego County defaults specific to a city park and operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions.

3.3.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project and alternatives. The following significance criteria for air quality were derived from Appendix G of the CEQA Guidelines. Impacts on air quality are considered significant if the Proposed Project or alternatives would:

10) Conflict with or obstruct implementation of any applicable air quality plan.
11) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
12) Expose sensitive receptors to substantial pollutant concentrations.
13) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

<u>San Diego Air Pollution Control District Significance Thresholds</u>

The significance criteria established by the applicable air quality management or air pollution control district (i.e., SDAPCD) may be relied upon to make the above determinations. According to the SDAPCD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SDAPCD recommends the use of the San Diego County thresholds of significance (San Diego County 2007) for air quality for construction and operational activities of land use development projects, such as that proposed, as shown in Table 3.3-5.

Table 3.3-5. SDAPCD Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
ROG	75	75
CO	550	550
NOx	250	250

Table 3.3-5. SDAPCD Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
SOx	250	250
PM_{10}	100	100
$PM_{2.5}$	55	55

Source: San Diego County 2007

Air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

USEPA Conformity Determination Thresholds

As previously described, General Conformity ensures that the actions taken by federal agencies do not interfere with a state's plans to attain and maintain national standards for air quality. A conformity determination would be required if the annual emissions of nonattainment pollutants generated by the Proposed Project were to exceed the General Conformity *de minimis* thresholds for the San Diego County region. The *de minimis* limits represent a level of emissions that the USEPA has determined will have only *de minimis* impacts to the air quality of an area and are thus exempted from the General Conformity Rule. If the overall predicted increase in emissions of a criteria pollutant, due to the Proposed Project, exceeds *de minimis* limits as shown in Table 3.3-6, the lead federal agency is required to make a conformity determination. As previously described, the Project Area is located in the SDAB. Table 3.3-6 lists the attainment status for each criteria air pollutant and the *de minimis* threshold based on San Diego County's NAAQS designation and classification.

Table 3.3-6. Federal General Conformity *De Minimis* Emissions Levels in San Diego County

Pollutant	Attainment Status	Classification	USEPA General Conformity Threshold (tons/year)
VOC (O_3 precursor)	Nonattainment	Severe	25
NO_x (O_3 precursor)	Nonattainment	Severe	25
PM_{10}	Unclassifiable	N/A	100
$PM_{2.5}$	Unclassifiable/Attainment	N/A	100
CO	Maintenance	Moderate	100
NO_2	Unclassifiable/Attainment	N/A	100
SO_2	Unclassifiable/Attainment	N/A	100

Table 3.3-6. Federal General Conformity *De Minimis* Emissions Levels in San Diego County			
Pollutant	**Attainment Status**	**Classification**	**USEPA General Conformity Threshold (tons/year)**

Source: CARB 2023; USEPA 2025a

Notes: CARB = California Air Resources Board; CO = carbon monoxide; N/A = Not Applicable; NOx = nitric oxides; O_3 = Ozone; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; SO_2 = sulfur dioxide; USEPA = U.S. Environmental Protection Agency; VOC = Volatile Organic Compound

3.3.4.3 Impact Discussion

Threshold 1: Would the Project conflict with or obstruct implementation of any applicable air quality plan?

Less than Significant Impact. As part of its enforcement responsibilities, the USEPA requires each state with federal nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal air quality standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in federal nonattainment areas, using a combination of performance standards and market-based programs. The SDAPCD currently monitors implementation of the SIP in the SDAB through the RAQS, which as previously described contains strategies and tactics to be applied in order to attain and maintain acceptable air quality in the SDAB. The RAQS is the applicable air quality plan for the Proposed Project. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date. As previously described, the SDAPCD has also prepared the 2020 Plan for Attaining the National Ozone Standards.

Consistency with the RAQS is determined by two standards: (1) whether the Project would increase the frequency or severity of violations of existing air quality standards, contribute to new violations, or delay the timely attainment of air quality standards or interim reductions as contained in the RAQS; and (2) whether the Proposed Project would exceed mobile and area emission source assumptions contained in the RAQS. The air quality emission projections and emission reduction strategies in the RAQS are based on information from CARB and SANDAG regarding mobile and area source emissions. CARB mobile source emissions projections and SANDAG growth projections are derived from population and vehicle use trends, and land use plans developed by the cities and the County of San Diego as part of their general plans. A project that proposes development consistent with the growth anticipated in a general plan would be consistent with the RAQS and 2020 Plan for Attaining the National Ozone Standards. Projects that propose development that is greater than the population growth projections and land use intensity of the adopted local general plan warrants further analysis to determine consistency with the RAQS and the SIP.

As evaluated below, the Project would not exceed the short-term construction standards or long-term operational standards (see Tables 3.3-7 and 3.3-9 below) and in so doing would not violate any air quality standards. Therefore, the Project would not contribute to new violations, or delay the timely attainment of

air quality standards or interim reductions as contained in the RAQS. Thus, the Project would be consistent with the first criterion. Furthermore, parcels within BFSP are designated for Park, Open Space and Recreation, and Public Facility land uses. The Proposed Project is consistent with these land use designations and is intended to enhance public access to the area, supporting its intended use as public land. As such, the Project would not conflict with or impede the implementation of the applicable air quality plan. The impact is less than significant.

Threshold 2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less than Significant Impact.

Proposed Project Construction Emissions

Regional Construction Significance Analysis

Emissions associated with Project construction would be temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., tractors, forklifts, pavers), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. Appendix D provides more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 3.3-7. Construction-generated emissions are short-term and of temporary duration, lasting only if construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the derived thresholds of significance.

Table 3.3-7. Construction-Related Criteria Air Pollutant Emissions

Construction Year	Pollutant (maximum pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction Calendar Year One*	11.40	104.00	116.00	0.29	32.40	15.20
Construction Calendar Year Two*	2.81	6.99	10.50	0.01	0.42	0.30

Table 3.3-7. Construction-Related Criteria Air Pollutant Emissions

Construction Year	Pollutant (maximum pounds per day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
SDAPCD Potentially Significant Impact Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Exceed SDAPCD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1. Refer to Appendix D for Model Data Outputs.

Notes: CalEEMod = California Emissions Estimator Model; CO = carbon monoxide; NOx = nitric oxides; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; ROG = Reactive Organic Gases; SDAPCD = San Diego County Air Pollution Control District; SO_2 = sulfur dioxide

* Construction emissions taken from the season (summer or winter) with the highest output. These emissions account for the removal of a 2,370-foot segment of Monument Road and the transport of approximately 22,710 cubic yards of soil. This estimate conservatively includes material movement associated with the proposed roadway realignment, parking lot improvements, and upgrades to the equestrian area. Soil import and export volumes were specifically calculated for the demolition and excavation of the north-south segment of Monument Road, the 1.3-mile road realignment, and enhancements to the equestrian parking area. A uniform roadway width of 30 feet was applied throughout the analysis.

As shown in Table 3.3-7, emissions generated during Project construction would not exceed the SDAPCD's thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. The impact is less than significant.

USEPA Conformity Determination Thresholds

As previously described, the Project Area is located in the San Diego County region, which is designated as a nonattainment area for the federal O_3 standard. Emissions generated during Project implementation would be short term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the Conformity Determination thresholds. Predicted maximum annual construction-generated emissions for the Proposed Project are summarized in Table 3.3-8 and compared against the USEPA Conformity Determination thresholds.

Table 3.3-8. Construction-Related Emissions (USEPA Conformity Determination Analysis)

Construction Year	Pollutant (tons per year)				
	VOC (ROG)	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Construction First Calendar Year	0.36	3.20	3.68	0.52	0.19
Construction Second Calendar Year	0.03	0.04	0.06	0.00	0.00

Table 3.3-8. Construction-Related Emissions (USEPA Conformity Determination Analysis)					
Construction Year	**Pollutant (tons per year)**				
	VOC (ROG)	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
USEPA Conformity Determination Thresholds for San Diego County (40 CFR 93.153)	*25*	*25*	*100*	*100*	*100*
Exceed USEPA Conformity Determination Thresholds?	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod version 2022.1. Refer to Appendix D for Model Data Outputs.

Notes: CalEEMod = California Emissions Estimator Model; CFR = Code of Federal Regulations; CO = carbon monoxide; NOx = nitric oxides; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; Project = Border Field State Park Resilience, Access, and Habitat Restoration Project; ROG = Reactive Organic Gases; USEPA = U.S. Environmental Protection Agency; VOC = Volatile Organic Compound

As shown in Table 3.3-8, emissions from construction of the Proposed Project would not exceed the USEPA Conformity Determination thresholds for the region. The impact is less than significant.

Proposed Project Operational Emissions

Regional Operations Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as O_3 precursors such as ROG and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use from employees and visitors to the state park. Operational air pollutant emissions were conservatively based on the total acreage of BFSP (418 acres). It is important to note that the CalEEMod model does not specifically accommodate the operational characteristics of a state park with roadway realignment, due to limitations in the available land use categories. As a result, operational activity has been modeled using the city park land use category within CalEEMod. Predicted maximum daily operational-generated emissions of criteria air pollutants for the Proposed Project are summarized in Table 3.3-9 and compared to the operational significance thresholds promulgated by the SDAPCD.

Table 3.3-9. Operational Criteria Air Pollutant Emissions						
Emission Source	**Pollutant (pounds per day)**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Mobile*	3.47	2.49	24.1	0.06	5.20	1.35
Area*	0.00	0.00	0.00	0.00	0.00	0.00
Energy*	0.00	0.00	0.00	0.00	0.00	0.00

Table 3.3-9. Operational Criteria Air Pollutant Emissions

Emission Source	Pollutant (pounds per day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Total	**3.47**	**2.49**	**24.1**	**0.06**	**5.20**	**1.35**
Daily Significance Threshold	*75*	*250*	*550*	*250*	*100*	*55*
Exceed Daily Threshold?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod version 2022.1. Refer to Appendix D for Model Data Outputs.

Notes: BFSP = Border Field State Park; CalEEMod = California Emissions Estimator Model; CO = carbon monoxide; NOx = nitric oxides; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; ROG = Reactive Organic Gases; SO_2 = sulfur dioxide;

* Construction emissions taken from the season (summer or winter) with the highest output. Emission projections predominately based on CalEEMod model defaults for San Diego County city park land uses and the total acreage of BFSP.

As shown in Table 3.3-9, the Project's emissions would not exceed any SDAPCD thresholds for any criteria air pollutants during operations. The impact is less than significant.

USEPA Conformity Determination Thresholds

As previously described, the Project Area is located in the San Diego County region, which is designated as a nonattainment area for the federal O_3 standard. Project operations would be considered a significant air quality impact if the volume of pollutants generated during operations exceeds the USEPA Conformity Determination thresholds. Predicted maximum annual operational-generated emissions of criteria air pollutants for the Proposed Project are summarized in Table 3.3-10 and compared to the Conformity Determination thresholds promulgated by the USEPA Conformity Determination.

Table 3.3-10. Operational-Related Emissions (USEPA Conformity Determination Analysis)

Emission Source	Pollutant (tons per year)					
	VOC (ROG)	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Total Annual Emissions	0.32	0.24	2.18	0.01	0.50	0.13
USEPA Conformity Determination Thresholds for San Diego County (40 CFR 93.153)	*25*	*25*	*100*	*100*	*100*	*100*
Exceed USEPA Conformity Determination Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

Source: CalEEMod version 2022.1. Refer to Appendix D for Model Data Outputs.

Table 3.3-10. Operational-Related Emissions (USEPA Conformity Determination Analysis)						
Emission Source	**Pollutant (tons per year)**					
	VOC (ROG)	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**

Notes: CalEEMod = California Emissions Estimator Model; CFR = Code of Federal Regulations; CO = carbon monoxide; NOx = nitric oxides; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; ROG = Reactive Organic Gases; SO_2 = sulfur dioxide; USEPA = U.S. Environmental Protection Agency; VOC = Volatile Organic Compound

As shown in Table 3.3-10, emissions from operation of the Proposed Project do not exceed the USEPA Conformity Determination thresholds for the region. The impact is less than significant.

Threshold 3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the Project Area is a single-family residence located northeast of the Project Area at the intersection of Monument Road and Saturn Boulevard, approximately 0.81 mile distant from the eastern boundary of the linear Project Area.

Construction Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of DPM, ROG, NO_x, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The San Diego County portion of the SDAB is listed as a nonattainment area for the federal O_3 standard and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and PM_{10} (CARB 2023). Thus, existing O_3, PM_{10} and $PM_{2.5}$ levels in the SDAB are at unhealthy levels during certain periods. However, as shown in Table 3.3-7 the Project would not exceed the SDAPCD's significance thresholds for construction emissions.

The health effects associated with O_3 are generally associated with reduced lung function. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO_x in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term O_3 exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O_3 may increase the risk of respiratory-related deaths. The concentration of O_3 at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to the least responsive individual after a 2-hour exposure to 400 parts per billion of O_3 and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O_3 concentration reaches 80 parts per billion. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NO_x) in excess of the SDAPCD thresholds, which are set to be protective of human health and account for cumulative emissions in San Diego County, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the SDAPCD's thresholds, which are set to be protective of human health and account for cumulative emissions in San Diego County. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and PM_{10} exhaust contains $PM_{2.5}$ exhaust as a subset. As with O_3 and NO_x, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SDAPCD's thresholds. The increases of these pollutants generated by the Proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. Therefore, PM_{10} and $PM_{2.5}$ emissions, when combined with the existing PM emitted regionally, would have minimal health effect on people located in the immediate vicinity of the Project Area. Additionally, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects from these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. This impact is less than significant.

Operational Air Contaminants

The health risk public-notification thresholds adopted by the SDAPCD are 10 excess cancer cases in a million for cancer risk and a hazard index of more than one (1.0) for non-cancer risk. Examples of projects

that emit toxic pollutants over long-term operations include oil and gas processing, gasoline dispensing, dry cleaning, electronic and parts manufacturing, medical equipment sterilization, freeways, and rail yards. Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Operation of the Proposed Project would not result in the development of any substantial sources of air toxics at nearby sensitive receptors. The Project would not have a high carcinogenic or non-carcinogenic risk during operation and the impact would be less than significant.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SDAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. A study conducted in Los Angeles County by the South Coast Air Quality Management District (SCAQMD) is helpful in showing the amount of traffic necessary to result in a CO Hotspot. The SCAQMD analysis prepared for CO attainment in the SCAQMD's 1992 Federal Attainment Plan for Carbon Monoxide in Los Angeles County, and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 Air Quality Management Plan can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). To establish a more accurate record of baseline CO concentrations affecting Los Angeles

County, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District, the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

A city park of equivalent acreage in San Diego County is projected to generate a daily maximum of 915 trips. Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per hour) and there is no likelihood of the Proposed Project traffic exceeding CO values. This is a less than significant impact.

Threshold 4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory, and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word *strong* to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

According to the CARB Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005), the sources of the most common operational odor complaints received by local air districts include facilities such as sewage treatment plants, landfills, recycling facilities, petroleum refineries, and livestock operations. The Project does not contain any of the land uses identified as typically associated with emissions of objectionable odors. Impacts would be less than significant.

3.3.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.3.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.4 Biological Resources

3.4.1 Introduction

This section describes the existing conditions and applicable laws, regulations, and policies for biological resources. The section also analyzes the potential of the Proposed Project to impact biological resources during construction, operation, and maintenance. Impacts to biological resources are considered significant if the project would: (1) have a substantial adverse effect on candidate, sensitive, or special-status species; (2) have a substantial adverse effect on riparian habitat or other sensitive natural community; (3) result in substantial interference with the movement of native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impedance of the use of native wildlife nursery sites; or (4) conflict with applicable local policies or ordinances protecting biological resources or with the provisions of an applicable adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The analysis is based on the following technical document included as an appendix to the Draft Environmental Impact Report:

- Biological Technical Report for the Border Field State Park Resilience, Access, and Habitat Restoration Project (Nordby et al. 2025).
- The biological surveys reported herein were conducted along a 200-foot-wide corridor including 100 feet on either side of the center line of the existing and proposed alignments, hereafter referred to as the survey corridor.

3.4.2 Environmental Setting

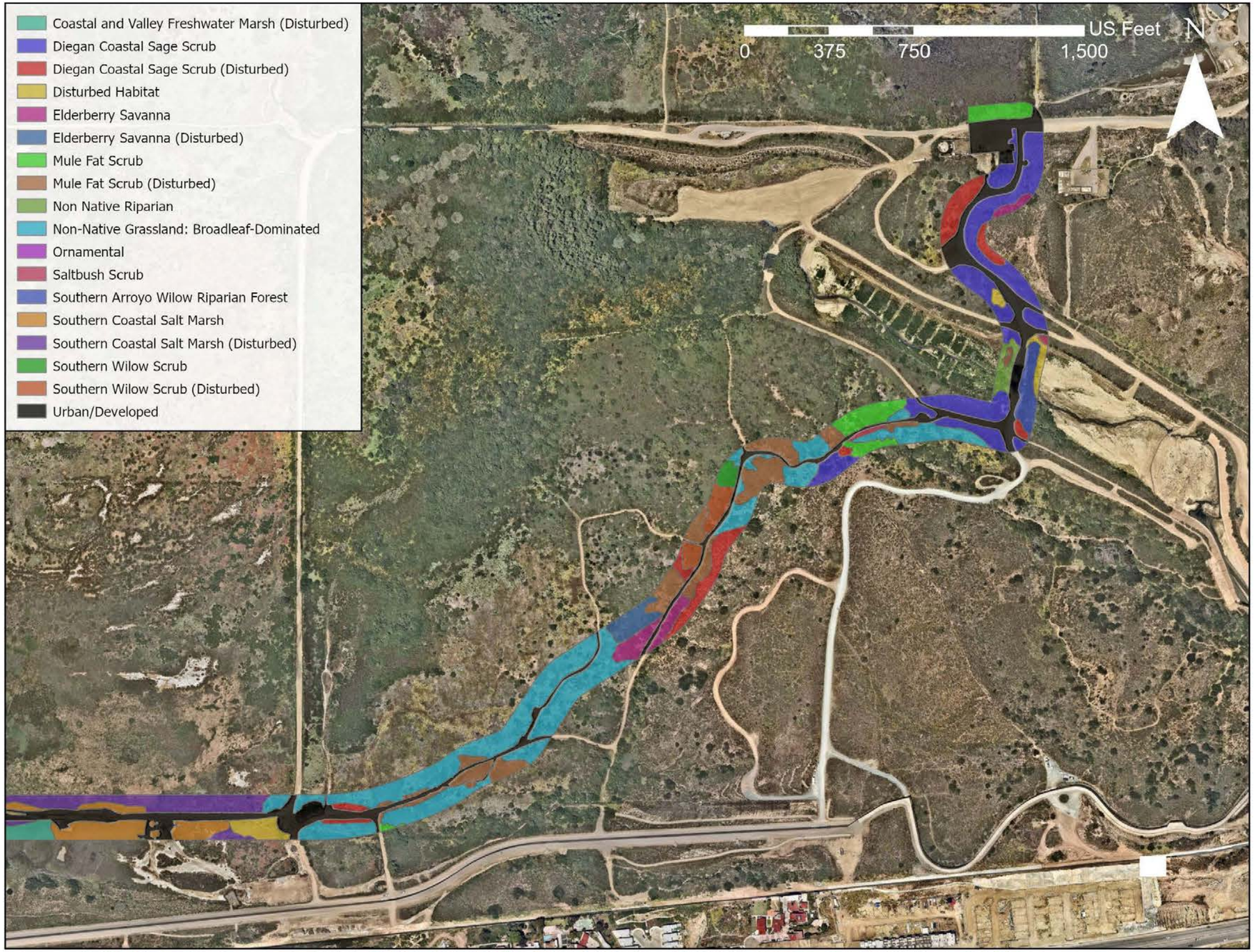
The Proposed Project traverses sensitive biological resources within Border Field State Park (BFSP). Additionally, the Project vicinity supports several sensitive vegetation communities, and sensitive plant and animal species. Sensitive vegetation communities include a variety of wetland and upland habitats, along with sensitive wildlife, including species designated as threatened and endangered by State and Federal resource agencies.

3.4.2.1 Vegetation Communities

Vegetation communities were originally mapped in 2016 and classified according to the system of Holland 1986 and modified Holland categories, as presented in Oberbauer et al. 2008. Due to the complexity of the vegetation communities, as a result of responses to flooding and sedimentation, California Department of Parks and Recreation (CDPR) biologists and a Geographic Information Systems (GIS) specialist reverified and updated mapping in the field in August 2023. CDPR also searched the California Natural Diversity Data Base (CNDDB) (California Department of Fish and Wildlife [CDFW] 2011, 2025) and San Diego Multiple Species Conservation Program (MSCP) for the Project vicinity, and generated lists of regionally significant species that could potentially occur in the area.

There are 18 vegetation communities and landforms, as described in the Biological Technical Report, located within the 200-foot-wide survey corridor that traverses both the existing and proposed alignments of the Project (Figures 3.4-1 and 3.4-2). Native habitats are described by name and, in some cases, include disturbed forms, as such areas support a moderate percentage of non-native plant species. Non-native habitats are described as either disturbed (comprised primarily of non-native species), ornamental (comprised primarily of planted landscape species), and urban/developed (comprised primarily of bare ground where there is a high level of usage with roadways, trails, and pullout areas). These vegetation communities include:

- coastal and valley freshwater marsh disturbed;
- Diegan coastal sage scrub – coastal form;
- Diegan coastal sage scrub – coastal form disturbed;
- disturbed habitat;
- elderberry savanna;
- elderberry savanna disturbed;
- mule-fat scrub;
- mule-fat scrub disturbed;
- non-native grassland - broadleaf dominated;
- non-native riparian;
- ornamental;
- saltbush scrub;
- southern arroyo willow riparian forest
- southern coastal salt marsh;
- southern coastal salt marsh – disturbed;
- southern willow scrub;
- southern willow scrub disturbed; and
- urban/developed.



Source: Nordby et al. 2025

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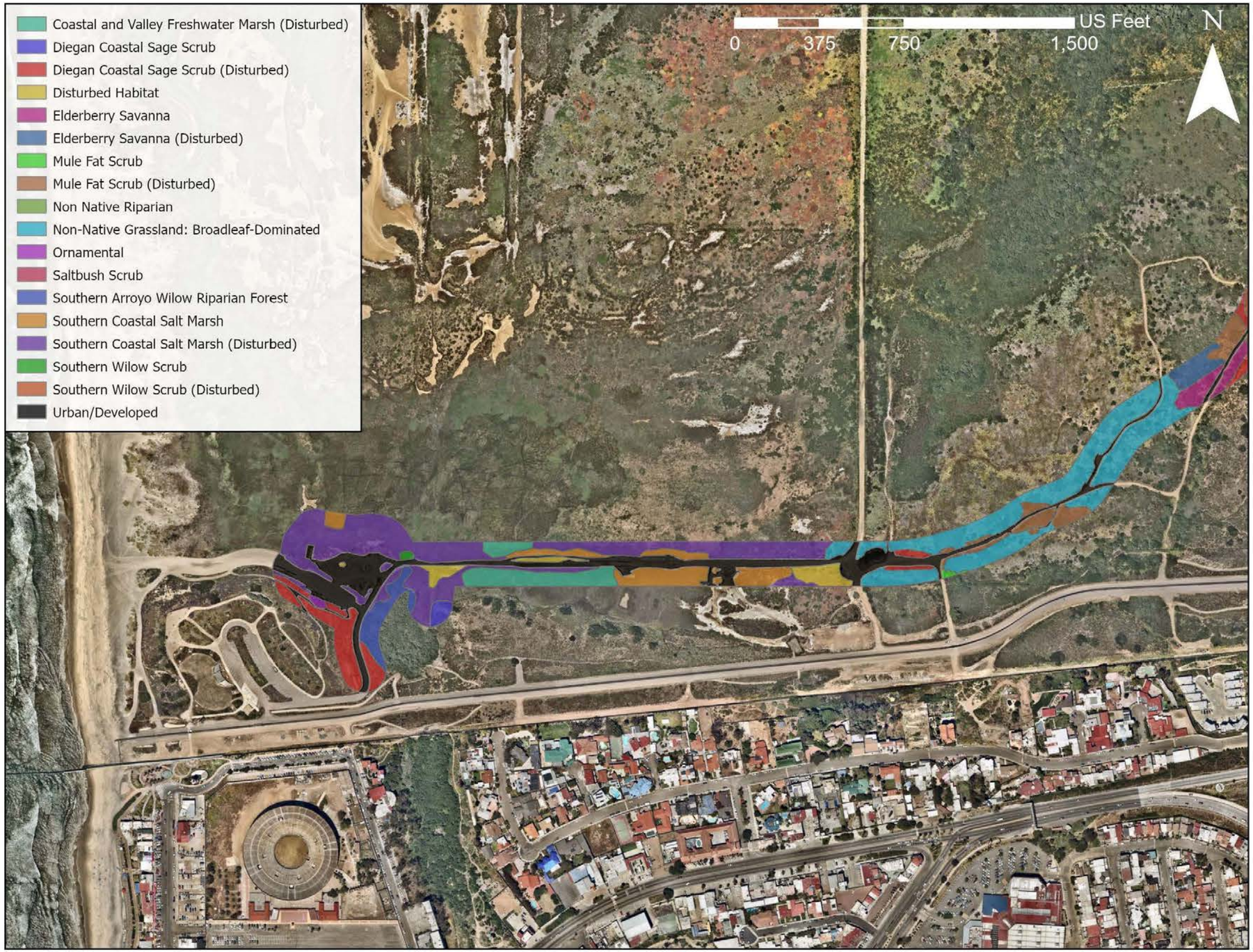
ENVIRONMENTAL CONSULTANTS

Figure 3.4-1. Vegetation Communities - Realignment Area

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project



Source: Nordby et al. 2025

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Figure 3.4-2. Vegetation Communities - East-West Segment and Equestrian Area

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project

A description of each vegetation community within the Project survey corridor is provided in the Biological Technical Report. Table 3.4-1 below provides a summary of the total acreage of each vegetation community that exists within the survey corridor.

Table 3.4-1. Vegetation Communities and Landforms within the Survey Corridor

Vegetation Community/Landform	Area within the 200-Foot Survey Corridor (acres)
Coastal and Valley Freshwater Marsh Disturbed	0.998
Diegan Coastal Sage Scrub -Coastal Form	3.221
Diegan Coastal Sage Scrub -Coastal Form Disturbed	2.307
Disturbed Habitat	0.745
Elderberry Savanna	0.581
Elderberry Savanna Disturbed	0.359
Mule-fat Scrub	0.940
Mule-fat Scrub Disturbed	2.008
Non-Native Grassland – Broad Leaf Dominated	5.383
Non-Native Riparian	0.230
Ornamental	0.042
Saltbush Scrub	0.079
Southern Arroyo Willow Riparian Forest	0.961
Southern Coastal Salt Marsh	1.248
Southern Coastal Salt Marsh Disturbed	4.363
Southern Willow Scrub	0.172
Southern Willow Scrub Disturbed	0.399
Urban/Developed	6.548
Total	**30.584**

Source: Nordby et al. 2025

3.4.2.2 Wildlife

Bird species comprised the majority of wildlife detected during surveys of the Project Area. Species included common yellowthroat (*Geothlypis trichas*), yellow warbler (*Dendroica petechial*), California thrasher (*Toxostoma redivivum*), black-throated gray warbler (*Setophaga nigrescens*), lazuli bunting (*Passerina amoena*), song sparrow (*Melospiza melodia*), wrentit (*Chamaea fasciata*), yellow-breasted chat (*Icteria virens*), rufous-crowned sparrow (*Aimophila ruficeps*), white-crowned sparrow (*Zonotrichia leucophrys*), western tanager (*Piranga ludoviciana*), coastal California gnatcatcher (*Polioptila californica californica*), orange-crowned warbler (*Vermivora celata*), cliff swallow (*Hirundo pyrrhonota*), house finch

(*Carpodacus mexicanus*), spotted towhee (*Pipilo maculatus*), greater roadrunner (*Geococcyx californianus*), and many others.

Mammal species detected onsite by direct observation or observations of track and/or scat included black-tailed jack rabbit (*Lepus californicus*), Audubon's cottontail (*Sylvilagus audubonii*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), California ground squirrel (*Spermophilus beecheyi*), and Botta's pocket gopher (*Thomomys bottae*). Several reptile species were also observed during the field surveys including western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis catenifer*), red diamond rattlesnake (*Crotalus ruber*), and California side-blotched lizard (*Uta stansburiana elegans*).

3.4.2.3 Special-Status Species

Sixty-one sensitive plant species and 48 sensitive wildlife species were identified as having the potential to occur in the Project vicinity.

Special-Status Wildlife

Wildlife surveys were conducted within the Project vicinity to determine the presence/absence of special-status wildlife species. Focused surveys were conducted for the coastal California gnatcatcher, least Bell's vireo (*Vireo bellii pusillus*), light-footed Ridgway's rail (*Rallus obsoletus levipes*), Belding's savannah sparrow (*Passerculus sandwichensis beldingi*), California least tern (*Sterna antillarum browni*), and western snowy plover (*Charadrius alexandrinus nivosus*).

Of the 48 wildlife species revealed by the database searches, 13 were confirmed present in or immediately adjacent to the survey corridor and are addressed below. Two additional species that did not appear in the database searches, but are on CDFW's Bird Species of Special Concern list and were observed during surveys, are the yellow warbler (*Dendroica petechia*), and yellow-breasted chat (*Icteria virens*).

A total of 15 sensitive wildlife species are addressed below.

Coastal California Gnatcatcher (Polioptila californica californica)

Federal status: Threatened / State status: Species of Special Concern (SSC) / MSCP Covered Species

The coastal California gnatcatcher nests and forages almost exclusively in coastal sage scrub habitat that formerly covered much of the coastal lowlands of southern California. Nests are generally built 0.5 to 1 meter off the ground in the branchs of California sagebrush (*Artemisia californica*), California buckwheat (*Eriogonum fasciculatum*), or any one of several other shrubs of the coastal sage scrub habitat.

California gnatcatcher surveys were conducted between April 13 and June 28, 2025. Six surveys were conducted at least one week apart and in accordance with U.S. Fish and Wildlife Service (USFWS) protocol (USFWS 1997). Eight pairs of California gnatcatchers and three dispersing juveniles, not associated with family groups, were detected during the surveys. While no territories overlapped with the Project study area, seven territories were within 500 feet of the Project work limits.

Least Bell's Vireo (Vireo bellii pusillus)

Federal status: Endangered / State status: Endangered / MSCP Covered Species

Optimal nesting habitat for least Bell's vireo typically consists of riparian woodland with well-developed overstories and understories, and low densities of aquatic and herbaceous cover. Nests are suspended from the branches of one of several possible tree or shrub species that typically occur in the riparian vegetation (Ehrlich 1988).

Least Bell's vireo surveys were also conducted following recommended USFWS survey techniques (USFWS 2001). Eight surveys at least 10 days apart were conducted from April 15 to July 22, 2025. Fifteen territories and unpaired or dispersing least Bell's vireo were documented during protocol surveys. All territories fell within the Project study area and four overlap the Project work limits.

Light-footed Ridgway's Rail (Rallus obsoletus levipes)

Federal status: Endangered / State status: Endangered; Fully Protected / MSCP Covered Species

Light-footed Ridgway's rails build nests in the coastal salt marshes they inhabit. Optimal habitat consists of monotypic stands of California cordgrass (*Spartina foliosa*), which the light-footed Ridgway's rail will pull over its nest to protect against detection by predators, although there are numerous accounts of rails nesting in cattails (*Typha* spp.), bulrush (*Schoenoplectus* spp.) and other species associated with fresh and brackish marshes.

As part of ongoing parkwide species' survey efforts, a habitat assessment and four surveys for light-footed Ridgway's rail were conducted in 2025, using methods from the Standardized North American Marsh Bird Monitoring Protocols (Conway 2009). Based on the survey results, eight nesting pairs and two individual males were detected. No rails were observed within the marginal habitat present within the Project study area or within 1,000 feet of the work limits.

Belding's Savannah Sparrow (Passerculus sandwichensis beldingi)

Federal status: None / State status: Endangered / MSCP Covered Species

The Belding's savannah sparrow nests and forages almost exclusively in the coastal salt marsh environment dominated by Pacific pickleweed (*Salicornia pacifica*). Nests are usually built in natural depressions in the ground and are concealed by overhanging vegetation (Ehrlich 1988).

As part of ongoing parkwide species' survey efforts, Belding's savannah sparrow surveys were conducted over a two-day period in May 2023. Protocol followed that established for the 5-year statewide breeding survey of the species by Zembal et al. 2015. Numerous individuals were observed within the park during the field efforts. No savannah sparrows were recorded within the Project study area or within 1,000 feet of the work limits.

California Least Tern (Sterna antillarum browni)

Federal status: Endangered / State status: Endangered / MSCP Covered Species

The California least tern resides in California only during the breeding season, which begins in mid-April and ends in mid-September. The southern extreme of its nesting range occurs near La Paz, Baja California while its northern most nesting range is in San Francisco Bay. During the breeding season the least tern will nest on sandy beaches, airports, and landfills adjacent to the ocean or a bay. The least tern is a colonial bird and nests on the ground by creating a small depression in the sand; the cryptic coloration of the eggs makes them difficult to detect.

Surveys of the California least tern colonies within the Tijuana River Estuarine Research Reserve and Border Field State Park have been conducted for over 20 years and include an annual census of the number of breeding pairs, nests, chicks, and fledglings produced. Weekly focused surveys of California least tern colonies were conducted in the Project Area during the 2023 nesting season. None of the nesting pairs were within approximately 500 feet of any Project component.

Western Snowy Plover (Charadrius alexandrinus nivosus)

Federal status: Threatened / State status: SSC / MSCP Covered Species

The western snowy plover is a small shorebird that occurs as a migrant, winter visitor, and localized breeder in San Diego County (Unitt 1984, 2004). Many of the local populations migrate south for the winter, while others remain in southern California year-round. The breeding season is typically between mid-March and may extend through September. However, nesting attempts as early as mid-February have been documented. Males build the nest in sandy dunes or mud flats by scraping a small depression in the ground and lining it with dry grass, twigs, and other debris.

Weekly focused surveys of western snowy plover nesting areas were conducted during the 2023 nesting season. None of the nesting pairs were within approximately 0.5 to 1 mile of any Project component.

Yellow Warbler (Dendroica petechia)

Federal status: None / State status: SSC

The yellow warbler is a small insectivorous migratory passerine that inhabits lowland and mature foothill riparian woodlands (Unitt 2004). Preferred plant species include cottonwoods (*Populus* spp.), willows (*Salix* spp.), and other small trees and shrubs typically found in open-canopy riparian woodlands. The birds usually occur on their breeding grounds from late March to mid-October.

Yellow warblers were detected in the Project study area during focused surveys for the least Bell's vireo in 2023 and 2025.

Yellow-Breasted Chat (Icteria virens)

Federal status: None / State status: SSC

The yellow-breasted chat is a relatively large warbler-like species which, in the arid West, is found primarily in shrubby habitats along rivers and streams. The bird breeds throughout North America from southern Canada to Mexico, and winters in Mexico and Central America.

Yellow-breasted chat were detected in the Project study area during focused surveys for the least Bell's vireo in 2023 and 2025.

Cooper's Hawk (Accipiter cooperii)

Federal status: None / State status: SSC / MSCP Covered Species

Cooper's hawk is a medium-sized accipiter native to North America, which ranges from southern Canada to Mexico. The species is common in San Diego County year-round where they utilize a number of native and artificial habitats ranging from woodlands and forests to suburban landscapes.

Cooper's hawks were observed in the Project Area during 2023 and 2025 surveys.

Northern Harrier (Circus hudsonius)

Federal status: None / State status: SSC

Northern harriers are a slender, medium-sized raptor with long broad wings, rounded tail, and owl-like face. The species primarily utilizes grassland and marsh habitats, nesting on the ground in shrubby vegetation. This raptor is found year-round in San Diego County.

Northern harriers were observed foraging adjacent to the Project Area during the 2025 wildlife surveys.

Rufous Crowned Sparrow (Aimophila ruficeps canescens)

Federal status: None / State status: None

The rufous-crowned sparrow, a member of the family Passerellidae, is a larger grayish-brown sparrow with a rufous crown and eye stripe. The species can be found on scrubby, arid hillsides in the Western U.S. and Mexico. This species is commonly found year-round in California south of Mendocino County. In San Diego, the species is primarily found on dry hillsides supporting chaparral and coastal sage scrub habitats.

Rufous-crowned sparrows were observed adjacent to the Project during 2025 coastal California gnatcatcher (CAGN) protocol surveys.

Southern California Legless Lizard (Anniella stebbinsi)

Federal status: None / State status: SSC

Southern California legless lizards are a small slender lizard with eyelids, a shovel-shaped snout, and no legs. It is light olive brown with yellow on the underside and sides. Legless lizards are found in areas with loose sandy soil with plenty of leaf litter.

A 2024 occurrence from iNaturalist was verified by a CDPR biologist, which showed the Southern California legless lizard as occurring within the Project study area.

Orange-throated Whiptail (Aspidoscelis hyperythra)

Federal status: None / State status: SSC

Orange-throated whiptail is a slim bodied lizard with a long slender tail. It has a black back with whiteish stripes, and a deep orange throat and blue-gray belly. In San Diego, the species occupies chaparral and coastal scrub habitats.

An orange-throated whiptail was observed within the Project Study Area during 2025 wildlife surveys.

Crotch's Bumblebee (Bombus crotchii)

Federal status: None / State status: Candidate Endangered

Crotch's Bumblebee is a medium sized bumblebee found throughout Central and Southern California. The term "medium tongue length" is used to describe the bee's tongue length, and the classification of "medium" means it prefers certain plants that have nectar sources accessible to bees with short to medium tongues. The species occurs in a range of habitats including grassland and sage scrub. This bumblebee primarily utilizes flowers from Astragalus, Acmispon, Asclepias, and other small flowers. The Crotch's bumblebee is a ground nesting species, with overwintering queens often occupying abandoned rodent burrows.

iNaturalist recorded occurrences in 2017 and 2024 that were verified when a CDPR biologist documented Crotch's bumblebee within the Project study area.

American Bumblebee (Bombus pensylvanicus)

Federal status: None / State status: None

The American bumblebee is a large bumblebee species found throughout the Eastern United States. There is a debate among taxonomists on the separation of *B. pensylvanicus* and *B. sonorous* (i.e., Sonoran bumblebee). Some sources cite *B. sonorus* as a subspecies of *B. pensylvanicus* that is found in the Western U.S., whereas *B. pensylvanicus* is typically found in the Eastern U.S. Other sources say the species are genetically unique.

Bombus sonorus was observed during 2023 and 2025 surveys foraging within the Project study area.

Special-Status Plants

Plant and wildlife species are considered sensitive if they have been listed as such by Federal or State resource agencies, or by special interest groups, such as the California Native Plant Society (CNPS). The 2023 and 2025 CNDDB RareFind searches resulted in the potential occurrence of 61 plant species in the Project Area. Of the 61 plant species included in the database search, 11 were confirmed present within the Project Study Area, all of which are addressed below.

Shaw's Agave (Agave shawii)

Federal status: None / State status: None / CNPS List 2B.1

Shaw's agave is a succulent-like shrub growing approximately 1 to 2 feet tall. The plant sends up a long flower stalk with small yellow flowers. The leaves are a dark green with spined edges. Shaw's agave is found in San Diego County and parts of Baja California primarily in scrub habitats on coastal bluffs.

San Diego Bur-Sage (Ambrosia chenopodiifolia)

Federal status: None / State status: None / CNPS List 2B.1

San Diego bur-sage is a shrub that grows up to 7 feet tall. Leaves are a silvery green and tomentose. Flower stalks consist of several unassuming flowers. San Diego bur-sage is found throughout Southern California and Baja California.

Single-Whorl Burro brush (Ambrosia monogyra)

Federal status: None / State status: None / CNPS List 2B.2

Single-whorl burro brush, a member of the Asteraceae family, is a shrub that is commonly found in washes, ravines and disturbed places below 2,000 feet. The plant and its stems are erect and generally under 8 feet in height. Branches are straight, slender and broomlike. Leaves are filiform, flowers are long, and fruits have burs. This species blooms from August to November.

Palmer's Sagewort (Artemisia palmeri)

Federal status: None / State status: None / CNPS List 4.2

Palmer's sagewort is common in wet locations, including drainages, ravines, and valleys below 6,000 feet. The plant can grow to approximately 8 feet in height from a woody base and is strongly scented (Hickman 1993). Stems are brittle and wand-like, leaves are deeply pinnately lobed, hairy above and gray green canescent below. It blooms from May to September. Like many CNPS-listed species, it is threatened by development.

San Diego Sunflower (Bahiopsis laciniata)

Federal status: None / State status: None / CNPS List 4.2

San Diego sunflower is common in Diegan coastal sage scrub and chaparral below 3,500 feet. The plant is typically spreading, rounded, and under 5 feet in height. The shrub's leaves are distinctly lanceolate, puckered, and leaf margins are cut. The flowers are radiate, yellow, and showy in summer. It is sometimes used in landscaping and blooms from February to August.

Golden-Spine Cereus (Bergerocactus emoryi)

Federal status: None / State status: None / CNPS List 2B.2

Golden-spined cereus is a rare coastal cactus that occurs below 1,000 feet. It is mostly erect, although it can be decumbent, and is less than 3 feet in height with spines up to 3 inches in length. The flowers are

yellow, and the blooming period is May through June. This species occurs on hillsides in the Project vicinity in Diegan coastal sage scrub and maritime coastal sage scrub.

Orcutt's Dudleya (Dudleya attenuata ssp. attenuata)

Federal status: None / State status: Protected by Assembly Bill 223 / CNPS List: 2B.1

Orcutt's dudleya is a small succulent approximately 0.8 to 6 inches tall. The plant flowers in June with flower stalks 0.8 to 4.5 inches tall with 3 to15 flowers on each stalk. Border Field State Park is the only location *D. attenuata* ssp. *attenuata* grows within California.

San Diego Barrel Cactus (Ferocactus viridescens)

Federal status: None / State status: None / CNPS List 2B.1 / MSCP Covered Species

San Diego barrel cactus is a rare species of barrel cactus native to southern California and northern Baja California. Most of its native range is in San Diego County, where it is threatened by development, agriculture, and other alterations in habitat. This cactus is spherical, oblate, or nearly cylindrical, is usually wider than tall, and less than 1 foot in height. The flesh is bright green and arranged into several ribs covered in arrays of long spines. The spines are red when new, dulling to gray or tan. The cactus has yellow to greenish flowers with red or pink scales and fruit that is yellow or red. It blooms from May through June. San Diego barrel cactus occurs primarily on steep slopes in maritime succulent scrub habitat.

San Diego Marsh Elder (Iva hayesiana)

Federal status: None / State status: None / CNPS List 2B.2

San Diego marsh elder is a shrubby, perennial herb native to northern Baja California and southern California. The plant can reach heights of approximately 40 inches. Its green oval-shaped leaves are fleshy, glandular, aromatic, and 1.2 to 2.4 inches long. The flowers are nearly invisible; male flowers have translucent corollas and simple yellow stamens and female flowers, if they occur, lack corollas altogether. This is a plant of mineral-rich waterways, such as intermittent streams and alkali flats.

Torrey Pine (Pinus torreyana spp. torreyana)

Federal status: None / State status: None / CNPS List 1B / MSCP Covered Species

The Torrey pine is a rare pine species growing primarily in coastal northern San Diego County and on Santa Rosa Island. The tree is found in closed cone coniferous forest and sandstone chaparral habitats. It is a broad, open-crowned pine tree growing to approximately 60 feet tall in the wild, with needles up to 12 inches long in groups of five. The cones are stout and heavy, typically 3 to 6 inches long and broad, and contain large, hard-shelled nuts.

Nuttall's Scrub Oak (Quercus dumosa)

Federal status: None / State status: None / CNPS List 1B

Nuttall's scrub oak is an evergreen shrub growing approximately 3 to 10 feet tall from a large, deep root network. The leaves have toothed edges, and the fruit is an acorn about 0.5 inches wide. Reproduction via seed generally occurs only in very moist years. Nuttall's scrub oak grows primarily in sandy soils near the coast in coastal chaparral habitats.

3.4.2.4 Critical Habitat

According to USFWS' Critical Habitat for Threatened and Endangered Species map viewer, there is no critical habitat within the Project Area (USFWS 2025). There is critical habitat for western snowy plover along the coast, west of the proposed Project and critical habitat for least Bell's vireo northeast of the Project; however, neither are within the Project Area and would not be impacted by the Proposed Project.

3.4.2.5 Wildlife Movement

Yogurt Canyon may provide some limited function as a wildlife corridor within the retained east-west segment of the Project; however, the canyon is filled at its southern boundary within the U.S. by the Border Area Infrastructure Project and is disconnected from the portion of the canyon within Mexico.

In its current configuration, the north-south segment of Monument Road fragments two areas of wetland habitat. The Project will remove pavement in this area and restore the connectivity, creating additional riparian habitat for wildlife use.

3.4.2.6 Jurisdictional Wetlands and Waters

The U.S. Army Corps of Engineers (USACE) currently requires that wetland delineations be performed using the 1987 Wetland Delineation Manual (USACE 1987), which states that a wetland delineation is based on three parameters: the prevalence of hydrophytic vegetation, the presence of hydric soils, and the presence of wetland hydrology. The 1987 manual requires the presence of all three indicators to define a wetland. A preliminary jurisdictional delineation was conducted in 2023 to assess the Project's potential impacts to jurisdictional habitats. The Proposed Project would temporarily impact 1.175 acres and permanently impact 0.925 acres of habitat under USACE jurisdiction. Additionally, the Project would temporarily impact 1.568 acres and permanently impact 1.476 acres of habitat under CDFW, Regional Water Quality Control Board (RWQCB), and California Coastal Commission (CCC) jurisdiction.

3.4.3 Regulatory Setting

3.4.3.1 Federal

<u>Endangered Species Act</u>

The federal Endangered Species Act (ESA) protects plants and animals that are listed as endangered or threatened by the USFWS and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR]17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any

endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary, provided a Habitat Conservation Plan (HCP) is developed.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918 implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act of 1940 (16 U.S. Code 668 to 668d), as amended, prohibits anyone, without a permit issued by USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Bald and Golden Eagle Protection Act also implements criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle... [or any golden eagle], alive or dead, or any part (including feathers), nest, or egg thereof." The Bald and Golden Eagle Protection Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." In addition to immediate impacts, the Bald and Golden Eagle Protection Act also covers effects that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

Clean Water Act

The purpose of the federal Clean Water Act (CWA) is to “restore and maintain the chemical, physical, and biological integrity of the nation’s waters.” Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the USACE. The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas “that are inundated or saturated by surface or ground water 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” (33 CFR 328.3 7b). The U.S. Environmental Protection

Agency acts as a cooperating agency to set policy, guidance, and criteria for use in evaluating permit applications and also reviews USACE permit applications. The USACE regulates *fill* or dredging of fill material within its jurisdictional features. *Fill material* means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Resources Control Board (SWRCB), administered by each of nine California RWQCBs.

3.4.3.2 State

California Endangered Species Act

The California ESA generally parallels the main provisions of the federal ESA but, unlike its federal counterpart, California ESA applies the take prohibitions to species proposed for listing (called *candidates* by the State). Section 2080 of the California FGC prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California FGC as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

Fully Protected Species

The State of California first began to designate species as fully protected in the 1960s, prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included birds (Section 3511), mammals (Section 4700), amphibians and reptiles (Section 5050), and fish (Section 5515). Most fully protected species have since been listed as threatened or endangered under federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California FGC Section 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code (FGC).

Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California FGC Sections 1900 to 1913) was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as *endangered* or *rare* and to protect endangered and rare plants from take. The California ESA of 1984

(California FGC Sections 2050 to 2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California FGC.

California Fish and Game Code

In addition to the FGC Sections mentioned above, the following Sections are applicable to the Project:

- *Section 3503*. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) may be considered take. Avoidance measures sufficient to prevent incidental take of bird nests and eggs protected by this statute must be incorporated into the Project.
    - *Section 3503.5*. All raptors and their nests are protected under this section. Avoidance measures sufficient to prevent incidental take of these species, their eggs, and their nests protected by this statute must be incorporated into the Project.
- *Section 3513*. This section protects California's migratory birds by making it unlawful to take or possess any migratory non-game bird as designated by the MBTA, except as authorized in regulations adopted by the federal government under provisions of the MBTA. Except as permitted by the USFWS under a Habitat Conservation Plan, avoidance measures sufficient to prevent incidental take of these species, their eggs, and their nests protected by this statute must be incorporated into the Project.

Lake and Streambed Alteration Program

Pursuant to Sections 1600 through 1616 of the California FGC, the CDFW regulates all substantial diversions, obstructions, or changes to the natural flow or the bed, channel, or bank of any river, stream, or lake which provides habitat and supports fish or wildlife. The CDFW defines a "stream" (including creeks and rivers) 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 surface or subsurface flow that supports or has supported riparian vegetation." "Bank" means the slope or elevation of land that bounds the bed of the stream in a permanent or longstanding way, and that confines the stream water up to its highest level. "Lake" includes "natural lakes or man-made reservoirs."

Rivers, streams, lakes, and riparian vegetation that provide habitat for fish and wildlife species are subject to jurisdiction by the CDFW under Sections 1600 through 1616 of the California FGC. Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Section 2785(e) defines "riparian habitat" as lands that contain habitat which grows close to and which depends upon soil moisture from a nearby freshwater source. The CDFW regulates the bed, bank to bank, as well as associated riparian vegetation. The CDFW has interpreted jurisdictional boundaries to be defined by the tops of stream banks (i.e., the limit of stream influence) and/or the limit of the canopy of riparian vegetation (outer drip line) that is hydrologically connected to river, stream, or lake, whichever is greatest. As a result, the area of CDFW jurisdiction is usually greater than the active channel and overlaps and extends beyond the USACE/RWQCB jurisdiction.

The Lake and Streambed Alteration Program requires execution of an agreement with the CDFW before any activity substantially modifies a river, stream, or lake. It is not legal to alter the bed or bank of a stream or lake or their natural water flow without a CDFW agreement. The California FGC Section 1602 requires an entity to notify the CDFW of any proposed activity that may substantially modify a perennial, intermittent, and ephemeral river, stream, or lake in the state (CDFW 2024b). Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- 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.

Porter-Cologne Water Quality Control Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Control Act (hereafter referred to as Porter-Cologne Act). These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California NPDES General Construction Permit for discharges of storm water runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). Under the Porter-Cologne Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" [Water Code 13260(a)].

Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code 13050[e]). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by the USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of Waste Discharge Requirements for these activities.

On April 2, 2019, the SWRCB adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (referred to as the Procedures) for inclusion in the *Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Resolution No. 2019-0015). The new Procedures include:

- definition of wetlands and aquatic resources that are Waters of the State,
- description of application requirements for individual orders (not general orders) for water quality certification, or waste discharge requirements,
- description of information required in compensatory mitigation plans, and
- definition of exemptions to application procedures.

The Office of Administrative Law approved the procedures on August 28, 2019, and the rule went into effect May 28, 2020.

3.4.3.3 Local

City of San Diego

While not bound to City of San Diego guidelines, the protection of MSCP listed species and the project restoration plan are being developed with the goals of the MSCP in mind.

Multiple Species Conservation Program

The MSCP was developed to preserve a network of habitat and open space thereby protecting biodiversity and enhancing the region's quality of life. Compliance with the MSCP is necessary to obtain compensation for potentially significant impacts to biological resources caused by a project.

The Multiple Habitat Planning Areas (MHPA) established within the City boundaries delineates core biological areas and corridors targeted for conservation. Limited development is allowed within the MHPA (City of San Diego 1997). The City of San Diego subarea plan includes five specific MHPA guidelines for the Tijuana Estuary and Tijuana River Valley.

- Maintain existing reserve (estuary) and park uses.
- Maintain a buffer around all wetland areas.
- Maintain existing agricultural uses on Spooner's Mesa with a long-term goal of phased restoration to coastal sage scrub, maritime succulent scrub or native grasslands.
- Maintain agricultural use on County-owned lands, with a long-term goal of restoration to native vegetation where possible, consistent with the County's Management Framework Plan.
- Retain and enhance, where possible, existing riparian habitat along the Tijuana River.

3.4.4 Impacts Analysis

3.4.4.1 Methodology

The impact analysis is based on the results of general, focused, and protocol surveys conducted in the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.4.4.2 Thresholds of Significance

To satisfy California Environmental Quality Act (CEQA) requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for biological resources were derived from Appendix G of the CEQA Guidelines. Impacts to biological resources are considered significant if the Proposed Project would:

14) have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

15) have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS;

16) have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

17) 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;

18) conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

19) conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

3.4.4.3 Impact Discussion

Threshold 1: Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant. SPRs and Project-Specific Requirements (PSRs) are incorporated to further ensure no impacts result. No direct or indirect impacts to Beldings's savannah sparrow, California least tern, or western snowy plover would occur, as these species are located well beyond the limits of construction. Avoidance and minimization measures contained in the PSRs and SPRs would be incorporated to prevent the potential for species disturbance.

Coastal California Gnatcatcher

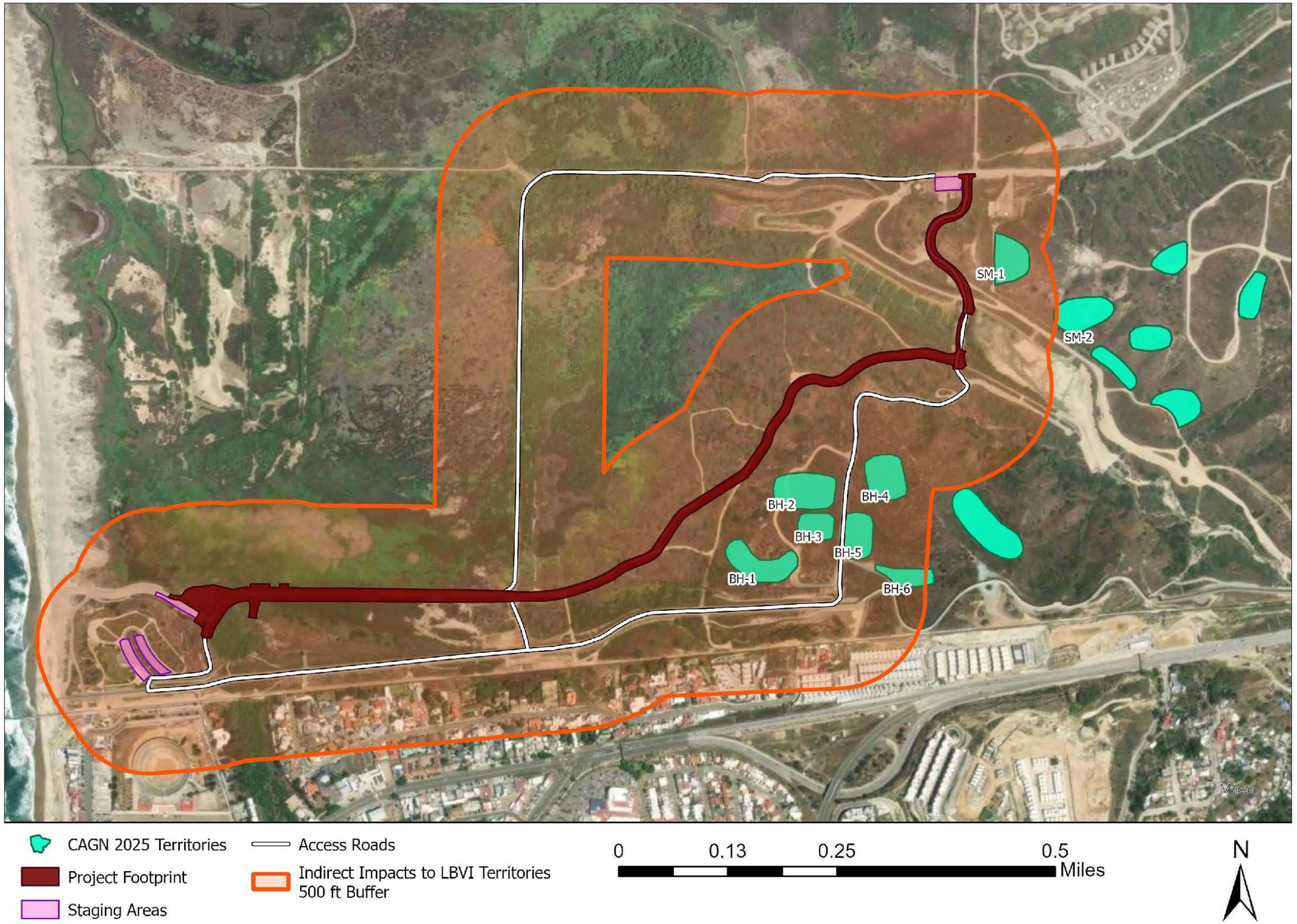
Fourteen territories of the CAGN were detected during 2025 surveys. All 2025 observations of CAGNs were made on topographic features known as Bunker Hill (BH) or Spooner's Mesa (SM). As such, the species was located well outside the proposed realigned Monument Road and are approximately 100 feet above the elevation of the existing and proposed road alignments. Therefore, implementation of the Proposed Project would not result in direct impacts to CAGN. Territories BH-1 through BH-6 and SM-1 and SM-2 are within 500 feet of the proposed roadway work and its associated access routes.

If nesting birds are present in the Project Area, ground-disturbing construction activities could directly affect nesting birds and other birds protected under the MBTA and their nests through the removal of habitat in the Project Area, and indirectly through increased noise, vibrations, and increased human activity.

Potential noise impacts to occupied gnatcatcher habitat from construction may occur to occupied habitat within 500 feet. Eight territories are either fully or partially included in the 500 ft buffer. Construction during the breeding season could potentially result in indirect impacts to these eight territories.

Implementation of SPRs BIO-1 through BIO-3 and PSR BIO-4 will ensure impacts to nesting birds will remain less than significant. The implementation of these SPRs and PSRs further reduce less than significant impacts to nesting birds and sensitive species within the Project Area. As previously stated, SPRs are specific standard requirements imposed uniformly by CDPR based on the proposed action taken and are required of the Proposed Project to reduce its potential environmental effects. Because these features are standard, they do not constitute mitigation measures. PSRs are specific project requirements of the Proposed Project that also have been incorporated to reduce its potential environmental effects. Because these features are part of Project design, they do not constitute mitigation measures.

Formal consultation with the USFWS is in progress. Avoidance and minimization measures to reduce impacts will be determined by the USFWS in the pending Biological Opinion for the Project, pursuant to Section 7 of the federal ESA.



Source: Nordby et al. 2025

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Figure 3.4-3. Indirect Impacts to CAGN by Territory

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project

Least Bell's Vireo

Fifteen territories of least Bell's vireo (LBVI) were detected during the 2025 surveys, of which one was confirmed paired. Of the 15 LBVI territories, all are located within a 500-foot buffer of the proposed new realignment or access routes. Use of this area as an access road could result in impacts from noise should work occur during the breeding season. Observations were largely in mule-fat scrub, elderberry savanna, and in larger arroyo willow stands.

Direct impacts from construction, both permanent and temporary, include those to territories G, I, J, K, and L (Figure 3.4-4). Construction would impact a total of 0.802 acres of occupied LBVI habitat. Through the Section 7 consultation process with USFWS, it is expected that Project construction would be phased to avoid the nesting season of LBVI, (roughly mid-March to mid-September). If Project construction occurs outside of the LBVI nesting season, no direct impacts to breeding LBVI are anticipated.

Construction noise may be considered an indirect impact as it may interfere with courtship behavior or cause temporary or permanent abandonment of the nesting territory. Noise may mask the song of the male, thereby inhibiting his chance of attracting a mate. Male LBVIs may also respond to construction noise by moving away from the source, thereby abandoning the nesting territory. Noise levels above 60 dBA could potentially disturb nesting LBVIs. Work windows could be utilized to minimize these impacts as well. Implementation of SPRs BIO-1 through BIO-3 and PSR BIO-4 will ensure impacts will remain less than significant.

Part of the project also includes improvements to equestrian facilities at the terminus of Monument Road, near the base of Monument Mesa. The increase in equestrian activity could potentially attract the brown-headed cowbird, a known nest parasite of the LBVI, to BFSP. Brown headed cowbirds have been tracked as part of the ongoing protocol surveys for LBVI in the park and will continue to be monitored after project implementation to ensure the success of LBVI in the future.

Light-footed Ridgway's Rail

No light-footed Ridgway's rail were detected within 1,000 feet of the nearest Project components during protocol surveys. Therefore, no direct or indirect impacts to this species would occur from Proposed Project implementation.

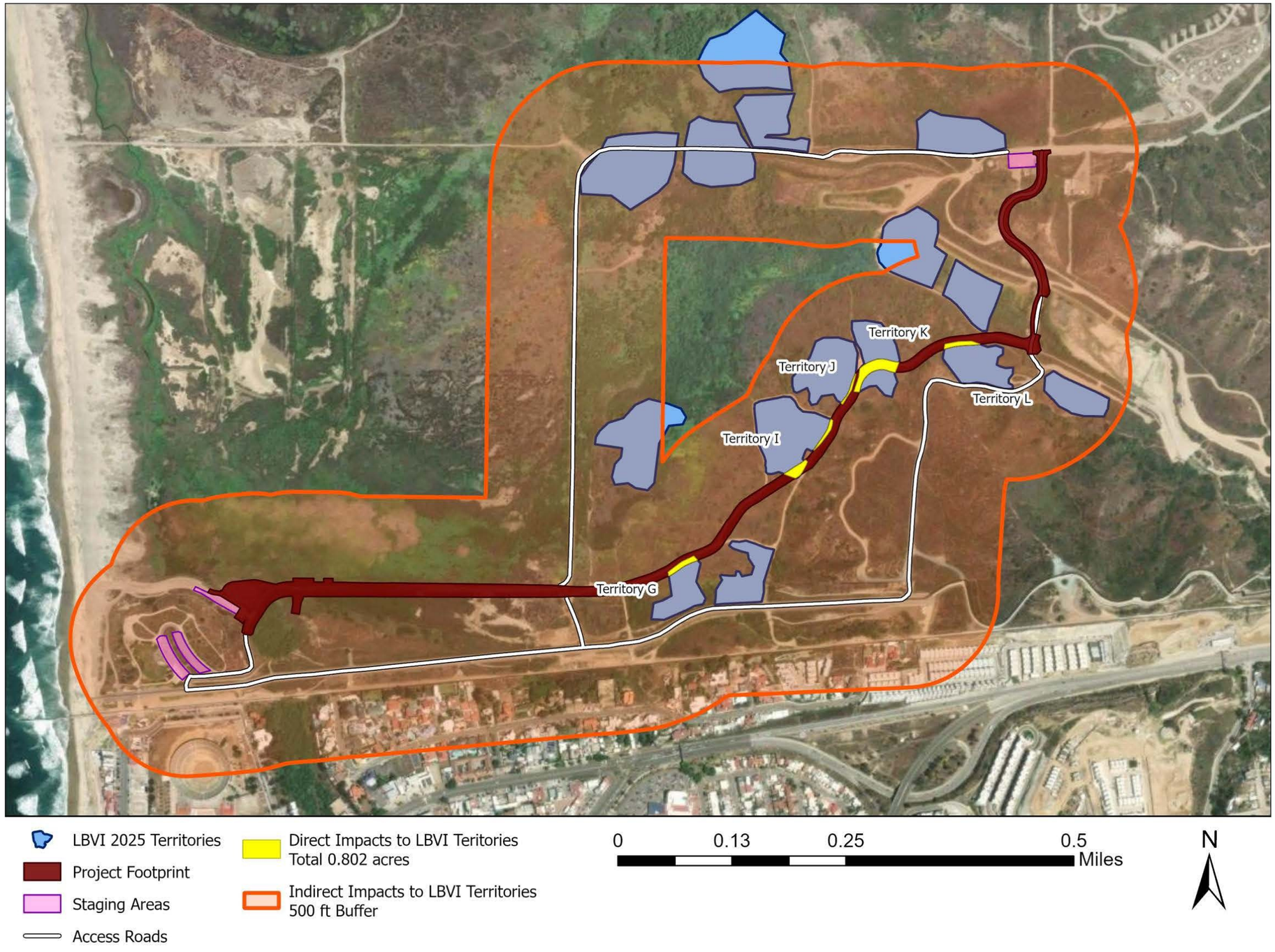
Belding's Savannah Sparrow

Numerous Belding's savannah sparrows (BSSP) were observed during the field survey in the salt marsh west of the north-south segment of Monument Road and north of the existing Horse Trail Road to the beach. Given that the nearest occurrence of a BSSP is located at least 1,000 feet from the Project footprint, no direct impacts to breeding savannah sparrows or their habitat are anticipated, nor are indirect impacts from construction noise anticipated.

California Least Tern

California least terns' nest on the beach outside of the Project footprint. The nearest nest was approximately 500 feet from the closest Project feature with a dune system further separating the Project

from the nesting area. No direct impacts to occupied habitat are anticipated from construction activities nor are indirect impacts from Project noise anticipated.



Source: Nordby et al. 2025

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Figure 3.4-4. Direct and Indirect Impacts to LBVI by Vegetation Community

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project

Western Snowy Plover

Similar to the California least terns, western snowy plovers nest on the beach outside of the Project footprint. The nearest nest was approximately 500 feet from the closest Project feature with a dune system further separating the Project from the nesting area. No direct or indirect impacts to western snowy plover and occupied habitat are anticipated from the construction of the Project.

Threshold 2: Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant. SPR's and PSRs Incorporated. Project impacts may include minor permanent impacts associated with the conversion of existing natural vegetation communities to structures or impervious surfaces, such as culverts and paved roadways. Temporary impacts include those associated with equipment access and staging areas. Table 3.4-2 summarizes total impacts to vegetation communities associated with the roadway access improvements.

Table 3.4-2. Total Vegetation Community Impacts

Vegetation Community/Landform	Temporary Impacts	Permanent Impacts	Total Impacts
	(acres)		
Coastal and Valley Freshwater Marsh Disturbed	0.212	0.095	0.307
Diegan Coastal Sage Scrub – Coastal Form	0.480	0.305	0.785
Diegan Coastal Sage Scrub – Coastal Form (Disturbed)	0.182	0.097	0.279
Disturbed Habitat	0.106	0.243	0.349
Elderberry Savannah	0.077	0.128	0.205
Elderberry Savannah (Disturbed)	0.044	0.070	0.114
Mule-fat Scrub	0.051	0.049	0.100
Mule-fat Scrub (Disturbed)	0.292	0.502	0.794
Non-native Grassland – Broadleaf Dominated	0.622	0.556	1.178
Non-native Fiparian	0.050	0.000	0.050
Saltbush Scrub	0.001	0.054	0.055
Southern Arroyo Willow Riparian Forest	0.110	0.072	0.182
Southern Coastal Salt Marsh	0.312	0.138	0.450
Southern Coastal Salt Marsh (Disturbed)	0.446	0.553	0.999
Southern Willow Scrub	0.030	0.005	0.035

Table 3.4-2. Total Vegetation Community Impacts			
Vegetation Community/Landform	**Temporary Impacts**	**Permanent Impacts**	**Total Impacts**
	(acres)		
Southern Willow Scrub (Disturbed)	0.065	0.062	0.127
Urban/Developed	0.650	3.835	4.485
Total	**3.730**	**6.764**	**10.494**

Source: Nordby et al. 2025

In addition to impacts from the overall Project, impacts by Project components are presented to provide details on the location of the impacts and the construction activities associated with the proposed work.

Realignment Area

Impacts associated with the realignment area are illustrated in Figure 3.4-5 and summarized in Table 3.4-3. Permanent impacts include those associated with the 30-foot-wide paved road, excluding those existing/unofficial dirt roads created and used by the Border Patrol. Temporary impacts include those incurred from two 10-foot-wide construction access roads. Staging areas will be located on sites that have been previously used for staging or in other disturbed or developed areas, such as existing parking lots.

Table 3.4-3. Realignment Area Construction Impacts			
Vegetation Community/Landform	**Temporary Impacts**	**Permanent Impacts**	**Total Impacts**
	(acres)		
Diegan coastal sage scrub – coastal form	0.478	0.305	0.783
Diegan coastal sage scrub – coastal form (disturbed)	0.131	0.088	0.219
Disturbed Habitat	0.009	0.008	0.017
Elderberry savannah	0.077	0.128	0.205
Elderberry savannah (disturbed)	0.044	0.070	0.114
Mule-fat scrub	0.051	0.049	0.100
Mule-fat scrub (disturbed)	0.292	0.502	0.794
Non-native grassland – broadleaf dominated	0.611	0.556	1.167
Non-native riparian	0.050	0.000	0.050
Saltbush scrub	0.001	0.054	0.055
Southern arroyo willow riparian forest	0.022	0.010	0.032
Southern willow scrub	0.013	0.004	0.017
Southern willow scrub (disturbed)	0.065	0.062	0.127

Table 3.4-3. Realignment Area Construction Impacts			
Vegetation Community/Landform	**Temporary Impacts**	**Permanent Impacts**	**Total Impacts**
	(acres)		
Urban/Developed	0.333	1.857	2.190
Total	**2.177**	**3.693**	**5.870**

Source: Nordby et al. 2025

Lower East-West Monument Road

Impacts associated with the retention and rehabilitation of the lower east-west segment of Monument Road are illustrated in Figure 3.4-6 and summarized in Table 3.4-4. Permanent impacts include those associated with the raised 30-foot-wide paved road with shoulders, excluding areas that are disturbed and the culvert crossing of Yogurt Canyon. Temporary impacts include two 15-foot-wide construction access roads located parallel to existing/unofficial roadways. Staging areas will be located on hardscape, existing roads, or in previously disturbed habitats.

Table 3.4-4. Lower East-West Monument Road Construction Impacts			
Vegetation Community/Landform	**Temporary Impacts**	**Permanent Impacts**	**Total Impacts**
	(acres)		
Coastal and valley freshwater marsh Disturbed	0.212	0.095	0.307
Diegan coastal sage scrub	0.002	0.000	0.002
Diegan coastal sage scrub (disturbed)	0.051	0.009	0.060
Disturbed Habitat	0.097	0.228	0.325
Non-native grassland: broadleaf-dominated	0.011	0.000	0.011
Southern arroyo willow riparian forest	0.088	0.062	0.150
Southern coastal salt marsh	0.312	0.138	0.450
Southern coastal salt marsh (disturbed)	0.385	0.464	0.849
Southern willow scrub	0.017	0.001	0.018
Urban/Developed	0.235	1.372	1.607
Total	**1.410**	**2.369**	**3.779**

Source: Nordby et al. 2025

Equestrian Area Improvements

The Proposed Project includes the construction of an aggregate surface equestrian parking lot off Beach Access Road near the terminus of the lower east-west segment of Monument Road. The parking lot would

provide two asphalt-concrete pavement driveways, one from Monument Road and another from Beach Access Road. The parking lot would include four equestrian parking stalls and eight horse corrals. Impacts associated with the improvements are illustrated in Figure 3.4-6 and summarized in Table 3.4-5.

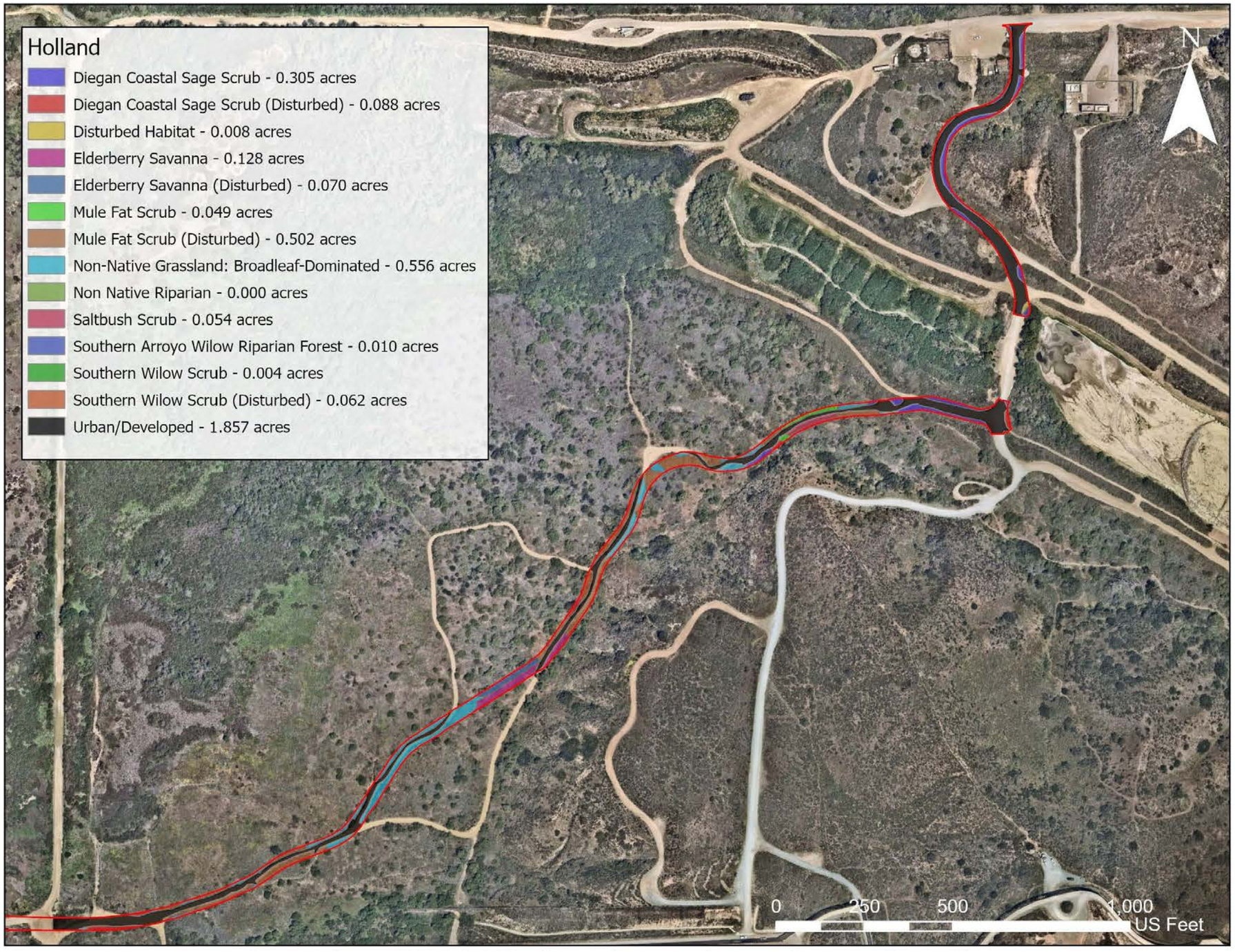
Table 3.4-5. Equestrian Area Construction Impacts

Vegetation Community/Landform	Temporary Impacts	Permanent Impacts	Total Impacts
	(acres)		
Disturbed Habitat	0.000	0.007	0.007
Southern coastal salt marsh (disturbed)	0.061	0.089	0.150
Urban/Developed	0.082	0.606	0.688
Total	**0.143**	**0.702**	**0.845**

Source: Nordby et al. 2025

In addition to impacts associated with the Project components presented in Tables 3.4-2 through 3.4-5, there will be impacts associated with staging areas. Staging areas will result in temporary impacts of 1.234 acres to Urban/Developed areas.

Since the Project will involve the implementation of a restoration component, the end result of the access improvements will be a net-wide gain of all native habitat types analyzed in the above sections. Implementation of PSR BIO-5 and SPRs BIO-6 and BIO-7 will ensure impacts to sensitive habitats will remain less than significant.



Source: Nordby et al. 2025

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Figure 3.4-5. Permanent Impacts on Vegetation Communities - Realignment Area

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project

Source: Nordby et al. 2025

ECORP Consulting, Inc.
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Figure 3.4-6. Permanent Impacts on Vegetation Communities - East-West Segment and Equestrian Area

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project

Threshold 3: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less than Significant. SPRs and PSRs Incorporated. The access improvement component of the Project would temporarily/permanently impact 1.175 acres/0.925 acres, respectively, of USACE jurisdictional habitat. Additionally, the Project would temporarily/permanently impact 1.568 acres/1.476 acres of CDFW, RWQCB, and CCC jurisdictional habitat (Figure 3.4-7). Table 3.4-6 summarizes total impacts to jurisdictional habitats associated with all Project components.

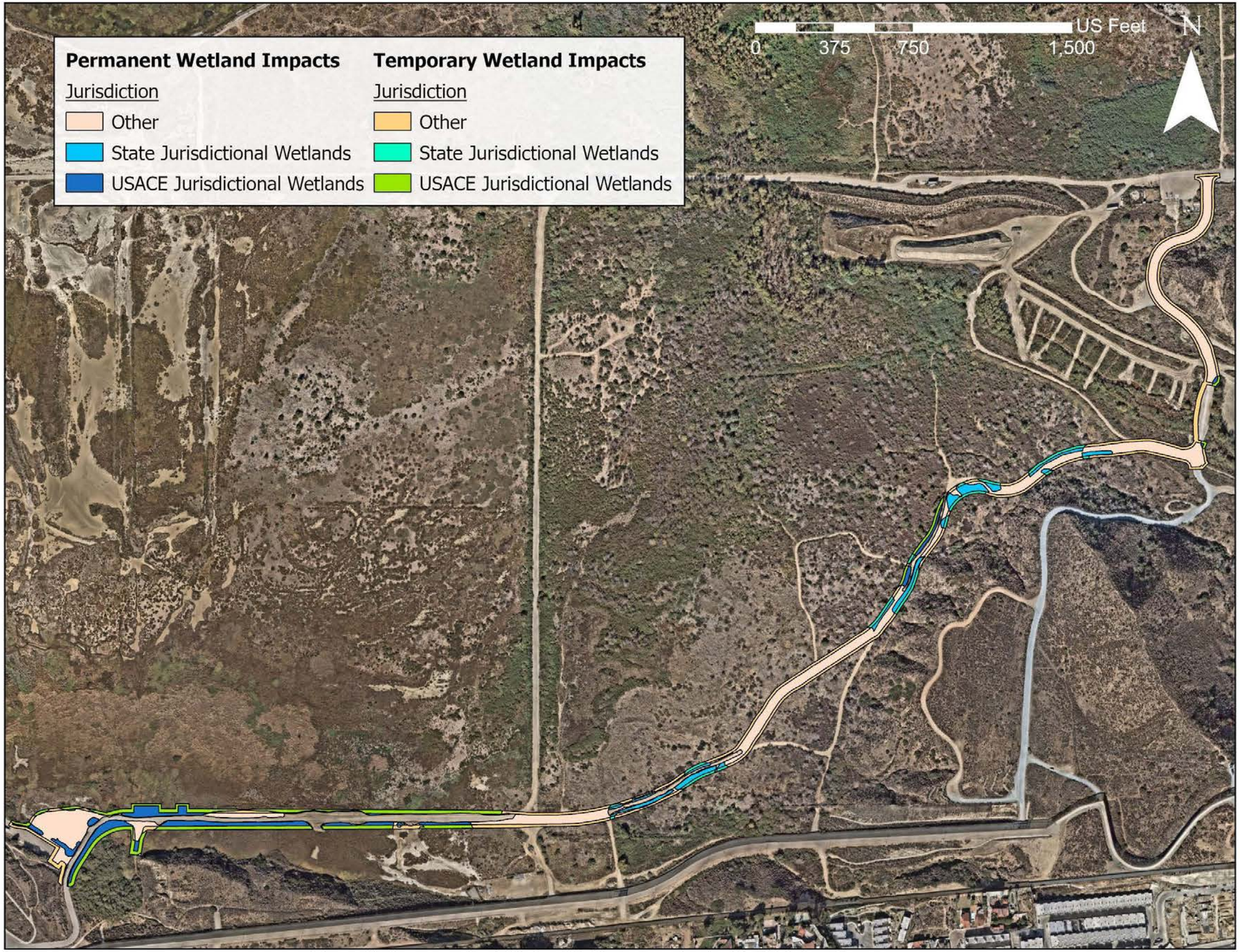
Table 3.4-6. Total Jurisdictional Habitat Impacts

Habitat Type	USACE Jurisdiction		CDFW, RWQCB, CCC Jurisdiction	
	Temporary/ Permanent Impacts	Total	Temporary/ Permanent Impacts	Total
	(acres)			
Coastal and valley freshwater marsh - disturbed	0.212/0.095	0.307	0.212/0.095	0.307
Mule-fat scrub	N/A		0.051/0.049	0.100
Mule-fat scrub - disturbed	N/A		0.292/0.502	0.794
Non-native riparian	N/A		0.050/0.000	0.050
Southern arroyo willow riparian forest	0.110/0.072	0.182	0.110/0.072	0.182
Southern coastal salt marsh	0.312/0.138	0.450	0.312/0.138	0.450
Southern coastal salt marsh - disturbed	0.446/0.553	0.999	0.446/0.553	0.999
Southern willow scrub	0.030/0.005	0.035	0.030/0.005	0.035
Southern willow scrub (disturbed)	0.065/0.062	0.127	0.065/0.062	0.127
Total	**1.175/0.925**		**1.568/1.476**	

Notes: CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; N/A = Not Applicable; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers

Source: Nordby et al. 2025

Impacts to individual Project components are presented below to provide details regarding both the location and habitat types impacted.



Source: Nordby et al. 2025

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Figure 3.4-7. Temporary and Permanent Impacts to Jurisdictional Habitat

2022-270.02 Border Field State Park Resilience, Access, and Habitat Restoration Project

Realignment Area

Impacts to jurisdictional habitats associated with construction of the road realignment are illustrated in Figure 3.4-7 and summarized in Table 3.4-7 below. Mule-fat scrub habitats have been heavily impacted by sediment and do not meet the USACE criterion for wetland soils. However, these habitats do qualify as wetlands as defined by the CDFW, RWQCB, and CCC.

Table 3.4-7. Realignment Area Jurisdictional Habitat Impacts

Habitat Type	USACE Jurisdiction	CDFW, RWQCB, CCC Jurisdiction
	Temporary/Permanent Impacts (acres)	
Mule-fat scrub	0.000/0.000	0.051/0.049
Mule-fat scrub (disturbed)	0.000/0.000	0.292/0.502
Non-native riparian	0.000/0.000	0.050/0.000
Southern arroyo willow riparian forest	0.022/0.010	0.022/0.010
Southern willow scrub	0.013/0.004	0.013/0.004
Southern willow scrub (disturbed)	0.065/0.062	0.065/0.062
Total	**0.100/0.076**	**0.493/0.627**

Source: Nordby et al. 2025

Notes: CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers

Lower East-West Monument Road

Impacts to jurisdictional habitats associated with the elevation of the existing east-west alignment are illustrated in Figure 3.4-7 and summarized in Table 3.4-8. Like those habitats located adjacent to the proposed north-south alignment, habitats adjacent to the east-west elevation are frequently inundated with water from Yogurt Canyon and thus meet all three USACE criteria.

Table 3.4-8. Lower East-West Monument Road Jurisdictional Habitat Impacts

Habitat Type	USACE Jurisdiction	CDFW, RWQCB, CCC Jurisdiction
	Temporary/Permanent Impacts (acres)	
Coastal and valley freshwater marsh	0.212/0.095	0.212/0.095
Southern arroyo willow riparian forest	0.088/0.062	0.088/0.062
Southern coastal salt marsh	0.312/0.138	0.312/0.138
Southern coastal salt marsh (disturbed)	0.385/0.464	0.385/0.464

Table 3.4-8. Lower East-West Monument Road Jurisdictional Habitat Impacts		
Habitat Type	**USACE Jurisdiction**	**CDFW, RWQCB, CCC Jurisdiction**
	Temporary/Permanent Impacts (acres)	
Southern willow scrub	0.017/0.001	0.017/0.001
Total	**1.014/0.760**	**1.014/0.760**

Source: Nordby et al. 2025

Notes: CCC = California Coastal Commission; CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers

Equestrian Area Improvements

Impacts associated with this Project component are illustrated in Figure 3.4-4 and summarized in Table 3.4-9.

Table 3.4-9. Equestrian Area Jurisdictional Habitat Impacts		
Habitat Type	**USACE Jurisdiction**	**CDFW, RWQCB, City Jurisdiction**
	Temporary/Permanent Impacts (acres)	
Southern coastal salt marsh (disturbed)	0.061/0.089	0.061/0.089
Total	**0.061/0.089**	**0.061/0.089**

Source: Nordby et al. 2025

Notes: CDFW = California Department of Fish and Wildlife; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers

Staging areas will impact 1.234 acres of urban/developed areas, of which no restoration is required. As previously discussed, the Proposed Project would temporarily/permanently impact 1.175 acres/0.925 acres, respectively, of USACE jurisdictional habitat. Additionally, the Project would temporarily/permanently impact 1.568 acres/1.476 acres of CDFW, RWQCB, and CCC jurisdictional habitat. With restoration, the Project would be consistent with the USACE policy of "no net loss" of wetlands. Additionally, as restoration is a primary component of the Project, implementation would result in a net gain of wetlands under the jurisdictions of the USACE, RWQCB, CDFW, and CCC. Therefore, less than significant impacts to wetland habitat would result from the access improvements.

Table 3.4-10. Total Impacts and Mitigation Associated with All Project Components

Habitat Type	Temporary/ Permanent Impact (acres)	Mitigation Ratio Temporary/ Permanent	Acreage Required Temporary/ Permanent) (acres)	Total Acreage Required
CVFW (D)	0.212/0.095	1:1/4:1	0.212/0.380	0.592
DCSS	0.480/0.305	1:1/ 1:1	0.480/0.305	0.785
DCSS (D)	0.182/0.097	1:1/1:1	0.182/0.097	0.279
Disturbed Habitat	0.106/0.243	N/A	0.000/0.000	0.000
Elderberry savanna	0.077/0.128	1:1/1:1	0.077/0.128	0.205
Elderberry savanna (D)	0.044/0.070	1:1/1:1	0.044/0.070	0.114
Mule-fat scrub	0.051/0.049	1:1/3:1	0.051/0.147	0.198
Mule-fat scrub (D)	0.292/0.502	1:1/3:1	0.292/1.506	1.798
NNG	0.622/0.556	1:1/1:1	0.622/0.556	1.178
Non-native Riparian	0.050/0.000	N/A	0.000/0.000	0.000
Saltbush scrub	0.001/0.054	1:1/ 1:1	0.001/0.054	0.055
SAWRF	0.110/0.072	1:1/3:1	0.101/0.216	0.326
SCSM	0.312/0.138	1:1/4:1	0.312/0.552	0.864
SCSM (D)	0.446/0.553	1:1/4:1	0.446/2.212	2.658
Southern willow scrub	0.030/0.005	1:1/3:1	0.030/0.015	0.045
Southern willow scrub (D)	0.065/0.062	1:1/3:1	0.065/0.186	0.251
Urban/developed	0.650/3.835	N/A	0.000/0.000	0.000

Notes: (D) = disturbed; CVFW = Coastal and Valley Freshwater Marsh; CVFW = Coastal and Valley Freshwater Marsh; DCSS = Diegan coastal sage scrub; N/A = Not Applicable; NNG = Non-native grassland; Project = Border Field State Park Resilience, Access, and Habitat Restoration Project; SAWRF = Southern arroyo willow riparian forest; SCSM = Southern coastal salt marsh

Source: Nordby et al. 2025

Impacts to all wetland communities will be mitigated through the creation, restoration, or enhancement of similar, higher quality wetlands within the MHPA or to standards requested by agencies during the permitting process. Implementation of PSR BIO-5 and SPRs BIO-6 and BIO-7 would ensure impacts to sensitive habitat/resources will remain less than significant.

Threshold 4: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. SPRs and PSRs Incorporated. Yogurt Canyon may provide some limited function as a wildlife corridor within the lower east-west segment of the Monument Road; however, the canyon is filled at its southern boundary within the U.S. by the Border Area Infrastructure Project and is

disconnected from the portion of the canyon within Mexico. With the restoration component of the Project, previously fragmented patches of habitat will be connected, thereby resulting in a net benefit to native and migratory wildlife moving through the park. Implementation of PSRs BIO-8 and BIO-9 would ensure impacts will remain less than significant.

Threshold 5: Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant Impact. As previously discussed, wetland and upland restoration proposed under this Project would be consistent with the USACE policy of "no net loss" of wetlands. Additionally, the Proposed Project would comply with all local policies or ordinances. Therefore, impacts would be less than significant.

Threshold 6: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Less than Significant with SPRs and PSRs Incorporated. The Project lies within the City of San Diego's MSCP, but it does not fall under the jurisdiction of the City and is therefore not subject to the MSCP regulations. However, the Project has taken the guidelines set forth in the MSCP into consideration to align with other habitat and species preservation efforts under the City's MSCP Subarea Plan for the Tijuana Estuary and Tijuana River Valley. MSCP covered species have been included in this review and addressed with respect to potential impacts. Appropriate avoidance and minimization measures for these species will be implemented as part of the Project. The Restoration Plan, currently being developed, also follows the MSCP guidelines and ultimately exceeds the requirements of the program; resulting in a net benefit and gain to sensitive habitat within BFSP.

CDPR will also be formally consulting with the USFWS and CDFW for all federally and State listed species within the Project Study area; therefore, take authorization under the City of San Diego's MSCP will not be necessary. Specific avoidance and minimization measures will be determined in coordination with these agencies to reduce the potential for impacts on special status MSCP species.

Given that the Project would result in a net gain or increase of native habitat that could support MSCP covered species, impacts would be less than significant with implementation of the restoration component.

3.4.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No mitigation measures are required for impacts to biological resources. The following Standard Project Requirements (SPRs) and PSRs would ensure that Project-related biological resource impacts remain less than significant.

BIO-1 (SPR): Environmental Awareness Training. A qualified biologist shall present an education program on the coastal California gnatcatcher, least Bell's vireo, and other listed/sensitive species to all Project employees prior to the start of construction and before new employees

begin work on-site. Materials discussed in the program will include, at a minimum, the following topics: (1) species description, general behavior, and ecology, (2) distribution and occurrence near the Project site, (3) species' sensitivity to human activities, (4) legal protection, (5) penalties for violation of State and Federal laws, (6) reporting requirements, and (7) Project conservation measures. The qualified biologist shall document the names, dates, and affiliation of those persons who attend the training.

BIO-2 (SPR): Resource Monitoring. Prior to construction, a qualified biologist shall conduct a pre-construction survey for all sensitive plants and wildlife within and near the Project Area to include:

- A survey for special-status plants. Should any special-status plants be found (either individuals or populations), then measures shall be incorporated into operations to prevent/reduce disturbance. At a minimum, temporary fencing or flagging shall be placed around/near the plant(s) to provide a conspicuous, visual barrier. Any other measures deemed necessary by the qualified biologist shall also be employed to prevent disturbance to the species and may involve monitoring and/or coordination with the permitting agency (or agencies).
- A survey for sensitive wildlife. Should sensitive wildlife be found, then measures recommended by the qualified biologist shall be incorporated into the Project to reduce the likelihood of species impacts.

A qualified biologist shall be present on-site during all clearing, grubbing, and grading activities to monitor work and ensure conservation measures are appropriately implemented. Such activities will include, the installation/removal of construction boundary materials, vegetation trimming, vegetation removal, and trench excavation/back-fill. In addition, the qualified biologist shall, at his/her discretion, continue to survey activities throughout construction to ensure that impacts to natural resources are avoided/minimized.

During vegetation clearing, trimming or removal, and/or ground disturbing work, the qualified biologist shall be on-site to monitor for the presence of special-status species. If any wildlife or plants of concern are discovered during these activities, the qualified biologist shall coordinate with the CDPR Representative regarding appropriate measures to safeguard the health/life of the resource(s) (e.g., flushing, safely relocating away from the site).

Should a federally or State listed species be discovered onsite, then the CDPR Representative shall be immediately notified. The CDPR Representative, in coordination with the qualified biologist, shall review/suspend activities and contact the USFWS and/or CDFW, as appropriate. Following consultation, conservation measures recommended by the USFWS and/or CDFW, in conjunction with CDPR, shall be implemented into the Project.

BIO-3 (SPR): Preconstruction Survey for Nesting Birds. Any construction-related activities conducted between February 15 to September 15 shall implement the following measures:

- A nesting bird survey shall be performed by the qualified biologist within and near the Project footprint no more than five (5) days prior to the onset of any activities.
- Should an active nest/nesting bird be found, then appropriate measures, as determined by the qualified biologist, shall be implemented to minimize impacts. These measures may include, but are not limited to:
    - Work shall be redirected to other locations within the Project area by the CDPR Representative.
    - Protection measures shall be implemented, such as staking/flagging near the nest site, establishing a minimum "no work" buffer, and/or installing temporary fencing.
    - Work shall not start or resume in the area of concern until receipt of written approval from the CDPR Representative.

BIO-4 (PSR): Work Windows. All Project-related work occurring on the North-South Segments (i.e., between Station (STA) 120+00 to STA 167+84 and 0+00 to 28+77) shall be completed between September and January, to the maximum extent possible, to avoid /minimize impacts to sensitive/listed avian species.

All Project-related work occurring on the East-West Segment (i.e., between STA 100+00 to STA 120+00) shall be completed between February to October (bird nesting season), as these areas were not documented as being occupied and, therefore, are less likely to support sensitive/listed species.

BIO-5 (PSR): Resource Fencing. Sensitive habitat near the Project boundaries shall be designated Environmentally Sensitive Areas and strictly avoided. No encroachment (i.e., workers, equipment, materials) shall be allowed in these locations at any time. Sensitive vegetation or resources shall be marked and protected by temporary fencing (e.g., orange plastic fencing, silt fencing) or other acceptable method. Work limits shall be clearly marked in the field and confirmed by the qualified biologist/biological monitor prior to the start of operations. All staked/fenced boundaries shall be maintained in good repair throughout construction.

BIO-6 (SPR): Equipment Fueling and Storage. All storage and staging areas shall only be allowed on existing developed or disturbed locations (e.g., paved surfaces) that have been reviewed and approved by CDPR, in coordination with the qualified biologist and Project archaeologist. All areas used for stockpiling shall be kept free from trash and other waste. No Project-related items shall be stored outside approved staging areas at any time.

The changing of oil, refueling, and other actions (e.g., washing of concrete or paint) that could result in the release of a hazardous substance shall be restricted to approved/designated areas that are a minimum of 50 feet from any sensitive habitat/Environmentally Sensitive Areas, culvert, or drainage. Such sites shall be surrounded with berms, sandbags, or other barriers to further prevent the accidental spill of fuel, oil, or chemicals. Any discharges shall be immediately contained, cleaned up, and properly disposed off-site.

All construction equipment and vehicles shall be inspected for leaks immediately prior to the start of work, and regularly thereafter until the equipment and/or vehicles are removed from the park. Should any oils or fluids be observed leaking from vehicles or heavy equipment, then a drip pan shall be placed below the leak to prevent hazardous materials from spilling onto the ground, seeping into the soil, or entering nearby habitat.

All equipment shall be cleaned, fueled, and repaired (other than emergency repairs) outside park boundaries, whenever possible. Contaminated water, sludge, spill residue, or other hazardous compounds shall be disposed of outside the park, at a lawfully authorized destination.

All construction equipment used for the Project shall be clean and free of soil and plant material before arrival on-site and before leaving the park to prevent the spread of invasive plants. The qualified biologist shall periodically inspect vehicles, equipment, and boots to ensure that no invasive species leave the site or are introduced into the park.

BIO-7 (SPR): **Work Limits.** Work shall be limited to the construction footprint, as outlined in the Project Plans and directed by the CDPR Representative. Access routes, staging areas, and the total footprint of disturbance shall be the minimum number or size necessary to complete the Project and will be selected and placed to avoid impacts to sensitive habitats and resources.

BIO-8 (PSR): **Temporary Fencing.** Temporary fencing shall be installed during construction parallel to any potential wildlife corridors or areas adjacent to sensitive natural resources, as determined by the qualified biologist, to discourage wildlife from accessing the construction areas. After construction is complete, the fencing shall be removed.

BIO-9 (PSR): **Open Trenches and Excavations.** Areas of excavation (e.g., pits, trenches, drilling holes) shall be covered or backfilled overnight and/or during periods of inactivity. Routes of escape from excavated pits and trenches shall also be installed for wildlife that could potentially become entrapped.

These locations shall be regularly inspected throughout construction, whenever areas of excavation are uncovered, and immediately prior to filling.

Should any entrapped wildlife be discovered, then the CDPR Representative shall be promptly contacted. Work at the excavation site shall be temporarily suspended until the entrapped animal can be safely relocated or released by the qualified biologist.

If any deceased wildlife is discovered in an excavated area, then the CDPR Representative shall be promptly contacted. Work at the site shall be temporarily suspended until the animal can be examined by the qualified biologist. Following review, appropriate measures, as directed by the CDPR Representative, shall be implemented to prevent future loss.

3.4.6 Level of Significance After Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

With the implementation of SPRs and PSRs, impacts to biological resources would be less than significant.

3.5 Cultural Resources

3.5.1 Introduction

This section of the EIR discusses the potential for the Proposed Project to impact cultural resources. This section also summarizes the results of a cultural resources assessment, including a records search, various cultural resources surveys of the Project Area occurring from 2016 to 2025, and significance evaluation of any identified resources. Impacts to cultural resources are considered significant if the project would (1) cause a substantial adverse change in the significance of a historical resource; (2) cause a substantial adverse change in the significance of a unique archaeological resource; or (3) disturb any human remains, including those interred outside of dedicated cemeteries.

The analysis is based on the following technical document:

- Cultural Resources Assessment Report (California State Parks 2025b)

Note: Due to the sensitive nature of cultural resources and their records and documentation, which are restricted from public distribution by state and federal law, the DEIR appendices do not include the cultural resources report.

3.5.2 Environmental Setting

3.5.3 Cultural Context

Pre-Contact Overview

BFSP is within the lands of the Kumeyaay people, one of the four indigenous tribes whose territories are within present-day San Diego County (the others being the Luiseño/Payómkawichum, the Cupeño/Kuupangaxwichem, and the Cahuilla/Ivilyuqaletem). "Kumeyaay" is definitive in some literature; however, it is more appropriately a modern term used to refer collectively to the southern San Diego Native Americans including the Iipay (Iipai) to the north, the Tipai (Tipay/Tiipai) to the south (extending into present-day Mexico) and the Kamia to the east. The term "Diegueño" is also a collective name referring to those indigenous people associated with the Mission San Diego de Alcalá during the Spanish occupation. The term Kumeyaay will be used for this report, although its intent to generalize should be noted (Meling et al. 2025)

Early Period

The Kumeyaay people of the San Diego region say they are descendants of the first people and have lived in the region since time immemorial (Cline 1979; Gifford and Block 1990; Kumeyaay Diegueno Land Conservancy 2017). Scientific studies support evidence of people in the San Diego region over 9,000 years ago.

The earliest cultural complex of southern California sites was named the San Dieguito Complex/Tradition (Rogers 1966). The San Dieguito Complex dates to the early Holocene, and although the San Dieguito people were previously thought to have been almost exclusively "big game hunters" due to large stone tools and a lack of grinding implements in the archaeological record (e.g., Pourade 1966), more recent

evidence suggests that they utilized a wider variety of the resources available to them including marine resources along the coast (Gallegos 1992). The San Dieguito Complex is divided into four major zones of concentration called "aspects", including Western, Central, Southwestern, and Southeastern Aspects. The Western Aspect covers the San Diego coastal region (Rogers 1966).

The end of the Early Period in present-day San Diego County has been estimated to be around 1,300 years BP (Gallegos 1992:212-213).

Late Pre-Contact Period

The Late Period (also known as the Yuman Period) lasted from circa 1,300 years BP to European contact. This period has been distinguished from earlier periods by the introduction of small projectile points and ceramics into the archaeological record, and the practice of cremating the dead (Christenson 1992; Gallegos and Kyle 1988). Late Period sites have been found mainly in the inland portion of the County, with only 2 percent being located within the coastal strip. These results may be skewed due to the loss of site data because of coastal development prior to the instigation of standard site recording practices. Although Christenson concludes that Late Period people of present-day western San Diego County used a wide variety of environmental settings for settlement and subsistence, maritime resources never became an emphasis, as reported for other groups living along coastal areas of California (Christenson 1992).

3.5.4 Historical Context

3.5.4.1 Spanish Colonial Period (1521–1821)

Spanish expansion into California began in 1542 when Juan Rodríguez Cabrillo, a veteran of Cortés' and Alvarado's conquests, sailed into San Diego Bay in search of a safe harbor for returning Manila galleons (Kelsey 1998; Kramer 2019; Weber 1992; Gutiérrez and Orsi 1998). While the area that now includes Border Field and the Tijuana River Natural Preserve was under the Spanish sphere of influence, the Kumeyaay and other native people, who had long lived in what we know today as the Southern California and Northern Baja California regions, had already been significantly impacted by the much earlier Spanish explorations. Spain reinforced its claim to Alta California with the establishment of a mission and presidio at the southwestern entrance of Mission Valley.

Later, Sebastián Vizcaíno surveyed the Alta California coast in 1602. Vizcaino renamed Cabrillo's Bay of San Miguel as San Diego de Alcalá and recorded coastal villages such as Chiap near the Otay River (Bolton 1916; Hughes 1996; Van Wormer 2005; Schoenher 2017). Despite the identification of suitable ports like San Diego, colonization was delayed for over a century due to limited resources and the risks of settlement in such a distant frontier (Weber 1992; Gutiérrez and Orsi 1998; Crosby 2003). By the mid-eighteenth century, growing threats from rival European powers spurred Spain to secure its northern frontier through missions and presidios, beginning Imperial Spain's colonization of the region in 1769, the start of the historic era in San Diego County.

The Serra-Portolá expedition followed long-used Kumeyaay trails through the Tijuana River Valley, passing through Goat Canyon and nearby rancherias (Hughes 1996; Crosby 2003). Kumeyaay villagers initially observed the expedition at a distance but later engaged in trade and served as guides for the final

leg into San Diego (Crosby 2003). Serra and Portolá's route brought them past the Kumeyaay villages of Milejo and Tijuan before camping at the mouth of Goat Canyon (Van Wormer 2005; Hughes 2008). This route became part of El Camino Real, the primary road connecting Alta California to Baja California's capital at Loreto, and it remained the principal north-south travel corridor until the 1830s, when a new route through the Tijuana Valley, roughly aligned with today's I-5, was established (Hughes 2016).

Because all land was legally owned by the Spanish Crown, private land grants were rarely issued during the Colonial Period. Missions controlled large tracts where they raised cattle, goats, and crops, relying on Indian neophytes for labor (Van Wormer 2005). Mission records document many Kumeyaay from the villages of Milejo and Chiap, though these entries represented only a portion of their population. Unlike the Kumeyaay and Luiseño north of the San Diego River, southern Kumeyaay villages largely maintained their sovereignty and resisted Spanish influence. Aside from the Crown-owned Rancho de la Nación managed by the Franciscans, no privately operated ranchos existed in the border region. It was not until the Mexican Republic period that land was granted to private owners, and non-Native settlement began along the border (Van Wormer 2005).

3.5.4.2 Mexican Republic Period (1821–1848)

Through the first decades of the 19th century, Spain's ability to support its distant Alta California frontier had weakened. Spain's waning influence created an unstable environment for its settlements. Presidios were largely self-sufficient and often unpaid for more than a year (Crosby 2003; Van Wormer 2005). In 1821, when Mexico gained independence, its new republican government continued to struggle financially, and secularization policies gradually reduced the Church's land holdings. Mexican-issued land grants were often used to compensate for back pay or other obligations. In 1823, Francisco María Ruiz, comandante of the San Diego presidio, received a house plot at the base of Presidio Hill, laying the foundation for pueblo San Diego, as well as the first land grant in San Diego County at Rancho los Peñasquitos (Van Wormer 2005).

Further grants established large ranchos in the border region. In 1833, Santiago E. Argüello was granted eleven square leagues as Rancho Milejo, encompassing much of today's BFSP, in addition to his earlier Rancho Tia Juana south of the border (Van Wormer 2005). These holdings allowed the Argüellos to run extensive cattle operations, becoming part of the ranchero elite and participating in the hide-and-tallow trade with New England ports. By 1850, Santiago Argüello was the wealthiest man in San Diego. Infrastructure also shifted during this period: Monument Road, which had served as the main route along El Camino Real, was partially supplanted in the 1830s by a new road, likely constructed by Argüello, to connect San Diego with the developing village of Tia Juana while skirting the eastern edge of Rancho Milejo (Hughes 2016; Hughes 2008).

3.5.4.3 Beginning of the American Republic Period and the End of the Rancho Era (1849–1875)

America's conquest of northern Mexico required the establishment of a new international border. The Treaty of Guadelupe Hidalgo (1848) that ended the U.S.-Mexico War, divided the extensive Kumeyaay lands as well as the Rancho Milejo and Rancho Tia Juana, establishing a new international boundary

between the United States and Mexico. A joint survey team began marking the border in 1849, starting just south of San Diego Bay. The resulting maps reflected different perspectives from the American and Mexican surveyors, though both showed the main road south into Baja California roughly along the route of modern I-5 (Hughes 2008: 27-28). The new boundary cut across landscapes of stark contrasts, from the Pacific coastal plains to 6,000-foot peaks, to the arid Colorado Desert.

This political change coincided with the Gold Rush, which radically reshaped California's economy and ranching industry. Initially, Southern California rancheros prospered as demand for beef surged, with herds driven north to supply booming mining regions (Van Wormer 2005). By the mid-1850s, however, prosperity turned into hardship. Rancheros increasingly borrowed money to manage court costs under the Land Act of 1851, which subjected Mexican land grants to lengthy legal reviews (Van Wormer 2005). Many Californios, unfamiliar with American legal and capitalist systems, fell into debt and lost their properties. At the same time, new waves of American settlers pressed for access to land, pushing California's policies toward smaller farms and away from the vast ranchos that had dominated under Mexico. Economic pressures worsened as cattle prices collapsed when herds from Texas, New Mexico, and Arizona entered the California market, while local droughts devastated pastures (Van Wormer 2005).

Environmental crises compounded financial troubles. After years of drought in the late 1850s, a catastrophic flood in 1861-62 drowned surviving cattle, followed by further dry years from 1863 to 1865. With herds destroyed and little reinvestment made during earlier prosperous years, many rancheros were unable to recover. Mortgages, taxes, and unresolved court disputes under the Land Act stripped Californios of their landholdings. The boom-and-bust cycles of the U.S. frontier economy proved particularly destructive to ranchero families whose social and economic traditions were ill-matched to American capitalism (Van Wormer 2005). Among those who suffered most were the Argüello family, who had held Rancho Milejo (later La Punta). Their title was rejected by the Land Commission in 1852, and by the late 1860s the land was opened to American settlement. Pioneer farmers quickly established claims in the Otay and Tia Juana valleys, leaving the Argüellos to wage a twenty-year legal struggle to reclaim their rancho. Even an appeal under an 1865 act of Congress failed, as courts ruled against them in 1873. Ultimately, the family retained only a small homestead around their adobe, while the valley became unequivocally government-owned land open to settlement (Van Wormer 2005).

The transformation of the borderlands during the American Republic period thus reflected not only a political realignment but also a profound economic and cultural upheaval. The shift from Mexican to American governance imposed unfamiliar systems of law, debt, and land tenure, compounded by ecological disaster and market collapse. For the Kumeyaay and Mexican ranchero families alike, the new border signaled the erosion of sovereignty, land, and livelihood, as U.S. settlement patterns and capitalism reshaped the region permanently.

3.5.4.4 Settlement, Agriculture, and Border Communities

Beginning in the late 1860s and early 1870s, the Tia Juana Valley saw the emergence of several small settlements alongside its agricultural development, including Tia Juana, Oneonta, South San Diego, and San Ysidro. As these settlements grew, Tia Juana Valley developed into an agricultural community. Originally called Monument City, the community was combined with neighboring villages of Tia Juana,

Oneonta, South San Diego, and San Ysidro. This reflected a broader trend across southern California and the American West as settlers moved onto government land to establish farms and townsites where rural populations were dispersed yet connected through shared institutions such as schools, post offices, and stores.

During this period following the Civil War, thousands of Americans and European immigrants sought 160-acre homesteads, either to build a livelihood or speculate on rising land values. These settlers envisioned farming communities modeled after those in the East, with small villages providing essential services for a surrounding landscape of five to eight farmsteads per square mile (Van Wormer 2005).

The first significant wave of pioneer farmers in San Diego County was spurred by Alonzo Horton's real estate promotion. Horton purchased 960 acres in 1867, including much of present-day downtown and Hillcrest, and laid out streets and lots. By 1869, settlers were pouring in, with 124 homes already constructed. By 1870, the city of San Diego had grown to 2,300 residents, setting the stage for both urban expansion and agricultural settlement in nearby valleys (Van Wormer 2005). The communities that developed during the late 19th century reflected both progress and volatility. Oneonta became a thriving settlement with churches, shops, and even a drama club. The Oneonta Hotel was eventually converted into a sanitarium, praised for its ocean air and healthful climate (Van Wormer 2005). Meanwhile, Tijuana, straddling the U.S.-Mexico border, began to grow into a small town of about 200 residents, attracting visitors for tourism, excursions to Agua Caliente Hot Springs, and smuggling. In 1889, Pueblo Zaragoza was surveyed to lay out a grid for Tijuana's expansion, while across the border, International City at Border Field was established with similar hopes for urban growth (Hughes 2010).

Between 1870 and 1890, numerous agricultural communities were firmly established in valleys such as Mission, Otay, Tia Juana, Sweetwater, San Dieguito, San Pasqual, El Cajon, Jamacha, and San Bernardo. Farmers sought fertile bottomlands along rivers and avoided the drier mesa tops or marginal mountain valleys. This hinterland farming was critical to the growth of San Diego, supplying food for the city's population and markets for local businesses (Van Wormer 1986a, 1986b, 2005).

In practice, rural communities in the County were networks of dispersed farmsteads bound together by shared institutions like schools, post offices, and country stores, linked together by roads rather than isolated towns. This was the most common settlement pattern from 1870 through the 1930s. At their peak between 1900 and 1910, approximately 112 such farmstead communities existed within present-day San Diego County (Van Wormer 1986a, 1986b, 2005). These communities were stable, rooted settlements where, as one historian observed, "men and women put down their roots, invested their money, and their lives" (Fuller 1981; Van Wormer 2005).

Initially, wheat was the dominant crop, as it required minimal investment and yielded quick returns. However, by the 1870s and 1880s, farmers experimented with more lucrative alternatives. The arrival of railroads that connected California to the East and the successful cultivation of olives, grapes, and citrus transformed local agriculture. At the same time, San Diego County experienced a speculative real estate boom tied to the coming of the transcontinental railroad. As many as twenty towns were platted. One such community was Monument City, promoted as "the southwest corner of the United States." Its boosters sold lots for $100 to $500 and promised a grand hotel and a railroad connection, but neither

materialized. Monument City became a focal point of agricultural settlement, with Nichols's hotel and store serving as a hub of commerce and community life (Bevil 2002).

By the late 1880s and early 1890s, the Tijuana River Valley was promoted as one of the most promising farming districts in San Diego County. Irrigation projects under the Wright Act of 1887 spurred orchards, ranches, and small-scale farming ventures. Contemporary observers described the valley as the "most favored portion of the county," with some 350 acres planted in fruit, particularly citrus, along with apricot and peach orchards (San Diego Union 1892). By 1888, San Diego County boasted tens of thousands of lemon, olive, and orange trees, alongside peaches, figs, plums, and apricots; by 1891, the number of fruit trees exceeded one million, signaling the county's shift toward diversified, commercial agriculture (Van Wormer 1986a; 2005). Railroad connections via the National City and Otay line and the Coronado Belt Line further supported this growth by linking the valley's farms to regional markets.

These early ambitions were disrupted in 1891 when heavy rains brought catastrophic flooding to the Tijuana River Valley. The storm, described as one of the most severe in southern California's history, inundated the landscape, swept away buildings, and caused damage estimated at $40,000. Tijuana was destroyed and later rebuilt on higher ground, resulting in two settlements: Tia Juana on the north side of the border and Tijuana to the south. International City, by contrast, was entirely lost to the ocean. Following the disaster, the town moved to higher ground. The Mexican village relocated to the southeast, and the American settlement reestablished a mile to the east (Van Wormer 2005).

After the destruction and relocation of the communities at the boundary crossing, most of the Tia Juana Valley continued to be an agricultural community, as it had been since the late 1860s. While there was a short period of oil well drilling and speculation, agriculture remained the primary function of the area. Between 1900 and 1920, the Tia Juana Valley in San Diego County saw significant agricultural development, driven by its fertile soils and favorable climate, though constrained by water availability. The valley, part of the former Rancho Tía Juana, transitioned from primarily cattle ranching to more diversified farming, including citrus, grapes, and other crops, as Anglo settlers and agricultural reformers promoted intensive farming practices. William E. Smythe's Little Landers colony, established in 1909, aimed to create a utopian farming community in what became San Ysidro, emphasizing small-scale, sustainable agriculture. However, challenges like the 1916 floods, which devastated crops and left 135 settlers homeless, underscored the region's vulnerability to natural disasters. Innovations in irrigation, such as Mr. Peavey's development of a large-scale water plant with five 90-foot wells, supported agricultural expansion, making the valley a model for scientific farming by the early 20th century (Schoenherr 2015).

Agriculture remained a defining feature of the valley landscape through the early twentieth century. Aerial photographs from 1928 show cultivated fields and farmsteads near the estuary and present-day BFSP. Farmsteads varied in size and design, ranging from modest adobe or frame homes to substantial Victorian residences. Outbuildings typically included barns, granaries, livestock pens, shops, and cisterns. Two farmsteads with orchards were located in Section 32 of Township 18 South, along what is now Sunset Avenue, and four large agricultural structures, likely barns and sheds, stood at the mouth of Goat Canyon (Van Wormer 2005). By 1941, two of these buildings were still in use, while new structures and cultivated fields extended from the canyon mouth to Monument Road (Van Wormer 2005). The property, once

recorded under the Guidbotti family in 1923, became locally known as the Smart Ranch by valley residents into the 1960s (Van Wormer 2005).

3.5.4.5 Military Activity

While agriculture remained important in the valley through the 1980s, beginning in the early 1900s, the military took interest in the area and began changing the landscape. During that time, international events played a direct role on activities on and near Monument Mesa.

Early 1900s Border Unrest

At the turn of the twentieth century, residents along California's border with Baja California experienced routine unrest at the border. Between January and May 1911, as revolution engulfed Mexico, forces aligned with the Partido Liberal Mexicano seized Mexicali and then Tijuana, with many Americans, some from the Industrial Workers of the World, among their ranks. President Taft mobilized 20,000 U.S. troops to enforce neutrality laws, dispatching Coast Artillery companies to the line near Tijuana with orders to stop the movement of arms and prevent armed musters on U.S. soil (Hughes 2010).

Border alarms persisted through 1916. After Pancho Villa's raid on Columbus, New Mexico (March 9, 1916), President Wilson sent General John J. Pershing into Mexico, while Baja California's governor massed troops at Tijuana and the War Department reinforced the U.S. line. To manage the crisis, the Army created border patrol districts from Brownsville to San Diego on October 14, 1916. District 7 covered California's boundary and operated camps at Palm City, San Diego, San Ysidro, Tecate, and Campo; at the far west end, on Monument Mesa (today's BFSP), the Army established San Diego Border Camp (Hughes 2010).

WWI Era

In April 1917, the U.S. entry into World War I heightened fears of foreign intrigue along the border. On December 5, 1917, President Wilson ordered the U.S.-Mexico border closed for the duration of the war. California leaders warned that the isolated Baja coast left the American Pacific flank under-guarded amid rumors of German and Japanese activity offshore (Hughes 2010).

Aviation emerged as the decisive new arm and the earliest probable military flying use at Border Field dates to 1917 to 1919. In early 1918, to meet combat training needs, the Army established auxiliary fields at Imperial Beach and Otay Mesa. Oneonta Field at Imperial Beach was renamed Ream Field on October 5, 1918, for Major William R. Ream. The Navy simultaneously planned a large aviation school on North Island and likely required auxiliary terrain such as Border Field (Hughes 2010).

Post-WWI to Start of WWII Aviation

After the Armistice ending WWI, auxiliary fields were deactivated and the border reopened, but the interwar years transformed San Diego into a Pacific defense hub. In 1920, the 11th Naval District headquarters moved to San Diego, followed by an array of bases and support facilities. In 1929 the Navy leased the landing site at Border Field for summer fleet air exercises, where dive-bombing and gunnery practice became routine and sometimes controversial when bombs crossed into Mexico (Hughes 2010).

Also in 1929, the Navy leased 58 acres specifically at Border Field; the 1930 USGS map labels it an "emergency landing field." The lease was renewed in 1941. Congress's 1941 "1,500-plane program" recommended expanding Border Field for dive-bombing and gunnery, but a paved runway was abandoned due to costly drainage on the tidal marsh. The site was instead developed as an aircraft gunnery range (Van Wormer 2005).

WWII to the 1960s

Throughout WWII the Navy steadily expanded their control of land within the current BFSP to approximately 372 acres. By 1944, improvements structures, including offices, quarters, shops, ammunition storage, and a Demonstration Bombing Target (MRS-02). Contemporary descriptions detail five 170-yard "Rabbit" ranges, fifteen stationary gun mounts at 120 yards, a half-mile rail line for firing from moving turrets, maximum ranges to 600 yards, and weekly night-tracer practice (USACE 2015; Hughes 2010).

The acquisitions and military activity during WWII included the Navy acquiring roughly 81 acres along the border and in the Tijuana Estuary, establishing Border Field Auxiliary Landing Field. By 1943, the base had approximately 35 structures that included offices, barracks, a mess/galley, repair shops, magazines, classrooms and towers for observing aerial gunnery. The Army also built a base-end (fire-control) station east of Monument Mesa that consisted of three concrete bunkers that fed targeting data to coastal guns. The bunkers survive on "Bunker Hill" within BFSP (USACE 2015; Van Wormer 2005).

By June 1942, the range was redesignated Border Field Naval Operating Base. Maps show eight core buildings below Monument Mesa and an observation tower on the mesa's northwest rim; five oval target tracks laced the dunes plus a curving "mobile firing line." In June 1944 the name changed again when it became the Machine Gun Training Center, Border Field, with expanded ranges, a lengthened mobile line, a new eastern access road, and a dense cluster of operational, maintenance, ammunition, classroom, and support buildings. Postwar planners judged further expansion impractical due to drainage and terrain (Van Wormer 2005).

After the war, Ream Field cycled from postwar decommissioning to recommissioning as an Auxiliary Landing Field. By 1951 Ream based its first helicopter squadron and in 1955 it was redesignated a Naval Air Station (NAS), achieving full NAS status in 1968. At its peak it hosted up to ten West Coast helicopter squadrons, plus maintenance and airborne-electronics training units, with a complement of approximately 3,400 personnel (Van Wormer 2005).

Postwar, Border Field hosted drone-target launches. Gunnery operations ceased in 1961, and the Navy transferred the site to the Navy Electronics Laboratory (NEL) for communications/electronics research, with a 50-foot wartime radar tower reportedly on Monument Mesa. In 1971 the property passed to the State of California and the Navy-era buildings were razed (USACE 2015; Bevil 2002; Van Wormer 2005).

3.5.4.6 Monument and Monument Road

The Monument

The conclusion of the U.S.-Mexican War in 1848 and the signing of the Treaty of Guadalupe Hidalgo made it necessary to establish a new international boundary between Upper and Lower California. The U.S.-Mexico International Boundary Commission, tasked with surveying this line, arrived in San Diego in June 1849. In October 1849, the joint U.S.-Mexico commission erected a stone cairn on Monument Mesa as the "initial point" on the Pacific (Bevil 2002; Van Wormer 2005). By 1851, the survey was complete, and a more permanent marker, a 15-foot obelisk of fine Italian marble, was installed on a mortared brick base at the cairn site. A second marble obelisk was placed several miles eastward at the Tijuana crossing. Although the surveyor's 1849 map had located the initial point slightly farther west on the beach, the monument was instead set on the bluff at Monument Mesa, where it soon became a popular destination. Visitors recorded outings to the striking landmark, which became a symbol of the new boundary as well as a tourist attraction (Van Wormer 2005; Hughes 2008).

The monument's prominence, however, made it a frequent target of vandalism. Newspaper accounts from 1872, 1873, and 1881 lamented the chipping away of marble and the defacing of its surfaces by souvenir hunters (San Diego Union 1872, 1873, 1881). By the late 1880s, a rail connection to the border brought even more visitors, estimated at over 100,000 annually. This number of visitors exacerbated the damage. In 1894 the International Boundary Commission temporarily relocated the monument to San Diego, where it was resurfaced, reinscribed, and renumbered "258" under a revised boundary scheme when the State of Texas had convinced a new International Boundary Commission to renumber the boundary markers with Number 1 starting at El Paso. It was reinstalled on a granite base within a protective fence (Bevil 2002; Hughes 2008).

Despite earthquakes and repeated repairs, the monument has remained in place and continues to mark the initial point of the U.S.-Mexico boundary survey of 1849 to 1856. Because of its national importance, it was added to the National Register of Historic Places in 1974. Only two other boundary monuments along the U.S.-Mexico border share this designation—one near El Paso and the other at Deadwood, Texas (Bevil 2002). Today, the marble and granite obelisk at BFSP stands both as a reminder of the geopolitical transformations of the mid-19th century and as a long-visited landmark within the landscape of the U.S.-Mexico borderlands (Van Wormer 2005).

Monument Road

As Charles Hughes stated, "Historical research involving Monument Road and the Horse Trail has reviewed the wide span of history associated with BFSP. The importance of a road relates strongly to the significance of the area it crosses and those who pass by – the Native American, missionary, farmer, tourist, smuggler, soldier and immigrant – all part of history" (Hughes 2008). He further illustrates that Monument Road has changed multiple times to address the needs of the travelers who used it.

The earliest overland travelers to San Diego in the eighteenth century are believed to have crossed near what became Monument Road. In 1769, the Serra/Portolá Expedition, guided by Indians from missions in Baja California, may have followed a course through the Tijuana River Valley in the area of Goat Canyon. If

so, the expedition would have passed over the alignment of Monument Road near its first 90-degree turn. By the late nineteenth century, local residents began petitioning for more formalized routes across the valley. In 1894 J.C. Jackson requested approval for a new South San Diego/Monument Road that would cut across the valley from Oneonta to the international boundary, following much of today's Horse Trail and sections of the road beyond its second 90-degree turn. Opposition from valley residents led to its denial in 1908. In 1898 J.A. Mansir submitted a separate petition for a road extending westward from Monument School to the ocean, crossing the Border Field property to within 20 feet of the monument. Although easements were granted, County records are unclear as to whether the route was ever officially established (Hughes 2008).

The County re-surveyed Monument Road in 1923, producing a layout that extended the road directly west to the ocean and then south along the beach to a point 193 feet west of the boundary marker. This alignment was reconfirmed during a Navy survey in 1941, shortly before the development of the site as a machine gun and bombing training center. At that time, the Horse Trail was incorporated into the original road network. Military use of the Border Field site after 1929 led to a reconfiguration of the road and relocation of its western terminus to the area below Monument Mesa. The former terminus became a secondary graveled road that is identified today as the Horse Trail. During the 1930s and 1940s, military activity prompted further reconfiguration. A 1942 site plan shows Monument Road's first 90° turn occurring further west than at present, with the road proceeding across the property in a non-linear fashion. 1944 and 1949, base site plans documented the road in its present alignment (Hughes 2008).

The construction of the Fleet Machine Gun Training School in 1941–1942 brought substantial changes to the road's function and configuration. A 1942 map shows eight structures along the second east-west section of Monument Road, including Crew Quarters, Range House, and Civil Guard House immediately adjacent to the alignment. Five additional buildings stood behind them, with an observation tower marking the western edge of Monument Mesa. The placement of these facilities likely necessitated the reconfiguration of Monument Road to its current form (Hughes 2008).

3.5.4.7 Border Wall and Border Security

Border Field is the Gateway to California. As the military history section discusses, the U.S. military recognized the importance of the Border Field area from the beginning and took steps to provide adequate protection to secure the southern border of the newly acquired California territory. Following the Mexican War through the end of World War II, guarding California's southern border remained a priority as part of an overall strategy to protect San Diego Harbor. The origins of the military installations located on the property that is today BFSP were part of that effort (Hughes 2007).

From the earliest overland arrivals through the work of the U.S.-Mexican Boundary Commission in 1849 to clearly mark the international line with monuments and cairns, Border Field was consistently shaped by its role as a corridor of movement. The military quickly recognized the vulnerability of this coastal approach, with Major Samuel Heintzelman in 1849 identifying the defense of the new boundary as one of three critical priorities for protecting San Diego. Throughout the late 19th century, reports of fugitives crossing back and forth near Campo and Tecate underscored the need for enforcement along the line, and by the 1870s cavalry detachments were occasionally dispatched to maintain order. The initial assumption that the

region would never support a significant population proved short-sighted, and as settlement increased disputes arose, prompting the 1894 resurvey that led to the establishment of a more defined border that included the land in BFSP (Hughes 2007).

By the early twentieth century, commerce expanded along the border, and officials struggled to enforce federal laws regulating trade and immigration. Smuggling was pervasive across the entire line, and by 1910 customs inspectors were stationed at Campo, Calexico, and Yuma. By the 1910s as many as 10,000 visitors crossed annually into Tijuana by rail or automobile, requiring multiple gates at the line and additional customs staff. At the same time, ranchers on both sides of the border complained of crop damage caused by wandering livestock. In response, by 1911, the Bureau of Animal Industry constructed a barbed-wire fence to control animal movement, a barrier that extended from Monument Mesa down the bluff and across the beach into the Pacific surf (Hughes 2010).

As was previously discussed, political instability in Mexico soon heightened tensions in the early 1900s. In 1911, rebels of the Partido Liberal Mexicano occupied Mexicali and expelled federal troops from Tijuana. In response, President Taft mobilized 20,000 troops, with artillery companies dispatched to the boundary line at Tijuana and later replaced by infantry who patrolled from the coast to Otay Mountain. Further unrest between 1914 and 1916, including raids, bomb threats, and the infamous Pancho Villa attack on Columbus, New Mexico, brought repeated troop deployments, culminating in the army's creation of Border Patrol District No. 7 in October 1916. San Diego's district established five camps from Palm City to Campo, with the westernmost at Monument Mesa, directly within present-day BFSP (Hughes 2010).

In the 1920s, San Ysidro and Tijuana grew rapidly, their distinction as separate towns eroded by cross-border vice economies. Gambling, horse racing, and alcohol during Prohibition transformed Tijuana into an international destination. For U.S. authorities, this growth exacerbated smuggling and enforcement challenges, while reformers pushed unsuccessfully for border closures or restrictions on hours of crossing. By the 1930s, the Civilian Conservation Corps began replacing early fences with sturdier barriers, though complaints of livestock crossings and narcotics smuggling persisted into the 1960s (Hughes 2010).

By the mid-twentieth century, the coastal border area remained a porous landscape, lightly patrolled and easily crossed. However, rising concerns about narcotics trafficking, undocumented migration, and Cold War security shifted federal policy toward more permanent physical barriers. In the 1960s, the federal government rebuilt and extended fencing along Monument Mesa and down onto the beach, replacing decaying wire with taller steel barriers. This construction marked a turning point in the landscape's transformation from a zone defined largely by symbolic markers and military encampments into a hardened boundary that foreshadowed later wall-building campaigns of the late twentieth century (Hughes 2010).

3.5.4.8 Tijuana Estuary, Flooding, and Sewage

The area's proximity to the Tijuana River estuary and its seasonal flooding have influenced settlement patterns, agricultural activity, and park development, while cross-border growth in Tijuana has exacerbated sanitation challenges. Beginning in the mid-1800s, flooding and sanitation issues became recurring problems in the Tijuana River Valley. After years of drought in the late 1850s, the catastrophic

flood of 1861–62 drowned most surviving cattle. With herds destroyed and little reinvestment from earlier prosperous years, many rancheros were unable to recover. In February 1891, heavy rains destroyed Tia Juana City. Floodwaters cut new channels through the community, sweeping away homes and businesses. Two men drowned, and afterward the settlement was relocated to higher ground on both sides of the border (Van Wormer 2005).

By the 1930s, authorities sought more systematic flood control and sanitation solutions. In 1936–37, the International Boundary and Water Commission (IBWC), with assistance from the Public Works Administration, constructed a sewer outfall line across the Border Field site (Hughes 2012; Hughes 2008). That same decade, flood control channels were proposed along the Tijuana River from the border to the Pacific Ocean. A 1944 treaty between Mexico and the United States formally recognized the shared risk of flooding and called for coordinated management. By 1967, the IBWC approved a six-mile concrete channel north of the border to join Mexico's 2.7-mile channel. Beyond mitigating flood hazards, the project opened 4,200 acres for development and promised increased land values and tax revenues for Imperial Beach (Van Wormer 2005).

Despite these improvements, flooding persisted. In 1974, San Diego Mayor Pete Wilson declined to continue Mexico's flood channel northward, leaving the valley vulnerable to high-velocity runoff. The Army Corps of Engineers installed a dissipation system in 1976, but heavy rains combined with runoff from Goat Canyon and Smuggler's Gulch, increased by uncontrolled development in Tijuana, continued to cause severe damage. Devastating floods in 1982 and 1992 stranded valley residents, inundated farmland, and forced some farmers and horse ranchers to abandon the region. Contamination of the groundwater caused the closure of the Smuggler's Gulch bottling plant, and layers of sediment buried former farmland (Van Wormer 2005).

Compounding the flooding problem, the rapid expansion of Tijuana created a persistent sewage crisis. From the late 1930s through the 1960s, an international collector and septic tank system discharged untreated sewage into the Pacific near the river's mouth. Mexico later built pump stations and pressure lines to divert flows further south, but the infrastructure quickly became overtaxed. An emergency collector line completed in 1966 linked Tijuana's sewage to San Diego's Point Loma treatment facility. By the 1980s, 12 to 20 million gallons of raw sewage per day still poured into the Tijuana Valley through Goat Canyon and Smuggler's Gulch due to broken lines, blockages, and overcapacity (Van Wormer 2005).

Bi-national efforts eventually addressed some of the sewage challenges. A $16 million project constructed cross-border collection and treatment stations along with a parallel conveyance system to ensure redundancy in case of line failure. Between 1995 and 1997, the U.S. section of the IBWC built the South Bay International Wastewater Treatment Plant (SBIWTP) near Dairy Mart Road. Completed in 1999 at a cost of $42 million and funded by the Environmental Protection Agency, the facility was treating 25 million gallons per day, discharging effluent through the South Bay Ocean Outfall. Despite these advances, sewage contamination from Tijuana remains an ongoing issue, especially as new developments appear in Tijuana, thus illustrating the complex interplay of rapid urban growth, cross-border infrastructure challenges, and persistent environmental hazards in the Tijuana River Valley (Van Wormer 2005).

3.5.4.9 Border Field State Park

Despite these challenges at the border, the cultural and symbolic significance of the border monuments endured. In 1951, the San Diego Historical Society celebrated the 100th anniversary of the marble monument with a picnic at Monument Mesa, envisioning the site's potential as a public park once military use ceased. At the same time, local community groups also wanted to stop the threat of the Tijuana River Estuary becoming an upscale marina and the creation of a new border crossing by having Border Field become a natural park if the Navy declared it surplus property. They also prevented the use of the land adjacent to the proposed park from becoming a sand and rock quarry (Hughes 2010; Bevil 2002).

The establishment of an international recreational park at the border that would be both in Mexico and the United States had first been proposed in 1956. In June 1968, San Diego County Park planners asked the State to spend a portion of park bond monies to acquire land for the park. The following month the County Comprehensive Planning Organization urged action to acquire five million dollars to acquire land for parks at Agua Hedionda Lagoon in Carlsbad and International Park at the border. In September 1970 the Navy formerly declared Border Field Auxiliary Landing Field surplus to its needs (Van Wormer 2005).

On August 18, 1971, in a ceremony presided over by First Lady Mrs. Pat Nixon, the Navy turned ownership of 372 acres at Border Field over to the State of California and the area became BFSP (San Diego Union 1971). In 1972 Governor Ronald Regan allocated $104,638 to develop the new park. In 1974 the governor appropriated another $3 million dollars to acquire 300 additional acres for BFSP, which would add around 6,000 feet of beach front to the already existing mile of beach within the park (Van Wormer 2005).

3.5.5 Existing Cultural Resources

3.5.5.1 Archaeological Research

Cultural resource identification efforts for the Border Field RAHR project included records searches, several different overlapping pedestrian survey efforts, and the analysis of archaeological test trenches and archaeologically monitored geotechnical borings that have occurred within and near the project area.

Sediment and dense brush currently obscure the ground surface in portions of the project area, but surface pedestrian survey data from 2016 (prior to the overgrowth of vegetation) and the distribution of past negative test excavations within the project area confirm the absence of evidence for cultural resources in areas outside of previously recorded archaeological sites.

A 2022 records search with the South Coastal Information Center (SCIC) of the California Historical Resources Information System (CHRIS) was supplemented with a comprehensive internal records search and literature review of CDPR cultural resource files and archival records in 2025. Documents and sources reviewed included archaeological reports, site records, maps, planning documents, and federal, state, and local inventories of historic properties, monuments, landmarks, and points of interest.

The records searches identified a total of 17 archaeological sites, three isolates, one historic road, and one historic monument located in the general area (within 0.25 mile of the Project APE). Of those resources, four archaeological sites and one historic road intersect with the Project APE and one archaeological

isolate is immediately adjacent to the APE. Table 3.5-1 below lists all known cultural resources within 0.25-mile of the Project APE. The six known resources that intersect with, or are immediately adjacent to, the APE are summarized below the table.

Table 3.5-1. Known Cultural Resources

Resource Type	Trinomial or Primary Number	Archaeological Site Era	National and California Register Eligibility	Intersects APE?
Archaeological Site	CA-SDI-0222	Precontact	Eligible	Yes
Archaeological Site	CA-SDI-03627	Multicomponent	Eligible	No
Archaeological Site	CA-SDI-04281	Precontact	Eligible	No
Archaeological Site	CA-SDI-11544	Precontact	Potentially Eligible	No
Archaeological Site	CA-SDI-13485	Multicomponent	Eligible	Yes
Archaeological Site	CA-SDI-13718H	Multicomponent	Potentially Eligible	No
Archaeological Site	CA-SDI-15038	Precontact	Potentially Eligible	No
Archaeological Site	CA-SDI-15039	Precontact	Not Eligible	No
Archaeological Site	CA-SDI-16047	Multicomponent	Eligible	Yes
Archaeological Site	CA-SDI-17310	Multicomponent	Potentially Eligible	No
Archaeological Site	CA-SDI-20156	Precontact	Potentially Eligible	No
Archaeological Site	CA-SDI-022219	Historic	Potentially Eligible	No
Historic Road	CA-SDI-022220	Historic	Not Eligible	Yes
Archaeological Site	CA-SDI-022221	Historic	Potentially Eligible	No
Historic Monument	International Boundary Monument # 258	N/A	Listed	No
Archaeological Site	P-37-024058	Historic	Not Eligible	Yes
Archaeological Isolate	P-37-024060	Precontact	Not Eligible	No
Archaeological Isolate	P-37-024061	Precontact	Not Eligible	Adjacent
Archaeological Isolate	P-37-026361	Precontact	Not Eligible	No
Archaeological Site	P-37-026362	Historic	Potentially Eligible	No
Archaeological Site	P-37-026363	Historic	Potentially Eligible	No
Archaeological Site	P-37-026365	Historic	Potentially Eligible	No

CA-SDI-0222

CA-SDI-0222 is a precontact habitation site with shell midden, artifacts and hearth features. The site was first recorded by Malcolm Rogers in 1929 as a San Dieguito and La Jollan period site and given the San Diego Museum of Man site number SDM-W-157 (Coleman 1992). May et al. resurveyed the site in 1972, finding a 3-acre shell midden described as La Jollan II and III, and surface collected (May et al. 1972). Jeff

Bingham excavated the site in 1976 prior to initial development of Parks infrastructure on the mesa, also identifying the site as dating from the La Jollan Period. Radiocarbon dates from the excavation dated the site at 7260+/-80 before present (B.P.). The site was recommended eligible to the National Register and California Register as a result of the testing (Bingham et al. 1978). Records of consultation with the Office of Historic Preservation (OHP), if they exist, are not available in CDPR files.

The site has been subject to various disturbances in the 19th and 20th centuries. In 1976, Bingham identified several concrete foundation features on the mesa top related to military use in the 1940s to 1960s. Bingham recommended preservation of some of these historic features and recommended that the most intact portion of the shell midden deposit be capped with fill prior to the development of day use and parking facilities (Bingham et al. 1978). However, it seems the historic foundations were removed, and it is unknown if any portion of the site was ever actually capped.

Subsequent research has shown that some intact portions of the site do remain, while other portions are highly disturbed. Mark Becker of ASM Affiliates, Inc. tested the western margin of the site and encountered intact shell midden deposits. Seven radiocarbon samples on shell produced dates ranging from 7680 to 2100 B.P. (Becker et al. 2006). Jackson Underwood of RECON and Sandra Schneeberger of Golden State Environmental undertook test excavations in 2008 along the site margins and also found undisturbed site material in the area of the retaining walls along the western edge of the mesa (Schneeberger 2011). Testing and monitoring by CSP in 2002 and 2007 in the southern/central portion of the site found sterile fill levels from early CSP work in the park, as well as Bingham's artifact-bearing Level 4 with modern trash and disturbances (Parker 2002; Farmer 2007).

CA-SDI-13485

Site CA-SDI-13485 is a multicomponent site consisting of buried precontact hearths and shell middens as well as remnants of a historic 20th century dairy farm. The site was first recorded in 1992 when geotechnical trenching exposed two subsurface hearth features at or below 1 meter in depth (Coleman and Goldborer 1992). In a later phase of investigations, Mariah Associates, Inc. performed archaeological testing consisting of 12 backhoe trenches, 10 1-meter-by-1-meter test units, and 24 hand auger tests (Turnbow et al. 1995). A total of 11 buried precontact thermal/hearth features were identified, ranging in depth from 64 centimeters to 4.3 meters below ground surface, with the majority of the features found at or below 1 meter in depth. In addition to the buried features, one historic structure foundation feature, visible on the ground surface, was identified as the foundation of a dairy barn. The location of the barn appears in aerial photography from 1929 and does not appear to date prior to this period. Eight radiocarbon dates on charcoal from the precontact features range from 1510 (+/- 60) B.P. to 790 (+/-60) B.P. Archaeological testing yielded information about site functions, environmental issues, as well as subsistence. Based on testing results, site CA-SDI-13485 was recommended eligible to the California and National Registers (Turnbow et al. 1995). Records of consultation with OHP, if they exist, are not available in DPR files.

CA-SDI-16047

CA-SDI-16047 is a multicomponent site first identified in 2000 by Tierra Environmental Services during archaeological survey for the Goat Canyon Enhancement Project as a historic archaeological site (Pigniolo and Murray 2000; Pigniolo 2000a). Two test trenches excavated in 2001 identified 6 historic features including two cement septic tanks, a cement structure foundation slab, two cement pipes and an iron/steel pipe, as well as one precontact hearth/thermal feature (Pigniolo et al. 2001a). Additional excavation was carried out in 2001 (Pigniolo et al. 2001b) consisting of three trenches, three test units and one shovel test pit. A previously unidentified subsurface precontact cultural component of the site was identified during the testing and called Locus B, while the originally recorded site, renamed Locus A, refers to the historic debris and historic resources from the demolished Smart Ranch, which previously included an abandoned single-story house with an adjacent garage and large trash scatter (Clausen 1999b; Pigniolo et al. 2001b). Site CA-SDI-16047 Locus B was recommended eligible to the National and California Registers under Criterion D/4 as a result of the trenching, while Locus A of CA-SDI-16047 was recommended not eligible due to lack of integrity (Pigniolo et al. 2001b). Records of consultation with OHP, if they exist, are not available in CDPR files. The entire site is treated as eligible for the purposes of this Project.

Testing in 2002 identified another hearth feature within Locus B, and since it was determined that unavoidable Project impacts would cause adverse effects to CA-SDI-16047 Locus B, data recovery excavation was recommended to mitigate those adverse effects (Pigniolo et al. 2002). Data recovery entailed excavation of 52 1-meter-by-1-meter test units, sampling 1.6 percent of the site area (Underwood and York 2004). A total of 6 thermal/hearth/charcoal features were identified during data recovery excavation, only two of which had fire-affected rock (FAR) associated, while shell was present in almost all of the features. Radiocarbon dates from charcoal and shell range from 1740 to 790 years B.P. The intact cultural deposits sampled by the test units contained lithic debitage, groundstone, flaked stone tools, antler tools, and bone beads, as well as marine shell, charcoal, faunal bone and FAR (Underwood and York 2004). During Project monitoring for sediment basin construction, three more precontact cobble hearth features containing charcoal and FAR were recorded and removed by CSP SSC archaeologists (Buxton and Pettus 2004).

CA-SDI-022220

Monument Road, a portion of which was first recorded as a site by Castells and Lennen at ASM Affiliates in 2016 (Castells and Lennen 2016b), was originally constructed prior to 1894 as a route from San Diego to the marble monument marking the initial point of boundary between the United States and Mexico on Monument Mesa. The route of the road has shifted over time to meet traveler's needs, and while it may have been part of a series of roads used adjacent to the El Camino Real in an earlier iteration that linked it to the Spanish and Mexican period, its current alignment is not that route. The current route is solidly linked to the military development of the property that began in 1929 and ended in 1971 with the transition to a state park and the removal of all military related buildings and infrastructure (Hughes 2008). The road is recommended as not eligible to the California and National Registers under criterion A/1 during the period of significance from 1929-1971. Pending concurrence from OHP, the road is being

treated as eligible for the purposes of the project. Due to past changes in the road route and surface material, those elements are not considered to be character-defining features of the road.

P-37-024058

P-37-024058 was first recorded by Andrew Pigniolo in 2000 during survey for the Goat Canyon Enhancement Project. The site was originally recorded as a single structural foundation made of cement (originally noted as stone) measuring 15 by 16.5 feet, exposed on the ground surface and partially inundated with water (Dietler et al. 2000a). The foundation slab is located about 10 meters (33 feet) south of Monument Road. The stump of an ornamental tree about 33 feet south of the foundation was also thought to be associated with the structure. The site was built as part of the World War II-era Border Field Auxiliary Naval Air Station operations center, a cluster of 35 or more semi-permanent structures which provided workspace and living quarters for approximately 100 enlisted men and officers during Naval training activities between 1941 and 1953 (Pigniolo et al. 2001b).

The site record was updated in 2001 after six archaeological test trenches were excavated within the general area of the site (Dietler et al. 2001). The original structure foundation identified during survey was called Structure 3 during testing. About 10 centimeters of surface sediments were scraped away from the originally recorded foundation to reveal a rectangular, 10-inch-thick slab measuring 50 feet 5.5 inches east/west and 14 feet 10 inches north/south. Evidence of a thin metal wall corroborates the building's appearance as a Quonset hut in historic aerial photos (Pigniolo et al. 2001b). A second, trapezoidal cement slab, interpreted as a driveway apron, is centered along the eastern side of the foundation. This slab measures only 4 inches thick; it has an intentionally roughened surface and remnants of paint (blue with red diagonal striping). Although very few artifacts were present around Structure 3, a dense scatter of window glass indicates that the building may have had a window in the eastern portion of the north wall (Pigniolo et al. 2001b). A 1949 map of the Naval operations center shows a rectangular structure of similar shape in that location identified as "Magazine" (USACE 2015).

Trenching revealed another cement slab foundation with an associated asphalt pavement, called Structure 2, buried under about 50cm of sediments. The foundation is 1 foot thick and measures 24 feet 4 inches north/south by 16 feet 3 inches east/west. Steel anchor bolts along the foundation edge affixed the wall (probably wood) to the slab. No internal room divisions were observed. A wooden post remnant containing an insulated copper wire was found adjacent to the west side of the northwest foundation corner (Pigniolo et al. 2001b). A 1949 map of the Naval operations center shows a structure of similar shape in that location identified as "Student Barracks" (USACE 2015).

Both Structure 2 and Structure 3 were demolished between 1971 and 1977 (Pigniolo 2001b). Additional trenching was carried out in 2001 to locate a structure identified on historic maps as "Trap House- East," but no remains of this structure were found. Either there was no cement slab associated with it, or the small slab had been entirely removed during demolition of the other structures between 1971 and 1977 (Pigniolo et al. 2001b). Since no artifact deposits were identified during testing, the site was recommended as not eligible to the California or National Register due to lack of research potential under criterion D/4 (Pigniolo et al. 2001b). Records of consultation with OHP, if they exist, are not available in CDPR files. The site is being treated as potentially eligible for the purposes of this Project.

P-37-02061

First recorded in 2000 by Tierra Environmental Services (Dietler et al. 2000b), P-37-02061 consists of a single water-worn Santiago Peak Volcanic lithic flake. The artifact is a secondary non-cortical flake measuring 4.5cm by 3.5cm. Due to its water-worn appearance and location in the vicinity of a small canyon to the east, it was assumed that the isolate was re-deposited in that location by flood action. No other artifacts were found in the vicinity of the isolate. As an isolated artifact, this resource is not eligible for inclusion in the National or California registers.

3.5.6 Regulatory Setting

3.5.7 Federal

3.5.8 National Historic Preservation Act, Section 106

The purpose of the National Historic Preservation Act (NHPA) (Title 16, Section 470 *et seq*. of the U.S. Code) is to protect sites, buildings, structures and objects significant in American architecture, history, archaeology, and culture. Section 106 of the NHPA requires federal agencies to consider the effects of their undertakings on historic properties. Section 106 applies to actions initiated, licensed or permitted by the federal government which have the potential to affect properties listed or eligible for listing on the National Register of Historic Places. Under Section 106, the responsible Federal agency must:

- Identify "historic properties" (cultural resources) which may be affected by project
- Determine the effects of the project on the subject properties
- Consult with appropriate state and local officials, Native American tribes, and members of the public regarding potential effects on cultural resources and consider their views and concerns when making project decisions

Pursuant to Section 106, the importance of the cultural resource and the severity of the impact are both evaluated in terms of significance. Mitigation is required for actions that result in significant impacts to significant resources.

3.5.9 National Register of Historic Places

The National Register of Historic Places (NRHP) was developed pursuant to Title 36 Code of Federal Regulations (CFR) Section 60 to identify the nation's cultural resources and indicate which properties should be considered for protection. The criteria used to evaluate properties for nomination to the NRHP are as follows:

> Districts, sites, buildings, structures, or objects that possess integrity of location, design, setting, materials, workmanship, feeling and association, and
>
> A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> B. That are associated with the lives of persons significant in our past; or

C. That embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

In California, applications for properties to be nominated to the National Register are submitted to the State Office of Historic Preservation for initial consideration; if deemed suitable, the State Historic Preservation Officer (SHPO) is responsible for formally submitting the nomination. While listing on the National Register does not automatically ensure protection of the resource, it establishes additional levels of review and consideration before approval of potentially harmful actions.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) was passed in 1990 to provide for the protection and return of Native American human remains, funerary belongings, sacred objects, and objects of cultural patrimony to lineal descendants, culturally-affiliated Indian Tribes, and Native Hawaiian organizations. Federal agencies and museums, universities, state agencies, local governments, or any institution that receives Federal funds must comply with NAGPRA.

3.5.10 State

California Environmental Quality Act

The California Environmental Quality Act (Public Resources Code Sections 21000 to 21189) is the main environmental law of California. The CEQA guidelines are codified in CCR, Title 14, Division 6, Chapter 3.

The basic purposes of CEQA are to:

1) Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.

2) Identify ways that environmental damage can be avoided or significantly reduced.

3) Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.

4) Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

California Code of Regulations (CCR) Section 15064.5

Determining the Significance of Impacts to Archaeological and Historical Resources.

A historical resource is one that is listed in, or determined to be eligible for listing in the California Register of Historical Resources; a resource included in a local register of historical resources; or any

object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (meets the criteria for listing on the California Register of Historical Resources).

These criteria include:

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

A project with an effect that may cause a substantial adverse change in the significance of an historical resource (physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings) is a project that may have a significant effect on the environment.

If an archaeological resource is neither a unique archaeological nor an historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment.

California Public Records Act

California Public Records Act Sections 6254(r) and 6254.10 were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public related to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports maintained by, or in the possession of, the Department of Parks and Recreation, the State Historical Resources Commission, the State Lands Commission, the Native American Heritage Commission (NAHC), another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency."

Public Resources Code Sections 5024 and 5024.5

Each state agency is required by this code to formulate policies to preserve and maintain, when prudent and feasible, state-owned historical resources that are (1) listed in or eligible for inclusion in the National Register of Historic Places, or (2) registered or eligible for registration as a state historical Landmark according to Section 5021.

Public Resources Code Section 5024.1

Established the California Register of Historical Resources and defined the criteria for listing on the Register, including California properties formally determined eligible for or listed in the National Register of Historic Places, State Historical Landmark No. 770 and all consecutively numbered state historical landmarks following No. 770, and Points of historical interest which have been reviewed by the office and recommended for listing in the California Register.

In addition, a resource may be listed as an historical resource in the California Register if it meets any of the following criteria:

1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
2) Is associated with the lives of persons important in our past.
3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4) Has yielded, or may be likely to yield, information important in prehistory or history.

Public Resources Code Section 21084.1.

A project that may cause substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

Executive Order W-26-92

All state agencies shall recognize and, to the extent prudent and feasible within existing budget and personnel resources, preserve and maintain the significant heritage resources of the State. Each state agency is directed to administer the cultural and historic properties under its control in a spirit of stewardship and trusteeship for future generations; to initiate measures necessary to direct its policies, plans, and programs in such a way that state-owned sites, structures, and objects of historical, architectural, or archaeological significance are preserved, restored, and maintained for the inspiration and benefit of the people; and to ensure that the protection of significant heritage resources are given full consideration in all of its land use and capital outlay decisions

Executive Order B-10-11

Every state agency and department shall encourage communication and consultation with Native American Tribes.

California State Parks Department Operations Manual and Resource Management Policies and Directives

The Department Operations Manual (DOM) is the guiding policy manual for California State Parks. Included within the DOM is a volume of resource management policies and directives. These policies and directives provide guidance toward the preservation of natural and cultural resources and on the uses that may impact those resources, as well as to amplify the legal codes contained in the Public Resources Code, the California Code of Regulations, and the California State Park and Recreation Commission's Statement of Policy and Rules of Order.

State Parks Consultation Policy (Departmental Notice 2007-05)

The Department recognizes its special responsibility as the steward of many sites of cultural and spiritual significance to living Native peoples of California. Therefore, it is the policy of California State Parks to engage in open, respectful, ongoing consultation with appropriate Native California Indian tribes or

groups in the proper management of areas, places, objects or burials associated with their heritage, sacred sites, and traditional cultural properties or cultural traditions in the State Park System.

Prior to implementing projects or policies that may have impacts to Native California Indian sites within the State Park System, the Department will actively consult with local Native California Indian tribes regarding the protection, preservation and/or mitigation of cultural sites and sacred sites in the State Park System.

California Native American Graves Protection and Repatriation Act of 2001

The California Native American Graves Protection and Repatriation Act (CalNAGPRA) was passed in 2001 and requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate tribes. Under CalNAGPRA, the Native American Heritage Commission (NAHC) was granted oversight authority. CalNAGPRA was amended in 2020 by AB 275 to add additional NAHC responsibilities, including maintaining a list of California Indian tribes and their state aboriginal territories, adopting mediation procedures, and publishing notices of completion of preliminary inventories and summaries on the NAHC website.

California Health and Safety Code, Sections 7050 and 7052

Health and Safety Code Section 7050.5 declares that, in the event of the discovery of human remains outside of a dedicated cemetery, all ground disturbance must cease, and the county coroner must be notified. Section 7052 establishes a felony penalty for mutilating, disinterring, or otherwise disturbing human remains, except by relatives.

California Penal Code Section 622.5

California Penal Code Section 622.5 provides misdemeanor penalties for injuring or destroying objects of historic or archaeological interest located on public or private lands but specifically excludes the landowner.

Public Resources Code Section 5097.5

PRC Section 5097.5 defines as a misdemeanor the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands.

3.5.11 Impact Analysis

3.5.12 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.5.13 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for cultural resources were derived from Appendix G of the CEQA Guidelines. Impacts to cultural resources are considered significant if the Proposed Project would:

20) cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5;

21) cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5; or

22) disturb any human remains, including those interred outside of dedicated cemeteries.

3.5.14 Impact Discussion

Threshold 1: Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. One known historical resource intersects with the Project APE: CA-SDI-22220, Monument Road, a historic road significant between 1898 and 1942 connecting San Diego with the monument marking the initial point of boundary between the U.S. and Mexico.

CA-SDI-022220

The Project proposes a partial re-route of Monument Road to allow continued access and SLR/flooding adaptation. The route of this road has changed many times throughout its history, and the surface treatment has varied from unimproved dirt to gravel to asphalt paving. These changes in route and surface materials reflect the fluid nature of this road, making its route a non-character defining or significant feature. Its current alignment is tied to the military activity that substantially altered any connection to the earlier roads, especially the north/south alignment that was closed to the public when the road served as the access road to the Naval target range facilities. The current alignment reflects its use for the military but the removal of all associated buildings or any potentially character-defining features on the road have impacted its integrity to the point that it no longer conveys its significance.

CDPR has determined that the roadway is not eligible for listing on the CRHR or NRHP under any Criterion. Research on Monument Road shows that although roads and trails have existed in this area for generations, the roadway itself holds limited historical significance because it has been altered and rerouted many times. These changes have disrupted any continuous association with the people who once traveled through the region- Native Americans, missionaries, farmers, tourists, smugglers, soldiers, and immigrants. The current alignment is the result of multiple construction activities conducted by the United States. As a result, the Project Area, while long part of a broader travel corridor, does not retain a distinct or intact road alignment that would convey that history (NRHP Criterion A, CRHR Criterion 1). The road was not designed or built by any person significant to the history of California or the nation. Roads, by nature, lead to transitory use so any important person who may have driven on it does not constitute

enough of a connection to justify eligibility (NRHP Criterion B, CRHR Criterion 2). This road in its current alignment, was constructed by the U.S. military. While the condition of the road does not constitute integrity, Monument Road currently floods seasonally and is no longer completely paved, suggesting that there are no engineering features that are significant or unique. There are also no dry-laid, stacked rock walls, culverts, or character defining grades. Therefore, Monument Road does not embody a distinctive characteristic of a type, period, or method of construction with high artistic value (NRHP Criterion C, CRHR Criterion 3). There are no distinct design features and the development plans from the U.S. military are available. In addition to the plans, the extensive existing scholarship documenting history of the Monument, the surrounding communities in the Tijuana River Valley, the border and the military activity in the area, therefore the road does not have the potential to yield information important to prehistory or history (NRHP Criterion D, CRHR Criterion 4).

The Project is not anticipated to cause significant impacts to the significance of the historic road. The upper east-west portion of Monument Road will remain in use for pedestrian and equestrian beach access. The only segment being rehabilitated through a reroute is the approximately 0.5-mile-long north-south segment of Monument Road, which frequently floods. Currently, the road is so frequently flooded and impassable that it does not allow access to Monument Mesa for months or even years at a time. The Project realignment is necessary in order to retain Monument Road as a functional road connecting San Diego to the international border and monument marker at Monument Mesa. The Project does not have the potential to cause a substantial adverse change to this resource.

As such, no impacts to historical resources are anticipated.

Threshold 2: Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with SPRs and PSRs Incorporated. The five archaeological resources intersecting the Project APE include CA-SDI-13485, a multicomponent site consisting of precontact buried hearths, shell middens and artifacts as well as remnants of a historic dairy farm; CA-SDI-16047, a multicomponent site containing precontact buried hearths, shell midden and artifacts as well as historic resources associated with the now-demolished Smart Ranch; CA-SDI-222, a buried precontact habitation site with shell midden features and artifacts capped by a parking lot; P-37-024058, two historic military structural cement foundations; and P-37-024061, an isolated secondary Santiago Peak Volcanic flake in secondary context. Detailed impact analysis for each resource can be found below.

CA-SDI-13485

All known precontact era features and potential cultural deposits previously recorded within the direct APE are 4 feet or more below current ground surface. In the vicinity of CA-SDI-13485, it is recommended that trenching depth be constrained not to exceed 3 feet in depth. As long as trenching is limited to 3 feet below current ground surface, no known precontact cultural deposits are anticipated to be encountered, as the vertical APE of the Project would not overlap with known site deposits in this location. Historic 20th century dairy farming features 21, 25, and 40 are located on the ground surface adjacent to, but just outside of the horizontal direct Project APE. Project plans direct the construction contractor to preserve existing features in place. No impacts to historic archaeological features are anticipated.

Although no impacts are anticipated to any significant cultural features based on existing data, there is the potential that unanticipated cultural features or deposits may be encountered during Project work.

CA-SDI-16047

Within the direct APE, all known precontact era features are at least 5.2 feet below current ground surface. It is recommended that trenching depth be constrained not to exceed 3 feet in depth in the vicinity of CA-SDI-16047. As long as trenching is limited to 3 feet below current ground surface, no known precontact cultural deposits are anticipated to be encountered, as the vertical direct APE of the Project would not overlap known site deposits in this location. Historic 20th century archaeological features have been recorded adjacent to the direct road APE, but not within it. Project plans direct the contractor to preserve existing structures and features in place.

Although no impacts are anticipated to any significant cultural features based on existing data, there is the potential that unanticipated cultural features or deposits may be encountered during Project work.

P-37-024058

The site boundary for this site overlaps the project APE. Structure 3, a rectangular concrete foundation feature, is located adjacent to the proposed maintenance driveway, with the feature's northwest corner overlapping the direct horizontal APE of the project in an area measuring 7-feet-by-16-feet. This feature is buried beneath sediment about 3.1 feet below current ground surface. In this location, the Project plans for the maintenance driveway propose excavation 1 foot deep for compaction and then the addition of several feet of fill, so although the feature overlaps the horizontal APE, it is not within the direct vertical Project APE in this specific location. No other features or known cultural deposits within the site boundary are located within the direct project APE. Impacts are not anticipated to any significant cultural features based on existing data.

P-37-024061 Isolate

The originally mapped location of the flake is just outside the direct Project APE. Trench 8 (Pigniolo 2001a), within 30 meters of the recorded location of the isolate, was negative for cultural resources to a maximum depth of 2.1 meters (7 feet) below surface. This suggests that the isolate, originally suspected to be a redeposit due to its water-worn appearance, is not associated with any subsurface cultural deposits. P-37-024061 was not observed in 2016 or 2023 and may no longer be in its originally recorded location. As an isolate, the flake is not considered a significant resource under CEQA and is ineligible to the National or California registers, so even if encountered during Project work it would not cause a significant impact.

CA-SDI-0222

The currently paved parking lot within this site will be used as staging area and the paved road will be used for access, but no ground disturbance or any other Project activities will take place that have the potential to cause any impacts to the archaeological site.

The Project is not anticipated to cause a substantial adverse change in the significance of any of the five archaeological resources recorded within or near the Project APE. With the accelerated rate of

sedimentation in the area, it is likely that most excavations necessary for the project will take place within sediment deposited in the last 20 to 30 years without reaching depths where known cultural resources would be encountered. However, not all areas accumulate sediment equally. There is potential that unanticipated subsurface cultural deposits or features, such as precontact shell lens, shell midden and/or hearth features, may be encountered during project work anywhere in the project area. The potential is especially high in the alluvial area in the vicinity of the previously recorded sites CA-SDI-13485 and CA-SDI-16047. Implementation of SPRs CUL-1 and CUL-4 through CUL-6, PSR CUL-2, and Mitigation Measure CUL-3 below would reduce the level of potential impact to less than significant.

Threshold 3: Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with SPRs and PSRs Incorporated. No known human remains have been identified within the APE of the Project, so no significant impacts are anticipated. However, human remains in archaeological context have been previously identified within 0.25-mile of the Project Area and there is a potential that unanticipated human remains may be encountered during Project work. Implementation of PSR CUL-6 below would reduce the level of potential impact to less than significant.

3.5.15 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

CUL-1 (SPR): **Monitoring and Inadvertent Discovery Plan.** A Monitoring and Inadvertent Discovery Plan is to be prepared by the lead CDPR archaeologist and reviewed by the consulting tribes and NPS. The Monitoring and Inadvertent Discovery Plan shall include, but not be limited to, the following measures:

If any potentially significant cultural resources are encountered during project work, work shall cease in the immediate vicinity until cultural resource specialists and tribal representatives can record and evaluate the resource and recommend appropriate treatment measures consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Avoidance is CDPR's preferred treatment method.

CUL-2 (PSR): **ESA Fencing.** ESA fencing shall be installed to protect existing features of the archaeological sites adjacent to the Project Area. The ESA fencing locations will be documented in the Monitoring and Inadvertent Discovery Plan.

CUL-3 (MM): **Excavation Limits.** In the vicinity of CA-SDI-13485 and CA-SDI-16047, the maximum depth of project excavation shall be constrained to 3 feet below current ground surface to ensure avoidance of known significant, intact cultural deposits.

CUL-4 (SPR): **Training of Construction Personnel.** A training session for Project construction personnel shall be conducted by a qualified archaeologist and Kumeyaay cultural monitor prior to the start of ground-disturbing activities.

The training session shall include a review of communication protocols, types of cultural resources that might be encountered, cultural resources responsibilities, protection procedures, and avoidance measures.

CUL-5 (SPR): **Cultural Monitoring.** An archaeological monitor and Native American (Kumeyaay) cultural monitor shall be present for all ground disturbing activities associated with this Project to identify any cultural resources that may be present subsurface in the Project Area.

CUL-6 (SPR): **Human Remains Encounter Plan.** In the event that human remains are encountered, work will cease immediately in the area of the find and the Project manager/site supervisor will notify the appropriate DPR personnel. Any human remains and/or funerary objects will be left in place or returned to the point of discovery and covered with soil. The DPR Superintendent (or authorized representative) will notify the County Medical Examiner, in accordance with Section 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). If a Native American monitor is on-site at the time of the discovery, the monitor will be responsible for notifying the appropriate Native American authorities. The County Medical Examiner will make the determination of whether the human bone is of Native American origin.

If the County Medical Examiner determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe will be consulted to identify the most likely descendants and appropriate disposition of the remains. Work will not resume in the area of the find until proper disposition is complete (PRC Section 5097.98). No human remains or funerary objects will be cleaned, photographed, analyzed, or removed from the site prior to determination.

If it is determined that the find indicates a sacred or religious site, the site will be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives will occur as necessary to define additional site mitigation or future restrictions.

3.5.16 Level of Significance After Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

The SPRs and PSRs included in Section 3.5.5 would be implemented, which would ensure that impacts are less than significant and the Project would not cause a substantial adverse change in the significance of any archaeological or historical resources. With implementation of Mitigation Measure CUL-3, Project-related impacts would be reduced to less than significant.

3.6 Energy

3.6.1 Introduction

This section discusses the energy implications of the Proposed Project, including electricity and transportation-related energy (petroleum-based fuels). Impacts to energy are considered significant if the Project would (1) result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operations or (2) conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The energy calculations used for this analysis are based on the air quality outputs discussed in the following technical document included as an appendix:

- Air Quality and Greenhouse Gas Emissions Assessment (ECORP 2025; Appendix D).

3.6.2 Environmental Setting

Energy relates directly to environmental quality. Energy use can adversely affect air quality and other natural resources. The vast majority of California's air pollution is caused by burning fossil fuels. Consumption of fossil fuels is linked to changes in global climate and depletion of stratospheric ozone. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes (auto, carpool, and public transit); vehicle speeds; and miles traveled by these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy. In addition, residential, commercial, and industrial buildings consume energy, typically through the usage of natural gas and electricity

3.6.2.1 Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity, followed by renewables, large hydroelectric, and nuclear power. San Diego Gas & Electric (SDG&E) currently provides natural gas and electricity transmission and distribution infrastructure in San Diego County. SDG&E has made several efforts to promote energy efficiency and reduce the climate impacts of energy usage. For instance, SDG&E has committed to achieving net zero emissions by 2045, which is in alignment with State goals. Additionally, approximately 50 percent of the power provided by SDG&E comes from renewable sources. The Proposed Project's energy needs would be supplied through the various combinations of energy resources available. SDG&E serves 3.7 million people across a 4,100-square-mile area which includes southern Orange County and San Diego County, including the Project Area. SDG&E distributes their energy service through 1.49 million electric meters and 905,000 natural gas meters.

The California Public Utilities Commission (CPUC) regulates SDG&E. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the California Energy

Commission (CEC) maintains a power plant database that describes all of the operating power plants in the state by county.

The components of transmission and distribution systems include the generating facility, switching yards and stations, primary substation, distribution substations, distribution transformers, various sized transmission lines, and the customers. The United States contains over a quarter million miles of transmission lines, most of them capable of handling voltages between 115 kilovolts (kV) and 345 kV, and a handful of systems of up to 500 kV and 765 kV capacity. Transmission lines are rated according to the amount of power they can carry, the product of the current (rate of flow), and the voltage (electrical pressure). Generally, transmission is more efficient at higher voltages. Generating facilities, hydro-electric dams, and power plants usually produce electrical energy at fairly low voltages, which is increased by transformers in substations. From there, the energy proceeds through switching facilities to the transmission lines. At various points in the system, the energy is "stepped down" to lower voltages for distribution to customers. Power lines are either high voltage (115, 230, 500, and 765 kV) transmission lines or low voltage (12, 24, and 60 kV) distribution lines.

Overhead transmission lines consist of the wires carrying the electrical energy (conductors), insulators, support towers, and grounded wires to protect the lines from lightening (called shield wires). Towers must meet the structural requirements of the system in several ways. They must be able to support both the electrical wires, the conductors, and the shield wires under varying weather conditions, including wind and ice loading, as well as a possible unbalanced pull caused by one or two wires breaking on one side of a tower. Every mile or so, a "dead-end" tower must be able to take the strain resulting if all the wires on one side of a tower break. Every change in direction requires a special tower design. In addition, the number of towers required per mile varies depending on the electrical standards, weather conditions, and the terrain. All towers must have appropriate foundations and be available at a fairly regular spacing along a continuous route accessible for both construction and maintenance.

A right-of-way is a fundamental requirement for all transmission lines. A right-of-way must be kept clear of vegetation that could obstruct the lines or towers by falling limbs or interfering with the sag or wind sway of the overhead lines. If necessary, land acquisition and maintenance requirements can be substantial. The dimension of a right-of-way depends on the voltage and number of circuits carried and the tower design. Typically, transmission line rights-of-way range from 100 to 300 feet in width. The electric power supply grid within the Project Area is part of a larger supply network operated and maintained by SDG&E, which encompasses a significant portion of Southern California. This system ties into a larger grid that connects with Southern California Edison and the Pacific Gas and Electric Company. These entities coordinate the development and operation, as well as the purchase, sale, and exchange of power throughout the State of California. Within San Diego County, SDG&E owns most of the transmission and distribution facilities.

The California Independent System Operator (CAISO) manages the flow of electricity across the high-voltage, long-distance power lines (high-voltage transmissions system) that make up 80 percent of California's and a small part of Nevada's grid. This nonprofit public benefit corporation keeps power moving to and throughout California by operating a competitive wholesale electricity market, designed to promote a broad range of resources at lower prices, and managing the reliability of the electrical

transmission grid. In managing the grid, CAISO centrally dispatches generation and coordinates the movement of wholesale electricity in California. As the only independent grid operator in the western U.S., CAISO grants equal access to 26,000 circuit miles of transmission lines and coordinates competing and diverse energy resources into the grid where it is distributed to consumers. Every five minutes, CAISO forecasts electrical demand and dispatches the lowest cost generator to meet demand while ensuring enough transmission capacity for delivery of power.

3.6.2.2 Energy Consumption

Electricity use is measured in kilowatt-hours (kWh). Vehicle fuel use is typically measured in gallons (e.g., gallons of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh. This impact analysis focuses on the three sources of energy that are relevant to the Proposed Project: electricity usage, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations.

The electricity consumption associated with all nonresidential uses in San Diego County from 2018 to 2022 is shown in Table 3.6-1. As indicated, electricity consumption has increased since 2018.

Table 3.6-1. Nonresidential Electricity Consumption in San Diego County 2018–2022

Year	Electricity Consumption (kilowatt hours)
2022	12,802,545,160
2021	12,353,416,157
2020	11,722,882,508
2019	12,453,450,012
2018	12,793,962,295

Source: CEC 2023a

Automotive fuel consumption in San Diego County from 2020 to 2024 is shown in Table 3.6-2. Fuel consumption has increased in the County since 2020.

Table 3.6-2. Automotive Fuel Consumption in San Diego County 2020–2024

Year	Gasoline Consumption (gallons)	Diesel Consumption (gallons)
2024	1,092,467,334	162,522,816
2023	1,128,882,339	153,654,457
2022	1,151,011,900	151,926,174
2021	1,159,052,125	161,974,451
2020	1,047,229,080	151,414,602

Source: CARB 2021, 2022

3.6.3 Regulatory Framework

3.6.3.1 State

Senate Bill 1389 (Integrated Energy Policy Report)

Senate Bill (SB) 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial Integrated Energy Policy Report (IEPR) that assesses major energy trends and issues facing California's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety (PRC Section 25301a). Each biennial IEPR takes into account various factors such as energy supply, demand, infrastructure, environmental considerations, and economic impacts. The report aims to address key energy challenges and provide recommendations to achieve a reliable, affordable, and sustainable energy system for California (CEC 2023b).

Some of the key areas typically covered in the report include:

1. *Renewable Energy*: The IEPR focuses on promoting renewable energy sources such as solar, wind, geothermal, and biomass. It assesses the state's progress in meeting its renewable energy goals, identifies barriers, and proposes strategies to increase renewable energy generation and integration into the grid.
2. *Energy Efficiency*: The report highlights the importance of energy efficiency measures to reduce energy consumption and GHG emissions. It explores policies and initiatives to promote energy-efficient technologies and practices in buildings, transportation, and industries.
3. *Grid Modernization*: The IEPR addresses the modernization and optimization of the electrical grid infrastructure to accommodate a higher penetration of renewable energy, improve grid reliability, and support emerging technologies such as energy storage and electric vehicles.
4. *Transportation*: The report typically includes a section on transportation, focusing on reducing dependence on fossil fuels and promoting the adoption of electric vehicles and alternative fuels. It may discuss infrastructure development, incentives, and policies to accelerate the transition to cleaner transportation options.
5. *Climate Change Mitigation*: Given California's commitment to combating climate change, the IEPR often emphasizes strategies to reduce GHG emissions and achieve the state's climate goals. This may include discussions on carbon pricing, cap-and-trade programs, and the integration of climate considerations into energy planning.
6. *Energy Resilience*: The report may address strategies to enhance the resilience of the energy system, considering factors such as extreme weather events, natural disasters, and cybersecurity risks. It could discuss measures to ensure a reliable and uninterrupted supply of energy during emergencies.

7. *Economic Impacts and Equity*: The IEPR often explores the economic implications of energy policies and initiatives, including job creation, investment opportunities, and the equitable distribution of benefits across different communities and socioeconomic groups.

The CEC prepares these assessments and associated policy recommendations every two years, with updates on alternate years, as part of the IEPR.

The 2023 IEPR focuses on the next steps for transforming transportation energy use in California. The 2023 IEPR addresses the role of transportation in meeting state climate, air quality, and energy goals; the transportation fuel supply; the Alternative and Renewable Fuel and Vehicle Technology Program; current and potential funding mechanisms to advance transportation policy; transportation energy demand forecasts; the status of statewide plug-in electric vehicle infrastructure; challenges and opportunities for electric vehicle infrastructure (CEC 2023c). (At the time of Report preparation, the 2024 IEPR has been drafted, but not yet adopted.)

Executive Order B-55-18

In September 2018 Governor Jerry Brown Signed Executive Order (EO) B-55-18, which establishes a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Carbon neutrality refers to achieving a net zero carbon dioxide emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for greenhouse gas emission reduction. EO B-55-18 requires CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Senate Bill 1368

On September 29, 2006, Governor Arnold Schwarzenegger signed into law SB 1368 (Perata, Chapter 598, Statutes of 2006). The law limits long-term investments in baseload generation by the state's utilities to those power plants that meet an emissions performance standard jointly established by CEC and CPUC.

The CEC has designed regulations that:

- Establish a standard for baseload generation owned by, or under long-term contract to, publicly owned utilities, of 1,100 pounds carbon dioxide per megawatt hour. This would encourage the development of power plants that meet California's growing energy needs while minimizing their emissions of greenhouse gas.
- Require posting of notices of public deliberations by publicly owned utilities on long-term investments on the CEC website. This would facilitate public awareness of utility efforts to meet customer needs for energy over the long term while meeting the State's standards for environmental impact.
- Establish a public process for determining the compliance of proposed investments with the Emissions Performance Standard (Perata, Chapter 598, Statutes of 2006).

Senate Bill 1078 Renewable Energy Sources (Renewable Portfolio Standards)

Established in 2002 under SB 1078 and accelerated by SB 107 (2006) and SB 2 (2011), California's Renewables Portfolio Standard (RPS) obligates investor-owned utilities, energy service providers, and community choice aggregators to procure 33 percent of their electricity from renewable energy sources by 2020. Eligible renewable resources are defined in the 2013 RPS to include biodiesel; biomass; hydroelectric and small hydro (30 megawatts or less); Los Angeles Aqueduct hydro power plants; digester gas; fuel cells; geothermal; landfill gas; municipal solid waste; ocean thermal, ocean wave, and tidal current technologies; renewable derived biogas; multi-fuel facilities using renewable fuels; solar photovoltaic; solar thermal electric; wind; and other renewables that may be defined later. Governor Jerry Brown signed SB 350 on October 7, 2015, which expands the RPS by establishing a goal of 60 percent of the total electricity sold to retail customers in California per year by December 31, 2030. 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 upon which an energy efficiency program is focused) of retail customers through energy conservation and efficiency. The bill also requires the CPUC, in consultation with the CEC, establish efficiency targets for electrical and gas corporations consistent with this goal. SB 350 also provides for the transformation of the CAISO into a regional organization to promote the development of regional electricity transmission markets in the western states and to improve the access of consumers served by the CAISO to those markets, pursuant to a specified process. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3.6.4 Impact Analysis

3.6.4.1 Methodology

Levels of construction and operational related energy consumption estimated to be consumed by the Project include the number of kWh of electricity and gallons of fuel. On-road construction-related fuel use was estimated using average county fuel economy found in CARB's Emission Factor (EMFAC) 2021 Model, which is a mathematical model that was developed to calculate emission rates and rates of gasoline and diesel consumption from motor vehicles that operate on highways, freeways, and local roads in California. EMFAC also provides annual vehicle miles traveled, which was used to calculate the average countywide fuel economy of both gasoline and diesel vehicles.

Off-road construction equipment fuel use was estimated using a combination of California Emissions Estimator Model (CalEEMod) (see Air Quality and Greenhouse Gas Emissions Assessment [ECORP 2025]) and CARB's OFFROAD2021 version 1.0.7 (CARB 2021). CalEEMod is a statewide land use computer model designed to quantify resources associated with both construction and operations from a variety of land use projects. The model contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. CARB's OFFROAD2021 is a mathematical model that was developed to calculate emission rates and rates of gasoline and diesel consumption from off-road vehicles that operate in California.

To calculate diesel use, fuel consumption factors were derived from the USEPA *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* (USEPA 2021), which identifies brake specific fuel capacities of 0.408 pounds of diesel per horsepower-hour for engines below 100 horsepower, and 0.367 pounds of diesel per horsepower-hour for engines above 100 horsepower. The fuel consumption factor was converted from pounds of diesel per horsepower-hour to gallons of diesel per horsepower-hour using the standard conversion (7.07 pounds of diesel per gallon). The fuel consumption factor for vehicles below 100 horsepower was calculated to be 0.0577 gallons of diesel per horsepower-hour and the fuel consumption factor for vehicles above 100 horsepower was calculated to be 0.0519 gallons of diesel per horsepower-hour. The horsepower and load factor of each piece of equipment was then multiplied by its respective fuel consumption factor in order to determine the fuel consumption rate of the equipment. After identifying the fuel consumption rate, the total quantity of each set of equipment and its daily usage were multiplied to find the total hours of usage per day, and then multiplied by the length of their respective construction phases in order to calculate total hours of usage per piece of equipment per construction phase. These total hours were multiplied by the fuel consumption rate in order to find each piece of equipment's total fuel consumption (see Appendix A: Energy Consumption Analysis).

Levels of operational related energy consumption estimated to be consumed by the Project include the number of kWh of electricity and gallons of automotive fuel. Project operational electricity consumption estimates were calculated using CalEEMod. The Project was modeled in CalEEMod with a land use designation of 'parking lot.' As the 'city park' land use category in CalEEMod does not account for operational energy use, energy demands for lighting and a proposed automated parking meter system in the equestrian parking area were evaluated separately. To ensure a conservative analysis that accounts potential future impacts, energy use was modeled based on a 20-acre parking lot, an intentional overestimation of the actual size of the proposed equestrian lot. Operational automotive fuel consumption has been calculated with San Diego County-specific fuel economy of both gasoline and diesel-powered vehicles derived from EMFAC.

3.6.4.2 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to energy if it would do any of the following:

A. 1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

B. 2) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The impact analysis focuses on the three sources of energy that are relevant to the Proposed Project: electricity usage, the equipment fuel necessary for Project construction and the automotive fuel necessary for Project operations. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity estimated to be consumed by the

Project are quantified and compared to that consumed by all nonresidential land uses in San Diego County. Similarly, the amount of diesel fuel and gasoline fuel necessary for Project construction and operations is calculated, totaled and compared to the countywide fuel consumption in 2024, the most recent full year of data.

3.6.4.3 Impact Discussion

This section evaluates the potential energy consumption impacts associated with the construction and operation of the Proposed Project.

The proposed north-south realignment and proposed elevation of the east-west segment of Monument Road are classified as low-volume rural roads. Both components would have a gravel surface, while a short section of road, from the new culverts and further west, would have AC pavement. Construction of the new road would involve placing up to approximately 6 feet of fill and constructing single and triple box culverts beneath the southern east-west leg of Monument Road. Construction activities would also include culvert removal, curb removal, guard rail removal, clearing and grubbing brush, debris disposal, culvert installation, painting and striping, curb installation, and guard rail installation.

Anticipated construction equipment and materials may include the following: portable air compressor, vibratory soil compactor, portable concrete mixer, articulated frame motor grader, front end loader, dozer, backhoe, excavator, generator set, forklift, rough terrain crane, dump truck, gooseneck trailer, water tanker, and an earth auger.

Threshold 1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation?

Less than Significant Impact. The Proposed Project is proposing to demolish the portion of Monument Road prone to flooding, realign Monument Road, increase the elevation of select roadway segments, and upgrade the equestrian parking lot. For the purpose of this analysis, the amount of electricity estimated to be consumed by the Project is quantified and compared to that consumed by all nonresidential land uses in San Diego County. The amount of diesel and gasoline fuel necessary for Project construction is calculated, totaled and compared to that consumed in San Diego County in 2024. Similarly, the amount of fuel necessary for Project operations is calculated and compared to that consumed in San Diego County in 2024. Energy consumption associated with the Proposed Project is summarized in Table 3.6-3.

Table 3.6-3. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Parking Lot Consumption		
Electricity Consumption[*]	800,000 kilowatt-hours	0.0062%
Construction Fuel Consumption		
Construction (Diesel)[*,†]	927,736 gallons	0.5203%

Table 3.6-3. Proposed Project Energy and Fuel Consumption		
Energy Type	**Annual Energy Consumption**	**Percentage Increase Countywide**
Construction (Gasoline)‡	1,007 gallons	0.0001%
Operations Fuel Consumption		
Operations (Diesel)‡	8,338 gallons	0.0051%
Operations (Gasoline)‡	62,497 gallons	0.0057%

Source: * CalEEMod (California Air Pollution Control Officers Association 2022)
† OFFROAD2021 (California Air Resources Board [CARB] 2021)
‡ EMFAC2021 (CARB 2022)

Notes: The Project increases in electricity consumption is compared with all nonresidential uses in San Diego County in 2022, the latest data available. The Project increases in automotive fuel consumption are compared with the anticipated countywide fuel consumption in 2024, the most recent full year of data.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project Area. The fuel expenditure necessary to demolish the portion of Monument Road prone to flooding, realign Monument Road, increase the elevation of some roadway segments, and upgrade the equestrian parking lot would be temporary, lasting only as long as Project construction. As indicated in Table 3.6-3, the Project's gasoline fuel consumption during the one-time construction period is estimated to be 1,007 gallons, which would increase the annual countywide gasoline fuel use by 0.0001 percent. Additionally, the Project is estimated to consume 927,736 gallons of diesel fuel, which would be 0.5203 percent of the County's annual diesel fuel consumption. As such, Project construction would have a nominal effect on local and regional energy supplies. No unusual Project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during Project construction.

Operations of the Proposed Project would include electricity usage. No natural gas is expected to be used once the Proposed Project is operational. As shown in Table 2-3, the annual electricity consumption due to operations would be 800,000 kilowatt-hours resulting in an imperceivable (0.0062 percent) in the typical annual electricity consumption attributable to all nonresidential uses in San Diego County. However, this is potentially a conservative estimate. In September 2018 Governor Jerry Brown Signed EO B-55-18, which established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Carbon neutrality refers to achieving a net zero CO_2 emissions. This can be achieved by reducing or eliminating carbon emissions, balancing carbon emissions with carbon removal, or a combination of the two. This goal is in addition to existing statewide targets for greenhouse gas emission reduction. Governor's Executive Order B-55-18

requires CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." Additionally, the 800,000-kWh estimate is a conservative value based on a modeled 20-acre parking lot land use, an overestimation of the actual size of the equestrian parking area, which may include lighting and an automated parking meter system.

The Project is estimated to generate a maximum of approximately 915 daily trips. As indicated in Table 3.6-3, this would equate to a consumption of approximately 62,497 gallons of automotive gasoline per year, which would lead to a minimal (0.0057 percent) increase in the annual countywide automotive gasoline consumption. The Project is estimated to consume approximately 8,338 gallons of automotive diesel fuel per year, which would lead to a minimal (0.0051 percent) increase in the annual countywide automotive diesel consumption. Therefore, fuel consumption associated with the vehicle trips generated by the Project during operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. This impact is less than significant.

Threshold 2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact. The IEPR provides policy recommendations to be implemented by energy providers in California. Electricity would be provided to the Project by SDG&E. SDG&E's 2022 Integrated Resource Plan builds on existing State programs and policies that support the IEPR goals of improving electricity, natural gas, and transportation fuel energy use in California. SDG&E's Integrated Resource Plan supports the State's goals of zero-carbon electricity and economy-wide carbon neutrality and moving towards a climate-resilient economy in a manner that preserves reliability and ensures reasonable cost (SDG&E 2022). SDG&E's website includes a 'request for offers' page related to procuring specific resources identified in its Integrated Resources Plan to ensure SDG&E is compliant with the IEPR (SDG&E 2025). Thus, because SDG&E is consistent with the IEPR and the Project would procure its energy from SDG&E, the Project is consistent with and would not otherwise interfere with or obstruct implementation of the goals presented in the 2023 IEPR.

The Proposed Project would not conflict or obstruct a State or local plan for renewable energy or energy efficiency. This impact is less than significant.

3.6.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.6.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.7 Geology and Soils

3.7.1 Introduction

This section describes geology, seismicity, soils, and paleontological resources in the Project Area that could be affected by construction, operations, and maintenance of the Proposed Project.

3.7.2 Environmental Setting

3.7.2.1 Geomorphic Setting

The Proposed Project is located within the Coastal Plain region of the Peninsular Ranges Geomorphic Province, which is characterized by a series of mountain ranges separated by northwest-trending valleys.

The surface geology of the Tijuana River Estuary consists of alluvial material with layers of sand and gravel, as well as larger stones. This deposition was caused by the Tijuana River's erosive action upstream (City of Imperial Beach 2024).

3.7.2.2 Regional Seismicity and Fault Zones

The southern California region is a seismically active area with a large number of known faults traversing the region. Three major regional fault zones traverse the San Diego Region, including the San Jacinto Fault Zone, the Elsinore Fault Zone, and the Rose Canyon Fault Zone (City of Imperial Beach 2024). According to the California Geological Survey (CGS), the Project Area is not located within an Alquist-Priolo Earthquake Fault Zone as delineated under the Alquist-Priolo Earthquake Fault Zoning Act (CGS 2022).

3.7.2.3 Soils

According to Natural Resources Conservation Service (NRCS) Web Soil Survey, soils in the Project Area include (NRCS 2024):

- CkA (Chino silt loam, saline, 0 to 2 percent slopes);
- MlC (Marina loamy coarse sand, 2 to 9 percent slopes);
- TeF (Terrace escarpments); and
- Tf (Tidal flats).

3.7.2.4 Paleontological Resources

The Project Area is characterized as Late Quaternary Alluvium and underlain by the San Diego Formation. Fossils are usually not found in Late Quaternary Alluvium deposits in the Coastal Plain Province, except for in San Diego. Fossils have been found in the floodplain deposits of the Tijuana River Valley (City of San Diego 2007). The San Diego Formation is a Pliocene Age tertiary shallow water marine deposit that is locally fossiliferous. The San Diego Formation consists of dense, easily pulverized, silvery, very finely

bedded sandstones. The surface geology of the Tijuana Estuary consists of alluvial material with layers of sand, gravel, and larger stones (City of Imperial Beach 2024).

3.7.3 Regulatory Setting

3.7.3.1 Federal

There are no applicable federal regulations for this issue area.

3.7.3.2 State

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (PRC Section 2621), signed into law in 1972, directs the State Geologist to establish regulatory "zones of required investigation" (earthquake fault zones) around traces of active faults and compile maps of these faults. The intent of this Act is to reduce the threat to public health and safety and to minimize the loss of life and property posed by earthquake-triggered ground failures by requiring thorough geological studies before development can occur in designated fault zones.

Seismic Hazards Mapping Act of 1990

The Seismic Hazards Mapping Act (SHMA) of 1990 (PRC Section 2690 to 2699.6) requires the DOC to identify and map the state's most prominent seismic hazards in order to help avoid damage resulting from earthquakes. The SHMA addresses non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, and seismically induced landslides. SHMA's goal is to minimize loss of life and property by identifying and mitigating seismic hazards.

3.7.4 Impacts Analysis

3.7.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.7.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for geology and soils and paleontological resources were derived from Appendix G of the CEQA Guidelines. Impacts to geology and soils and paleontological resources are considered significant if the Proposed Project would:

23) directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:

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

(ii) strong seismic shaking

(iii) seismic-related ground failure, including liquefaction

(iv) landslides

24) result in substantial soil erosion or the loss of topsoil;

25) 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse;

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

27) have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or

28) directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

3.7.4.3 Impact Discussion

Threshold 1: Would the Project directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:

(i) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault? refer to Division of Mines and Geology Special Publication 42
(ii) strong seismic shaking
(iii) seismic-related ground failure, including liquefaction
(iv) landslides

i) Rupture of a Known Earthquake Fault?

Less than Significant Impact. The Project Area is within a seismically active area of California which has a high likelihood for seismic activity; however, the Project Area does not intersect with an established Alquist-Priolo Earthquake Fault Zone. The nearest Alquist-Priolo fault zone is the Newport-Inglewood-Rose Canyon Fault Zone, located approximately 9 miles northwest of the Project Area (DOC 2025b). Three unnamed fault lines are mapped on the DOC CGS Fault Activity Map of California east of the Project Area but are located outside of the Project Area.

The Proposed Project would introduce construction workers to the Project Area which could expose people to seismic risks. However, BFSP is an existing park that has visitors and park maintenance staff onsite. The proposed improvements to the Project Area would not result in an increased risk to people or structures from fault rupture and would not increase the potential for fault rupture. Impacts would be less than significant.

ii) Strong Seismic Shaking?

Less than Significant Impact. As Southern California is a seismically active area, seismic ground shaking can be felt miles from the earthquake epicenter. Damage from seismic ground shaking depends on factors such as the earthquake's magnitude, distance from the epicenter, underlying soils, and the construction material and quality of construction (City of Imperial Beach 2024; City of San Diego 2024).

Depending on the aforementioned factors, damage to the Proposed Project facilities and injury to workers or visitors could result. However, because the Proposed Project would not establish a permanent onsite population during operations and maintenance and would not include the construction of any habitable structures; it would not expose a substantial number of people to potential adverse effects due to strong seismic ground shaking. Impacts would be less than significant.

iii) Seismic-Related Ground Failure, Including Liquefaction?

Less than Significant Impact. Liquefaction can occur when unconsolidated and water-saturated sediments become unstable due to the effects of strong seismic shaking. Uniformly graded materials are more susceptible to liquefaction than well-graded materials. Within uniformly graded materials, fine sands liquefy more easily than coarse sands, graded soils, silts, or oil. Additionally, loose soil deposits and shallower strata liquefy more easily than denser deposits and deeper strata. According to the City of San Diego's Seismic Safety Study, there is a high potential for liquefaction in the Project Area due to shallow groundwater, major drainages, and hydraulic fills (City of San Diego 2008). Liquefaction also poses a serious threat in the City of Imperial Beach in the event of moderate or major seismic activity due to the structure of soils and the City's high water table (City of Imperial Beach 2024).

The Proposed Project would not introduce any new habitable structures that would expose people to substantial adverse effects from seismic-related ground failure, including liquefaction. Impacts would be less than significant.

iv) Landslides?

Less than Significant Impact. The City of San Diego's Seismic Safety Study does not note any confirmed, known, or highly suspected landslides nor any possible or conjectured landslides in the vicinity of the Project Area (City of San Diego 2008). Landslides have occurred in Otay Mesa, located approximately 4 miles east of the Project Area (City of San Diego 2024). The City of Imperial Beach General Plan notes that the City's terrain is generally flat except for small cliffs within BFSP; therefore, landslides are not considered a significant hazard (City of Imperial Beach 2024).

Site elevations along the proposed alignment in the Project Area range from approximately 45 feet above msl at Goat Canyon to approximately 10 feet above msl at the connection to the southern east-west

segment of Monument Road. According to the City of Imperial Beach General Plan, limited landslides may occur at the small cliffs in BFSP during a more severe earthquake; these cliffs can be found just east of the proposed road alignment near Goat Canyon. The Proposed Project would not disturb substantial slopes or other ground supporting features that could create unstable geologic conditions. It would not have the potential to induce or increase the risk of landslides. Impacts would be less than significant.

Threshold 2: Would the Project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. Construction of the Proposed Project would involve ground-disturbing activities that could expose soils to the effects of wind or water erosion. Construction activities would temporarily increase erosion, runoff, and sedimentation. The Proposed Project would be required to obtain and comply with the NPDES Construction General Permit, and implement dust control measures, which would include construction best management practices (BMPs) to control and limit sedimentation and erosion. Thus, impacts are considered less than significant.

Threshold 3: Would the Project 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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. Lateral spreading is the horizontal fracturing of the ground surface that occurs when saturated, loose soil loses its strength due to liquefaction. This ground failure is usually triggered by an earthquake but can be artificially induced. Lateral spreads are distinctive because they usually occur on very gentle slopes or flat terrain (U.S. Geological Survey [USGS] 2025a). As discussed above, impacts related to liquefaction and landslides would be less than significant as the Proposed Project would not to introduce any new habitable structures that would expose people to substantial adverse effects from seismic-related ground failure.

Subsidence is the settling or collapse of the Earth's surface due to subsurface movement of earth materials. Subsidence often results from the extraction of water, oil, natural gas, or minerals through pumping, fracking, or mining activities but can also be caused by natural events such as earthquakes, soil compaction, and erosion (National Oceanic and Atmospheric Administration 2024). In California, the main cause of subsidence is due to groundwater pumping. Subsidence is not a significant problem in the City of Imperial Beach (City of Imperial Beach 2024). There are also no historical or current recorded instances of subsidence across the Project Area (USGS 2025b).

The Proposed Project would utilize wick drains, or prefabricated vertical drains, along the proposed road alignment. The wick drains consist of geotextile filter-wrapped plastic strips with molded channels that are installed vertically into soils to accelerate pore water drainage and the soil consolidation process. The reduction of water content of the saturated layers allows the soils to better accommodate superimposed loads and minimizes future settlement. Impacts would be less than significant.

Threshold 4: Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant Impact. Expansive soils are clay rich soils that swell and shrink with wetting and drying. The shrink-swell capacity of expansive soils can result in differential movement below or adjacent

to a structure, resulting in distress. Soils within the Project Area have expansive properties; however, construction activities for the Proposed Project would not create substantial risks to life or property as no permanent habitable structures would be constructed as part of the Project. Impacts would be less than significant.

Threshold 5: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Proposed Project does not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

Threshold 6: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation. The Project Area is characterized as Late Quaternary Alluvium and underlain by the San Diego Formation. The Late Quaternary Alluvium deposits are relatively young and are assigned low paleontological resources sensitivity. The San Diego Formation has rich fossil beds with diverse assemblages of marine organisms and is assigned high paleontological resource sensitivity (City of San Diego 2007). San Diego Formation deposits are not expected to be encountered as Project related excavation would not exceed 6 feet in depth from the existing grade.

It is possible, though unlikely, that paleontological resources might be encountered during excavations below the ground surface in the Project Area. This could result in potentially significant impact if paleontological resources are encountered and inadvertently destroyed during ground-disturbing activities. The inadvertent discovery of a paleontological resource during construction cannot be entirely discounted; therefore, implementation of SPR GEO-1 would reduce impacts to less than significant.

3.7.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

GEO-1 (MM): **Unanticipated Paleontological Discovery.** Although full-time monitoring is not warranted based on the low sensitivity to produce paleontological resources (i.e., fossil remains), a Worker's Environmental Awareness Program shall be given to all personnel associated with the Project prior to ground disturbance in case any unanticipated paleontological resources are discovered during excavation activities. If an unanticipated discovery is made, the contractor shall notify California Department of Parks and Recreation and cease excavation within 50 feet of the find until a qualified paleontological professional can provide an evaluation of the site. The qualified paleontological professional shall evaluate the significance of the find and recommend appropriate measures for the disposition of the site (e.g., fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

3.7.6 Level of Significance After Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

Impacts would be less than significant after the implementation of Mitigation Measure GEO-1.

3.8 Greenhouse Gas Emissions

3.8.1 Introduction

This section describes the affected environment and regulatory setting relating to greenhouse gases (GHGs) for the Proposed Project. Greenhouse gas impacts are considered significant if the project would (1) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment or (2) conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas.

The analysis is based on the following technical document included as an appendix:

- Air Quality and Greenhouse Gas Emissions Assessment (ECORP 2025; Appendix D).

3.8.2 Environmental Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO_2, methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. More specifically, experts agree that human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020 (Intergovernmental Panel on Climate Change [IPCC] 2023).

Table 3.8-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the GHG effect.

Table 3.8-1. Summary of Greenhouse Gases	
Greenhouse Gas	**Description**
CO_2	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.*
CH_4	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about 12 years.†
N_2O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.‡

Sources: * USEPA 2023a
† USEPA 2023b
‡ USEPA 2023c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

3.8.3 Regulatory Setting

3.8.3.1 State

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed AB 32 (Health and Safety Code Section 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2022 Scoping Plan Update, outlines strategies and actions to reduce greenhouse gas emissions in California. The plan focuses on achieving the state's goal of reaching carbon neutrality by 2045 and reducing greenhouse gas emissions to 40 percent below 1990 levels by 2030. The plan includes a range of strategies across various sectors, including transportation, industry, energy, and agriculture. Some of the key strategies include transitioning to zero-emission vehicles, expanding renewable energy sources, promoting sustainable land use practices, implementing a low-carbon fuel standard, and reducing emissions from buildings. Additionally, the plan addresses equity and environmental justice by prioritizing investments in communities most impacted by pollution and climate change. The plan also aims to promote economic growth and job creation through the transition to a low-carbon economy.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provided a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies. The 2017 Scoping Plan also placed an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with Statewide per capita goals of no more than 6 metric tons of CO_2 equivalent (CO_2e) by 2030 and 2 metric tons of CO_2e by 2050.

Assembly Bill 1279 of 2022

In September 2022, Governor Brown signed AB 1279, The California Climate Crisis Act, which requires California to achieve carbon neutrality as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. AB 1279 also requires that by 2045 statewide anthropogenic GHG emissions be reduced to at least 85 percent below 1990 levels and directs CARB to ensure that its scoping plan identifies and recommends measures to achieve these goals. AB 1279 also directs CARB to identify policies and strategies to enable carbon capture, utilization, and storage and CO_2

removal technologies to meet emission reduction goals. In addition, CARB is required to submit an annual report on progress in achieving the 2022 Scoping Plan's goals.

In response to the passage of AB 1279 and the identification of the 2045 GHG emissions reduction target, CARB published the *Final 2022 Climate Change Scoping Plan* in November 2022 (2022 Update). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying a new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan; addresses recent legislation and direction from Governor Newsom; extends and expands upon these earlier plans; and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "the plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the State's natural and working lands and using a variety of mechanical approaches." Specifically, the 2022 Update achieves the following:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of natural and working lands to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in natural and working lands and explores how they contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet these GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

Executive Order N-79-20

Governor Gavin Newsom signed an executive order on September 23, 2020, that would phase out sales of new gas-powered passenger cars by 2035 with an additional 10-year transition period for heavy vehicles. The State would not restrict used car sales, nor forbid residents from owning gas-powered vehicles, meaning that the overall reduction in GHG emissions would likely not substantially reduce GHG emissions from vehicles for many years after the ban goes into effect.

Senate Bill 100 of 2018

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

Senate Bill 1020 of 2022

SB 1020, the Clean Energy, Jobs, and Affordability Act of 2022, adds interim targets to the policy framework originally established in SB 100 to require renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent of all retail electricity sales by 2040. Additionally, the bill requires all state agencies to rely on 100 percent renewable energy and zero-carbon resources to serve their own facilities by 2035. This bill also requires that CARB's Scoping Plan workshops be held in non-attainment areas and requires the California Public Utilities Commission, the California Energy Commission, and CARB to create a joint report on electricity reliability.

Senate Bill 375 of 2008

SB 375 set forth a mechanism for coordinating land use and transportation on a regional level for the purpose of reducing GHG emissions. SB 375 was adopted with a goal of reducing fuel consumption and GHG emissions from cars and light trucks. Under SB 375, CARB was required to set GHG reduction targets for each metropolitan region for 2020 and 2035, and each of California's metropolitan planning organizations was responsible to prepare a sustainable communities strategy that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning. The Southern California Association of Governments Regional Council adopted the 2024 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to remain compliant with SB 375.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is an association of air pollution control officers representing all 35 local air quality agencies across California. Established in 1976, CAPCOA's primary objectives include the advancement of clean air initiatives and to provide a platform for the exchange of knowledge, experience, and information among air quality regulatory bodies statewide. The association is dedicated to fostering unity and efficiency, aiming to promote consistency in methods and practices pertaining to air pollution control. CAPCOA convenes regularly with federal and state air quality officials to formulate statewide regulations and ensure uniform adherence to established rules.

CAPCOA has instituted a GHG significance threshold of 900 metric tons of CO_2e annually for the evaluation of proposed land use development projects. This threshold, indicating a 90 percent capture rate, encompasses projects representing approximately 90 percent of GHG emissions from new sources. The 900 metric tons of CO_2e per year threshold is typically utilized to classify small projects within California as inconsequential, as it accounts for less than one percent of the future 2050 statewide GHG emissions target. CAPCOA considers the 900 metric ton threshold sufficiently low to capture a significant portion of future residential and nonresidential development necessary for accommodating statewide population and economic growth. Simultaneously, it establishes the emission threshold at a level that excludes small projects contributing a relatively minor fraction of cumulative statewide GHG emissions.

3.8.4 Impact Analysis

This section evaluates the potential GHG emission impacts associated with the construction and operation of the Proposed Project. The Proposed Project involves the realignment and elevation of Monument Road, installation of culverts and associated drainage infrastructure, removal of degraded roadway segments, and upgrades to an existing parking lot primarily associated with equestrian use.

The proposed north-south realignment and proposed elevation of the east-west segment of Monument Road are classified in the Caltrans Highway Design Manual as low-volume rural roads. Both components would have a gravel surface, while a short section of road, from the new culverts and further west, would have AC pavement. Construction of the new road would involve placing up to approximately 6 feet of fill and constructing single and triple box culverts beneath the southern east-west leg of Monument Road. Construction activities would also include culvert removal, curb removal, guard rail removal, clearing and grubbing brush, debris disposal, culvert installation, painting and striping, curb installation, and guard rail installation.

These roadways would have two 12-foot-wide travel lanes and two shoulders (2-feet-wide and 4-feet-wide) and would accommodate a standard 45-foot bus template with a 125-foot minimum curve radius. The roadways are designed based on the current Caltrans Highway Design Manual. The proposed roadway elevations are based on sea level rise, water surface elevations, and the sedimentation rates of Goat Canyon and Yogurt Canyon. The total length of road improvements would be about 1.3 miles, and the design speed and posted speed limit within the Project limits is 20 miles per hour.

In addition to the road segment realignment and proposed elevation redesign, the Proposed Project includes improvements to an existing staging area (including the construction of an aggregate surface

equestrian parking lot off Beach Access Road near the terminus of Monument Road), a minor redesign of the existing entrance parking lot (including the proposed installation of an automated pay machine alongside the proposed north-south realignment), and relocation and installation of utilities (new electrical lines and 6-inch water mains are proposed to be trenched within the new roadway alignment). Earthwork for the new automated pay machine is anticipated to consist of remedial and fine grading, foundation excavations, and trenching for underground utilities.

The primary access routes to the Project Area would be via Monument Road from the north and the south. Two staging areas are proposed: (1) in the lower beach parking lot below Monument Mesa and/or (2) the informal dirt parking lot west of the new proposed entrance to BFSP. Construction is anticipated to begin March 2026 and take approximately 12 months to complete.

Anticipated construction equipment and materials may include the following: portable air compressor, vibratory soil compactor, portable concrete mixer, articulated frame motor grader, front end loader, dozer, backhoe, excavator, generator set, forklift, rough terrain crane, dump truck, gooseneck trailer, water tanker, and an earth auger.

2.1.1.2 Methodology

GHG emissions were modeled using CalEEMod, version 2022.1 for disclosure purposes. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated GHG emissions were calculated using CalEEMod model defaults for San Diego County and Project information provided in the Project Site Plan; including road component length and width (for both demolition and realignment), box culvert dimensions, and parking lot area square footage. Additionally, construction haul truck emissions associated with the removal of the existing road segment material and excavation for utility placement were included in the CalEEMod emissions modeling. In addition to using CalEEMod San Diego County model defaults for proposed construction equipment, equipment was added manually to Proposed Project construction modeling to align with the Project Applicant's equipment list. The Proposed Project construction timeline is updated to match the Project Applicant's estimation. CalEEMod does not specifically account for state park operations; therefore, a city park of equivalent acreage was modeled for comparative purposes to assess operational GHG emissions related to public access and maintenance. Modeling calculations of operational mobile source emissions are informed by San Diego County defaults and operational area source emissions account for emissions associated with pesticides used for maintenance of lawn areas, parking degreasers, parking lot paint, and landscaping equipment emissions.

3.8.4.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to GHG emissions if it would:

1. Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

2. Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently consider the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130). As a note, the CEQA Guidelines were amended in response to Senate Bill 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community

conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The City of Imperial Beach, the City of San Diego, and the SDAPCD have not established specific numeric thresholds for determining the significance of GHG emissions. As a result, Proposed Project GHG emissions are quantified and compared to the thresholds issued by CAPCOA, which is an association of the air pollution control officers from all 35 local air quality agencies throughout California, including the SDAPCD. CAPCOA recommends a significance threshold of 900 metric tons annually. This threshold is based on a capture rate of 90 percent of land use development projects, which in turn translates into a 90 percent capture rate of all GHG emissions. The 900 metric ton threshold is considered by CAPCOA to be low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

In *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal. 4th 2014, 213, 221, 227, following its review of various potential GHG thresholds proposed in an academic study [Crockett, Addressing the Significance of Greenhouse Gas Emissions: California's Search for Regulatory Certainty in an Uncertain World (July 2011), 4 Golden Gate U. Envtl. L. J. 203], the California Supreme Court identified the use of numeric bright-line thresholds as a potential pathway for compliance with CEQA GHG requirements. The study found numeric bright line thresholds designed to determine when small projects were so small as to not cause a cumulatively considerable impact on global climate change was consistent with CEQA. Specifically, Public Resources Code section 21003(f) provides it is a policy of the state that "[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." The Supreme Court-reviewed study noted, "[s]ubjecting the smallest projects to the full panoply of CEQA requirements, even though the public benefit would be minimal, would not be consistent with implementing the statute in the most efficient, expeditious manner. Nor would it be consistent with applying lead agencies' scarce resources toward mitigating actual significant climate change impacts." (Crockett, Addressing the Significance of Greenhouse Gas Emissions: California's Search for Regulatory Certainty in an Uncertain World (July 2011), 4 Golden Gate U. Envtl. L. J. 203, 221, 227.)

Additionally, the Project is also evaluated for consistency with the City of San Diego Climate Action Plan (CAP) and the City of Imperial Beach CAP.

3.8.4.2 Impact Discussion

Threshold 1: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact.

Project Construction

Construction-related activities that would generate GHG emissions include on- and off-road equipment traffic. Table 3.8-2 illustrates the specific construction-generated GHG emissions that would result from the construction of the Project.

Table 3.8-2. Construction Related Greenhouse Gas Emissions

Description	CO_2e Emissions (metric tons/year)
Construction – Calendar Year 1	845
Construction – Calendar Year 2	8
Total Construction Emissions	**853**
Significance Threshold	*900*
Exceed Threshold?	***No***

Notes: Construction GHG emissions account for the removal of a 2,370-foot segment of Monument Road and the transport of approximately 22,710 cubic yards of soil.

Sources: CalEEMod version 2022.1. Refer to Appendix D for Model Data Outputs.

As shown in Table 3.8-2, Project construction would result in the generation of approximately 853 metric tons of CO_2e over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. This impact is less than significant.

Project Operations

Operational GHG emissions impacts are long-term GHG emissions that are associated with any changes in the permanent use of the Project Area by onsite stationary and offsite mobile sources that substantially increase emissions. The Project proposes upgrades to an existing state park. Currently, Monument Road is subject to seasonal flooding in several locations, which often leads to extended closures. The Project proposes the realignment and elevation of the access road to maintain park access. Upon completion, enhanced accessibility could lead to an increase in operational emissions compared to existing conditions. To conservatively estimate the potential increase in GHG emissions, the full 418-acre extent of BFSP is modeled in CalEEMod and analyzed as if operating as a city park, ensuring a comprehensive assessment of operational emissions.

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. Long-term operational GHG emissions attributable to the Project are identified in Table 3.8-3.

Table 3.8-3. Operational Related Greenhouse Gas Emissions

Description	CO_2e Emissions (metric tons/year)
Mobile	504
Area	0.00
Energy	0.00
Project Operations Total	**504**
Significance Threshold	*900*
Exceed Threshold?	***No***

Notes: GHG Emission projections predominately based on CalEEMod model defaults for San Diego County as well as the total BFSP acreage (418 acres).

Sources: CalEEMod version 2022.1. See Appendix D for modeling assumptions.

As shown in Table 3.8-3, operational-generated emissions would total to approximately 504 metric tons of CO_2e, which would not exceed the numeric brightline threshold of 900 metric tons of CO_2e annually. This threshold is based on a capture rate of 90 percent of land use development projects, which in turn translates into a 90 percent capture rate of all GHG emissions. This impact is less than significant.

Threshold 2: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant Impact. The Project would not conflict with any adopted plans, policies, or regulations adopted for the purpose of reducing GHG emissions. The Project would not include new permanent sources of GHG emissions and would not generate new or unplanned permanent GHG emissions since the Project proposed roadway and parking lot upgrades to an existing state park. As discussed previously, the Proposed Project-generated GHG emissions would not surpass the CAPCOA GHG significance threshold, which was developed in consideration of statewide GHG reduction goals.

While local CAPs do not directly regulate state-owned lands, they reflect regionally adopted strategies to reduce GHG emissions and enhance climate resilience. As such, the Proposed Project's consistency with several strategies and goals contained in the City of San Diego and City of Imperial Beach CAPs will be highlighted as part of a comprehensive analysis. This voluntary evaluation helps ensure that the proposed improvements align with regional efforts to address climate change and promote environmental sustainability.

As part of the City of San Diego's 2030 target goal to restore 350 acres of salt marsh land and other associated tidal wetland and riparian habitats, the San Diego CAP Policy 5.1 aims to build resilient infrastructure and healthy ecosystems by investing in carbon sequestration projects. The policy states, "Preserving and restoring natural ecosystems like canyons and marsh lands play a crucial role in mitigating greenhouse gas emissions through carbon sequestration. These ecosystems act as 'carbon sinks,' absorbing carbon dioxide from the atmosphere during photosynthesis and storing it in biomass and soil" (City of San Diego 2022). Restoring degraded ecosystems enhances the ecosystem's ability to

sequester carbon by promoting the growth of vegetation and improving soil health. The Proposed Project's relocation of portions of Monument Road is intended to improve the ecological health and hydrologic function of the Tijuana Estuary, while also addressing chronic seasonal flooding by repositioning and elevating the road to maintain consistent public access. Together, these efforts to restore natural habitat and improve infrastructure resilience are consistent with the City of San Diego's CAP goals related to carbon sequestration.

Similarly, the City of Imperial Beach CAP recognizes the GHG reduction benefits of estuarine and wetland ecosystems. While its sequestration strategy focuses on tree planting, it also highlights the role of existing natural areas, such as the Tijuana Estuary, in providing substantial carbon sequestration and climate resilience services. The Imperial Beach CAP encourages collaboration with regional partners to enhance and conserve such habitats (City of Imperial Beach 2019). The Project's restoration work within the estuarine landscape directly aligns with this approach, furthering regional CAP goals.

Therefore, the Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. This impact is less than significant.

3.8.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.8.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation

No SPRs, PSRs, or mitigation measures are required.

3.9 Hazards and Hazardous Materials

3.9.1 Introduction

This section describes the affected environment for hazards and hazardous materials and analyzes effects that could occur in the Project Area from construction, operation, and maintenance of the Proposed Project.

3.9.2 Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code (HSC), Section 25501 as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A hazardous material is defined in 22 CCR Section 662601.10 as follows:

> A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Transporters of hazardous waste in California are subject to several federal and state regulations. They must register with the California Department of Health Services (DHS) and ensure that vehicle and waste container operators have been trained in the proper handling of hazardous waste. Vehicles used for the transportation of hazardous waste must pass an annual inspection by the California Highway Patrol (CHP). Transporters must allow CHP or DHS to inspect its vehicles and must make certain required inspection records available to both agencies. The transport of hazardous materials that are not wastes is regulated by the U.S. Department of Transportation through national safety standards.

3.9.3 Regulatory Setting

3.9.3.1 Federal

Toxic Substances Control Act/Frank R. Lautenberg Chemical Safety Act of the 21st Century

The Toxic Substances Control Act of 1976 (TSCA) (15 USC 2601 et. seq.) addresses the production, importation, use, and disposal of specific chemicals and provides the USEPA with the authority to require

reporting, record-keeping and testing requirements, and restrictions on chemical substances (USEPA 2023d). The TSCA was amended by the Frank R. Lautenberg Chemical Safety Act of the 21st Century (Lautenberg Chemical Safety Act) in 2016. The Lautenberg Chemical Safety Act provides improvements such as a mandatory requirement for the USEPA to evaluate existing chemicals with clear and enforceable deadlines, risk-based chemical assessments, increased public transparency, and consistent sources of funding (USEPA 2023e).

Occupational Safety and Health Act of 1970

The Occupational Safety and Health Act was established in 1970 to set and enforce safety and health standards for workers. The act also provides training, outreach, education, and assistance to establish a safe working environment.

3.9.3.2 State

Cortese List

The Cortese List, under California Government Code Section 65962.5, includes a list of hazardous waste facilities and sites. The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the CEQA. Under Section 65962.5 (a) through (d):

- The Department of Toxic Substances Control (DTSC) shall compile and update a list of:
  - all hazardous waste facilities subject to corrective action pursuant to HSC Section 25187.5;
  - all land designated as hazardous waste property or border zone property pursuant to HSC Article 11, Chapter 6.5, Division 20;
  - all information received by DTSC pursuant to HSC Section 25242 on hazardous waste disposals on public land;
  - all sites listed pursuant to HSC Section 25356; and
  - all sites included in the Abandoned Site Assessment Program.
- DHS shall compile and update a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to HSC Section 116395.
- The State Water Resources Control Board (SWRCB) shall compile and update a list of:
  - all underground storage tanks for which an unauthorized release report is filed pursuant to HSC Section 25295;
  - all solid waste disposal facilities from which there is a migration of hazardous waste and for which a California RWQCB has notified DTSC pursuant to subdivision (e) of Section 13273 of the Water Code; and

- all cease-and-desist orders issued after January 1, 1986, pursuant to Section 13301 of the Water Code, and all cleanup or abatement orders issued after January 1, 1986, pursuant to Section 13304 of the Water Code, that concern the discharges of wastes that are hazardous materials.

- The local enforcement agency shall compile a list of all solid waste disposal facilities from which there is a known migration of hazardous waste.

California Health and Safety Code

- California HSC, Division 20, Chapter 6.5 (Hazardous Waste Control Law) identifies hazardous waste control regulations pertaining to transportation, treatment, recycling, disposal, enforcement, and the permitting of hazardous waste.
- Division 20, Chapter 6.10 identifies regulations applicable to the cleanup of hazardous materials releases.
- Division 20, Chapter 6.11, Sections 25404 through 25404.9 (Unified Hazardous Waste and Hazardous Materials Management Regulatory Program) consolidates and coordinates the administrative, permit, inspection, and enforcement requirements of the environmental and emergency response programs. It also gives the Certified Unified Program Agency implementation and enforcement authority.

Hazardous Waste Control Act

The Hazardous Waste Control Act (22 CCR Division 4.5) contains regulations adopted from the HSC, such as environmental health standards for the management of hazardous waste. Chapter 11 describes standards for the identification of hazardous waste, and Chapter 13 describes standards that are applicable to transporters of hazardous waste.

3.9.4 Impact Analysis

3.9.4.1 Methodology

Evaluation of hazards and hazardous material impacts associated with the Proposed Project included a focus on the use, generation, management, transport, and disposal of hazardous or potentially hazardous materials at the Project Site. For airport hazards, the Naval Outlying Landing Field (NOLF) Airport Land Use Compatibility Plan (ALUCP) Airport Influence Area was consulted to determine if the Proposed Project would increase air hazards. In determining the level of significance, the analysis assumes that construction and operation of the Proposed Project would be in compliance with relevant local, state, and federal laws and regulations pertaining to the use, storage, and disposal of hazardous materials.

3.9.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for hazards and hazardous

materials were derived from Appendix G of the CEQA Guidelines. Impacts to hazards and hazardous materials are considered significant if the Proposed Project would:

29) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;

30) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;

31) emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;

32) be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;

33) for a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project Area; or

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

3.9.4.3 Impact Discussion

Threshold 1: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. The Proposed Project involves the realignment and elevation of Monument Road, installation of culverts and associated drainage infrastructure, removal of degraded roadway segments, and upgrades to an existing parking lot primarily associated with equestrian use. As the Proposed Project would implement various improvements to the existing BFSP, it would not transport, use, or dispose of any hazardous materials beyond those used during construction and maintenance. Construction activities may involve limited transport, storage, use, or disposal of hazardous materials. Some examples of hazardous materials handled during construction include fueling and servicing construction equipment onsite. These activities would be short-term, would occur within designated staging areas strategically placed to minimize impacts to waterways and vegetated areas, and would be subject to federal, state, and local health and safety requirements. A less than significant impact related to the use or transport of hazardous materials would occur during construction.

BFSP is an existing recreational park and roadways within the park are not used for routine transport, use, or disposal of hazardous materials. Once construction is complete, the Project would be able to maintain year-round access to BFSP, Monument Mesa, and the coastline and Monument Road would continue to operate as a primary access road to these natural amenities. No significant impact related to the use or transport of hazardous materials would occur during operation.

Threshold 2: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. With the Proposed Project, potential impacts that may result from upset or accidents during construction include accidental release of materials such as hydraulic fluid, fuel, oil, grease, and lubricants. Quantities of these hazardous materials would generally be limited and handled in accordance with manufacturer's guidelines. Additionally, implementation of the BMPs required by the National Pollutant Discharge Elimination System (NPDES) Construction General Permit would include containment and spill response measures. As mentioned above, construction activities would be short-term, would occur within designated staging areas strategically placed to minimize impacts to waterways and vegetated areas, and would be subject to federal, state, and local health and safety requirements. Impacts would be less than significant.

As noted above, BFSP is an existing recreational park and the Project would not generate or store any amount of hazardous materials within the Project Area. The Proposed Project would not create a significant hazard to the public involving an accidental release of hazardous materials into the environment. No impact would occur.

Threshold 3: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are no schools within 0.25 mile of the Project Area. The nearest school is Mar Vista Academy, which is located approximately 2.1 miles north of the Project Area. Additionally, upon the completion of construction, the Proposed Project would serve as a recreation area and would not emit hazardous emissions or create significant impacts through the handling of hazardous or acutely hazardous materials, substances, or waste. No impact would occur.

Threshold 4: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Government Code Section 65962.5 requires DTSC, the State Department of Health Services, the SWRCB, and the California Integrated Waste Management Board to compile and annually update lists of hazardous waste sites and land designated as hazardous waste property throughout the state.

California Environmental Protection Agency's (CalEPA) Cortese List Data Resources records were reviewed to determine whether hazardous materials have been handled, stored, or generated in the Project Area or the adjacent properties and businesses (CalEPA 2025). The list, although covering the requirements of Section 65962.5, has always been incomplete because it does not indicate if a specific site was at one time included in the abandoned site program.

The list is a compilation of the following five separate websites:

1. DTSC's EnviroStor – identifies waste or hazardous substances sites.

2. SWRCB's GeoTracker – identifies underground storage tanks for which an unauthorized release report was filed, cleanup sites, and all solid waste disposal facilities from which there is a mitigation of hazardous waste for which a regional board has notified DTSC.
3. A PDF of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit.
4. A list of cease-and-desist orders and clean up and abatement orders.
5. A list of hazardous waste facilities subject to corrective action.

EnviroStor identified four military evaluation sites within 0.5 mile of the Project Area, including:

- Border Airport
  - Location: Border Field, California
  - Site Type: Formerly Used Defense Sites (FUDS)
  - Potential Contaminants of Concern: None Specified
  - Potential Media of Concern: None Specified
  - Status: Inactive – Needs Evaluation as of 7/1/2005
- Mexican Border F.C St
  - Location: Goat Canyon, California
  - Site Type: FUDS
  - Potential Contaminants of Concern: Explosives (UXO [Unexploded Ordnance], MEC [Munitions and Explosives of Concern])
  - Potential Media of Concern: None Specified
  - Status: Inactive – Needs Evaluation as of 7/1/2005
- Mexican Border FCS
  - Location: San Diego, California
  - Site Type: FUDS
  - Potential Contaminants of Concern: Explosives (UXO, MEC)
  - Potential Media of Concern: None Specified
  - Status: Inactive – Needs Evaluation as of 7/1/2005
- SRC POS 26 27 HD SD
  - Location: San Diego, California

- Site Type: FUDS
- Potential Contaminants of Concern: None Specified
- Potential Media of Concern: None Specified
- Status: Inactive – Needs Evaluation as of 7/1/2005

These military sites are all inactive as of 2005 and are not located within the Project Area. Encountering aboveground or subsurface contamination due to these sites during construction is not anticipated.

GeoTracker did not identify any underground storage tanks in the Project Area for which an unauthorized release report was filed, a cleanup site, or a solid waste disposal facility from which there is a mitigation of hazardous waste for which a regional board has notified DTSC.

A list of solid waste disposal sites with waste constitutes above hazardous waste levels outside the waste management unit was also checked. No records were listed.

The list of cease-and-desist orders and clean up and abatement orders did not include the Project Area.

The list of hazardous facilities subject to corrective action does not include the Project Area.

The Proposed Project is not located on a site which is included on a list of hazardous materials sites and would not create a significant hazard to the public or the environment. No impact would occur.

Threshold 5: For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project Area?

Less than Significant Impact. The Project Area is located approximately 1.2 miles south of the NOLF in the City of Imperial Beach. According to the NOLF ALUCP, the Project Area is within Airport Influence Area Review Area 2. Within Review Area 2 only airspace protection and overflight policies and standards apply. Additionally, the Project Area is located outside of all Safety Compatibility Zones. The Proposed Project would not construct any structures that would result in a safety hazard for people working in or visiting the Project Area. Impacts would be less than significant.

Threshold 6: Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The City of Imperial Beach maintains an Emergency Operations Plan (EOP) that is compatible with the San Diego County EOP (City of Imperial Beach 2024). The City of San Diego also maintains an EOP and Operational Area Emergency Plan which dictate responsibilities and coordination for evacuation efforts. Primary evacuation routes consist of the County's major interstates, highways, and prime arterials (City of San Diego 2024). A major interstate (I-5) is located approximately 2.4 miles northeast of the Project Area and would serve as an evacuation road for the Project vicinity. Currently, BFSP is closed to the public and does not create a need for implementing an emergency response plan or emergency evacuation plan. Once constructed, the Proposed Project would not interfere with any interstates, highways, or prime arterials that would serve as an emergency evacuation route. The proposed improved

roadways would be designed to be resilient to sea level rise and would accommodate large emergency response vehicles such as fire trucks which is an improved condition when compared to the existing condition. Project implementation would accommodate safe public and emergency vehicular access for 100 percent of the route. No impact would occur.

3.9.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.9.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.10 Hydrology and Water Quality

3.10.1 Introduction

This section describes the hydrologic conditions on and adjacent to the Project Area and evaluates potential impacts to surface and groundwater resources from construction, operation, and maintenance of the Proposed Project.

3.10.2 Environmental Setting

3.10.2.1 Regional Hydrology

San Diego County is located west of the Peninsular Ranges, a group of mountain ranges that stretch from Southern California to the tip of the Baja California peninsula. There are 11 major watersheds in the County that drain westward, including the San Juan, Santa Margarita, San Luis Rey, Carlsbad, San Dieguito, Los Peñasquitos, San Diego, Pueblo, Sweetwater, Otay, and the Tijuana Watershed (San Diego County 2024). The Project Area is located within the Tijuana Watershed, which encompasses approximately 1,750 square miles on both sides of the U.S.-Mexico Border. The Tijuana River Watershed within the U.S. is known as the Tijuana River Watershed Management Area (WMA) and constitutes approximately 27 percent of the watershed (San Diego County 2024).

The Tijuana River WMA is divided into eight hydrological areas, including the Tijuana Valley, Potrero, Barrett Lake, Monument, Morena, Cottonwood, Cameron, and Campo. The Proposed Area is located within the Tijuana Valley hydrologic area (RWQCB 2021).

3.10.2.2 Water Quality

As the Tijuana Watershed and Tijuana Valley hydrologic area are divided by the U.S.-Mexico Border, surface water and groundwater quality in this hydrologic area are affected by transboundary flows of the Tijuana River and several of its tributaries (RWQCB 2021). These transboundary flows act as conduits for pollution generated in Mexico, transporting them through the river valley, estuary, and into the Pacific Ocean. The lower stretch of the Tijuana River that crosses the border from Mexico into the U.S. has not met water quality standards for decades due to untreated domestic and industrial wastewater. Concentrations of indicator bacteria (Escherichia coli [E. coli] and enterococci) in the Tijuana River indicate the potential presence of pathogens from fecal contamination. Additionally, other pollutants prevent the waterbody from meeting water quality standards (RWQCB 2024).

3.10.2.3 Site Hydrology and Onsite Drainage

The roadway elevation along the north-south segment of Monument Road is approximately 12 feet and the elevation along the east-west segment is approximately 10 feet (M&N 2022a). The existing north-south and east-west portions of the alignment are subject to seasonal flooding in several locations. The flooding is caused by storm runoff flows from Goat Canyon and Yogurt Canyon which both convey sewage contaminated flows from Tijuana, Mexico northerly into the United States. These flows cause

portions of the roadway to remain flooded for up to 8 months out of the year and more recently for longer periods of time.

3.10.3 Regulatory Setting

3.10.3.1 Federal

Clean Water Act

The Clean Water Act (CWA) (33 USC Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. and has given the USEPA the authority to implement pollution control programs. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the NPDES permit process (CWA Section 402).

- *Section 402*. Section 402 of the CWA authorizes the SWRCB to issue NPDES Stormwater General Construction Permit referred to as the "General Construction Permit." Construction activities can comply with and be covered under the General Construction Permit if they meet the following requirements:
  - Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) which specifies BMPs that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters.
  - Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation.
  - Perform inspections of all BMPs.
- *Section 401*. Section 401 of the CWA, as implemented in California, requires that any activity involving placement of dredged or fill material into waters of the U.S. that are subject to a Section 404 permit must be certified by the RWQCB to ensure that the proposed activity does not violate State and/or federal water quality standards.
- *Section 404*. Section 404 of the CWA requires a permit for activities involving placement of dredged or fill material into waters of the U.S., including wetlands. Non-tidal aquatic resources subject to Section 404 permitting may include rivers, streams, lakes, and wetlands.
- *Section 303(d)*. Section 303(d) of the CWA is a state's list of impaired and threatened waters. States are required to identify waters that are impaired by pollution and develop Total Maximum Daily Loads (TMDLs) for these waterbodies.

3.10.3.2 State

Porter-Cologne Act

The Porter-Cologne Act (California Water Code, Section 7), passed in 1969, is the principal law governing water quality in the state. Unlike the CWA, the Porter-Cologne Act applies to both surface water and groundwater. This Act assigns responsibility for water rights and water quality protection to the SWRCB and directs the nine statewide RWQCBs to plan and enforce water quality standards within their boundaries.

3.10.3.3 Regional

Water Quality Control Plan for the San Diego Basin

The California RWQCB San Diego Region adopted the Water Quality Control Plan for the San Diego Basin (Basin Plan) in 1975 to preserve and enhance the quality of water resources in the San Diego Region. The purpose of the Basin Plan is to (1) designate beneficial uses of the Region's surface and ground waters; (2) designate water quality objectives for the reasonable protection of those uses; and (3) establish an implementation plan to achieve the objectives. The designation of water quality objectives must satisfy all of the applicable requirements of the Water Code, Division 7 (Porter-Cologne Act) and the Clean Water Act. The Region's water quality objectives include objectives for general antidegradation; dissolved oxygen; hydrogen ion concentration (pH); sediment quality; un-ionized ammonia; bacteria such as total coliform, fecal coliform, E. coli, and enterococci; biostimulatory substances; boron; chlorides; color; floating material; fluoride; inorganic chemicals; iron; manganese; methylene blue activated substances (MBAS); nitrate; oil and grease; organic chemicals; pesticides; radioactivity; suspended and settleable solids; sulfate; tastes and odors; temperature; dissolved solids; toxicity; toxic pollutants; and turbidity (RWQCB 2021).

Lower Tijuana River Indicator Bacteria and Trash Advance Restoration Plan for Total Maximum Daily Loads

The RWQCB developed the Lower Tijuana River Indicator Bacteria and Trash Advance Restoration Plan for TMDLs to address water quality impairments through an implementation plan with actions to restore and maintain water quality standards. The draft Trash Advance Restoration Plan identifies sources of trash and indicator bacteria pollution, establishes numeric targets to achieve water quality standards in the Tijuana River, and identifies potential actions for pollution control in an implementation plan (RWQCB 2024).

3.10.4 Impact Analysis

3.10.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria. Evaluation of hydrology and water quality impacts associated with the Proposed Project includes the following:

- Determine the construction phase water quality impacts based on NPDES standards;
- Determine the operational water quality impacts based on NPDES standards;
- Determine the operational impacts on drainage patterns and drainage capacity; and
- Determine the impacts on local groundwater table levels.

3.10.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for hydrology and water quality were derived from Appendix G of the CEQA Guidelines. Impacts to hydrology and water quality are considered significant if the Proposed Project would:

35) violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

36) substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin;

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

    (i) result in substantial erosion or siltation onsite or offsite;

    (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite 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; or

    (iv) impede or redirect flood flows?

38) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation; or

39) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

3.10.4.3 Impact Discussion

Threshold 1: Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant Impact. Construction of the Proposed Project would involve the use of heavy equipment (bulldozers, excavators, dump trucks, etc.) for pavement demolition, clearing and grubbing brush, trenching, and installation of roads and other facilities. After construction of the roadway is

completed, restoration efforts would take place within the former north-south road alignment and within upland areas along the realigned alignment of Monument Road.

Construction activities could potentially loosen existing surface soils and sediments, increasing the possibility that erosion might occur during storm events. Water used for dust suppression also has the potential to generate runoff that could transport sediments and dissolved solids. The use of construction equipment onsite may involve the accidental release of fuel, oils, brake dust, lubricants, antifreeze, and other potentially hazardous substances at the Project construction site. These water quality pollutants could be delivered to surface waterbodies during storm events, and/or be infiltrated into groundwater and the underlying aquifer, resulting in the degradation of water quality.

As a result of these concerns, the Proposed Project would be subject to compliance with the NPDES Construction General Permit. The Construction General Permit would include the development and implementation of a SWPPP. The objectives of a SWPPP are (1) to identify pollutant sources that may be delivered offsite (in the form of runoff) and affect the quality of stormwater discharge; (2) to implement site controls and practices to reduce stormwater pollution; and (3) to protect water quality of receiving waters. The SWPPP would include site-specific BMPs to minimize erosion onsite and reduce or otherwise prevent conditions of erosion and stormwater runoff.

Currently, some road segments in the Project Area are seasonally flooded with sewage contaminated water and mud. The Proposed Project would relocate and elevate the southern east-west segment of Monument Road above the base flood elevation and construct culverts beneath the elevated roadway to reduce sedimentation and flooding and would restore the surrounding, degraded wetlands around the north-south segment that would be removed. Restoration activities would consist of restoring impacted or degraded habitats to equal or better conditions than before roadway construction. The reduction in sedimentation and improvement of the estuary would enhance water quality by minimizing erosion, improving filtration, tidal prism, and circulation and conveyance of flows and sediment.

By complying with General Construction Permit implementation requirements, which would include the preparation and deployment of a SWPPP and associated BMPs, water quality impacts during construction would be minimized and less than significant. After Project construction is completed and final stormwater management facilities are in place, the implemented runoff controls would maintain or improve the existing runoff conditions within the Project Area. For these reasons, the impacts to water quality during operation would be less than significant.

Threshold 2: Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?

Groundwater Supply

Less than Significant Impact. The City of San Diego's water system is composed of nine reservoirs that capture runoff from local watershed rainfall, three water treatment plants, and a small supply of local groundwater. Three groundwater basins in the San Diego region are within the jurisdiction of the City of San Diego; these include the San Pasqual, Santee/El Monte (San Diego River Valley Basin), and Coastal

Plain of San Diego Basin (includes the Sweetwater Valley, Otay Valley, and Tijuana basins). The Coastal Plain of San Diego groundwater basin is located in southern San Diego County and underlies a portion of the Otay Valley, Tijuana, and Sweetwater Valley groundwater basins. The City's current and projected groundwater supply is 100 acre-feet per year from 2025 through 2045 (City of San Diego 2021).

Construction-related water requirements will be primarily associated with dust suppression and soil compaction during ground-disturbing activities. Frequency of watering of activities areas will be determined by the type of activity, site-specific soil conditions, and wind conditions. Restoration activities would begin after construction and would include soil testing; plant and seed procurement; plant and seed installation; installation of protection measures and erosion control materials; and if necessary, a temporary irrigation system setup and testing. These activities would not substantially decrease groundwater supplies such that the Proposed Project would impede sustainable groundwater management of the basin. Impacts would be less than significant.

Groundwater Recharge

Less than Significant Impact. The primary groundwater recharge mechanism is rainfall. The Proposed Project would realign a 4,670-foot segment of Monument Road which would be a base road over the existing unpaved road; create 625 feet of elevated asphalt concrete roadway on base road; and would elevate the existing access road to Monument Mesa to 5 feet above existing grade to accommodate the box culvert structure and 4 feet above existing grade for the roadway segment west of the culvert crossing. This would increase the amount of impervious surface; however, much of the Project Area will remain permeable. The north-south alignment of Monument Road would be removed to allow for restoration of the surrounding wetland habitat. The Proposed Project would not substantially interfere with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Impacts would be less than significant.

Threshold 3: Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner that would:

i) ***result in substantial erosion or siltation on- or off-site?***
ii) ***substantially increase the rate or amount of surface run off in a manner which would result in flooding on- or off-site?***
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?***

i) Result in Substantial Erosion or Siltation On- or Off-Site?

Less than Significant Impact. Construction activities could potentially loosen existing surface soils and sediments, increasing the possibility that erosion might occur during storm events. Water used for dust suppression during construction has the potential to generate runoff that could transport sediments and dissolved solids. In compliance with the NPDES Construction General Permit, the SWPPP would include site-specific BMPs to minimize erosion onsite and reduce or otherwise prevent conditions of erosion and

stormwater runoff. Therefore, the Proposed Project would not result in substantial soil erosion or the loss of topsoil, and a less than significant impact would occur.

ii) Result in Substantial Erosion or Siltation On- or Off-Site?

Less than Significant Impact. Water supply during the construction period is expected to only require that used for dust suppression and soil compaction and is expected to be brought in by truck. As discussed above, water used for dust suppression during construction could generate runoff that could transport sediments and dissolved solids. The SWPPP would include BMPs to reduce or prevent conditions for stormwater runoff during construction.

The Proposed Project would increase the amount of impervious surface; however, much of the Project Area will remain permeable. The north-south alignment of Monument Road would be relocated, and the existing north-south road segment would be removed to allow for restoration of the surrounding wetland habitat. The amount of surface runoff would not substantially increase in a manner that would result in on or offsite flooding. The proposed culvert design is expected to allow more sediment to pass beneath Monument Road than existing conditions, thus reducing the sediment deposition rate south of Monument Road and contributing to a reduction in flooding onsite. Impacts would be less than significant.

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?

Less than Significant Impact. Existing stormwater that currently occur convey sewage contaminated flows from Tijuana, Mexico northerly into the United States. The Proposed Project would not create additional sources of polluted runoff. As previously discussed, project-specific BMPs would be implemented for stormwater pollution control during construction. Additionally, the Proposed Project would implement components to reduce sediment deposition and runoff flows from Goat Canyon and Yogurt Canyon. Impacts would be less than significant.

iv) Impede or Redirect Flood Flows?

Less than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the Project Area is located in Zones A and AE of the Special Flood Hazard Areas, the 200-year and 100-year flood hazard area, and Area of Minimal Flood Hazard (FEMA 2025). The Proposed Project would increase the amount of impervious surface; however, much of the Project Area will remain permeable. The proposed road realignment would eliminate the north-south segment of Monument Road that currently experiences frequent flooding conditions and would elevate the east-west segment of the southern portion of Monument Road above the base flood elevation. The Proposed Project would install precast concrete culverts beneath the road near Yogurt Canyon to reduce sedimentation and flooding. All Project components would maintain the natural drainage pattern and would improve flood flows. Impacts would be less than significant.

Threshold 4: Would the project result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant Impact. Tsunamis are large sea waves generated by a submarine earthquake, landslide, or volcanic eruption. Submarine earthquakes are common along the edge of the Pacific Ocean and all coastal areas are exposed to the potential hazard of tsunamis. Tsunamis due to landslides or volcanic eruption are less likely to occur. The Project Area west of the existing north-south Monument Road alignment is located within the tsunami hazard area (DOC 2022). According to the City of Imperial Beach's General Plan, the City lies within the low-lying shoreline susceptible to tsunamis, however, it is improbable that a damaging tsunami would strike the coast of southern California (City of Imperial Beach 2024).

Seiches are earthquake-induced oscillations generated in enclosed bodies of water, such as a lake, reservoir, or bay. Seiches can overflow their bodies of water and cause flooding to adjacent or downstream areas. There is no historical precedent for large damaging seiches in the San Diego region.

The Tijuana River Valley is the drainage way for much of the watershed basins in the County and is subject to flooding. According to the FEMA FIRM, the Project Area is located in Zones A and AE of the Special Flood Hazard Areas, the 200-year and 100-year flood hazard area, and Area of Minimal Flood Hazard (FEMA 2025). Flooding in the Project Area is a continual issue, as storm runoff flows from Goat Canyon and Yogurt Canyon frequently flood both the north-south and east-west portions of the existing Monument Road with sewage contaminated water and mud. Border Field State Park is currently closed to hiking, biking, equestrian activity, and vehicles due to flooded roads and trails.

The Sea Level Rise Report determined that the flood boundaries of 1-year and 100-year storms extend further inland as sea levels rise. Under 3.3 feet of SLR, a scenario that is relevant to the 75-year life span of the Project, the existing Monument Road is likely to experience more frequent and higher magnitude flood events, which is reflected by the steadily expanding closure period. The Proposed Project improvements would largely elevate segments of Monument Road above the base flood elevation, thus establishing resilience against the future effects of SLR, while restoring degraded wetland habitats. The Project would include a new alignment of a segment of Monument Road and installing box culverts and headwall systems to improve flow and reduce sedimentation. It would also restore the health and function of the estuary, which would contribute to a reduction in flooding. Impacts would be less than significant.

Threshold 5: Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The Project Area is located within the Tijuana Valley Hydrologic Area within the Tijuana Hydrologic Unit. The Basin Plan for the San Diego Region preserves and enhances the quality of water resources, including the Tijuana Valley Hydrologic Area. The Region's water quality objectives for inland surface waters, enclosed bays, and estuaries, coastal lagoons, and groundwaters include objectives for general antidegradation; un-ionized ammonia; bacteria such as total coliform, fecal coliform, E. coli, and enterococci; biostimulatory substances; boron; chlorides; color; dissolved oxygen; floating material; fluoride; pH; inorganic chemicals; iron; manganese; MBAS; nitrate; oil and grease; organic chemicals; pesticides; phenolic compounds; radioactivity; suspended and settleable solids; sulfate; tastes and odors;

temperature; total dissolved solids; toxicity; toxic pollutants; trihalomethanes; and turbidity (RWQCB 2021).

Neither the nature of the Project nor the type of development proposed would be likely to conflict with the Basin Plan or obstruct implementation of its provisions. In addition, by adhering to the conditions stipulated by the SWPPP and the NPDES permits for the Project, water quality impacts would not result in violations to, conflicts with, or obstructions of the Basin Plan; therefore, impacts related to this water quality control plan would be less than significant.

The Proposed Project does not include groundwater extraction and would not generate a demand for groundwater. The Project Area is located within the Coastal Plain of San Diego groundwater basin which is designated as a low-priority basin by the State and is not one of the groundwater basins in the County where a sustainable groundwater management plan is adopted. No impact would occur.

3.10.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.10.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.11 Land Use and Planning

3.11.1 Introduction

This section describes the affected environment and regulatory setting of the Proposed Project for land use and planning and analyzes effects that could occur in the Project Area from construction, operation, and maintenance of the Proposed Project.

3.11.2 Environmental Setting

3.11.2.1 City of San Diego

As of 2023, land use distribution in the City of San Diego includes 28 percent park, open space, and recreation; 25 percent residential; 17 percent institutional, public, and semi-public facilities; 15 percent roads, freeways, and transportation facilities; 4 percent industrial; 4 percent commercial, retail, and services; 3 percent water bodies; 2 percent agriculture; and 2 percent vacant (City of San Diego 2024).

3.11.2.2 City of Imperial Beach

The City of Imperial Beach spans 4.5 square miles and is almost entirely built out. Land use distribution in the City of Imperial Beach includes 41 percent open space and public facilities, 18 percent urban reserve, 17 percent single-family dwellings and mobile homes, 12 percent two-family dwellings, 9 percent apartments and condominiums, and 4 percent commercial (City of Imperial Beach 2024).

3.11.2.3 Existing Land Use and Zoning

The Project Area is located in both the Cities of San Diego and Imperial Beach. Table 3.11-1 describes the land use and zoning designations of the Project Area and surrounding area.

Table 3.11-1. Surrounding Land Uses and Zoning

Area	Land Use Designation	Zoning Designation	Existing Land Use
Project Area	SD: Park, Open Space, & Recreation IB: Open Space and Public Facilities	SD: AR-1-1 – Agricultural - Residential IB: PF – Public Facility	Border Field State Park
North	SD: Park, Open Space, & Recreation IB: Open Space and Public Facilities	SD: AR-1-1 – Agricultural - Residential; OF-1-1 – Open Space - Floodplain IB: PF – Public Facility; OS – Open Space	Border Field State Park; TRNERR
East	SD: Park, Open Space, & Recreation	SD: AR-1-1 – Agricultural - Residential	Tijuana River Valley Regional Park
South	SD: Park, Open Space, & Recreation IB: Open Space and Public Facilities	SD: AR-1-1 – Agricultural – Residential IB: PF – Public Facility	Border Field State Park; U.S.-Mexico Border
West	SD: Park, Open Space, & Recreation IB: Open Space and Public Facilities	SD: AR-1-1 – Agricultural - Residential IB: PF – Public Facility	Border Field State Park Beach; Pacific Ocean

Table 3.11-1. Surrounding Land Uses and Zoning			
Area	**Land Use Designation**	**Zoning Designation**	**Existing Land Use**

Source: City of Imperial Beach 2024; City of San Diego 2024

Note: SD = San Diego; IB = Imperial Beach; TRNERR = Tijuana River National Estuarine Research Reserve

The Tijuana River Valley community planning area, which encompasses the Project Area, is located in the Coastal Overlay Zone. The purpose of the Coastal Overlay Zone is to protect and enhance the quality of public access and coastal resources.

3.11.3 Regulatory Setting

3.11.3.1 Federal

There are no applicable federal regulations for this issue area.

3.11.3.2 State

There are no applicable State regulations for this issue area.

3.11.3.3 Local

County of San Diego Local Coastal Program Land Use Plan

The County's Land Use Plan (LUP) is a document stating coastal resource protection policies on the San Diego Coast, consistent with the California Coastal Act (County of San Diego 2018). The Plan collectively describes County land-use policies and takes precedent over associated land use and community plans. The following describes applicable policies within the LUP:

- *Policy 2.11* Changes to existing public access ways required as part of an existing Coastal Development Permit shall not allow a reduction in access. Any such changes to public access would be required to be reviewed through a Coastal Development Permit amendment process.

Tijuana River Valley Local Coastal Program Land Use Plan

Community plans work together with the General Plan to provide location-based policies and recommendations in the City's more than 50 community planning areas. Community plans are written to refine the General Plan's citywide policies, designate land uses and housing densities, and provide additional site-specific recommendations as needed. The Tijuana River Valley Local Coastal Program Land Use Plan is the community plan for City jurisdictional lands in the Tijuana River Valley (City of San Diego 1999). The Tijuana River Valley planning area, including Border Highlands, is located within the California Coastal Zone and, as such, is subject to the regulations of the California Coastal Act of 1976.

City of San Diego General Plan

The City of San Diego's Land Use and Community Planning Element includes policy direction to govern the preparation of community plans. The element also provides policy direction in areas including zoning and policy consistency, the plan amendment process, coastal planning, airport-land use planning, annexation policies, balanced communities, equitable development, and environmental justice. The following goals and policies are applicable to the Proposed Project:

- *Goal F:* Consistency
  - *Policy LU-F.2*. Review public and private projects to ensure that they do not adversely affect the General Plan and community plans. Evaluate whether proposed projects implement specified land use, density/intensity, design guidelines, and other General Plan and community plan policies including open space preservation, community identity, mobility, and public facilities.

City of Imperial Beach General Plan

The City of Imperial Beach's General Plan Land Use Element includes specific goals for natural resource protection. All land use proposals shall respect, preserve and enhance the most important natural resources of Imperial Beach, those being the ocean, beach, San Diego Bay and the Tijuana River Valley. The following goals and policies are applicable to the Proposed Project:

- *Goal 11*: Small Beach Oriented Town
  - *Policy L-1*: Land Use Map. Land uses shall be regulated as shown on the Land Use Map.

3.11.4 Impact Analysis

3.11.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation and maintenance using appropriate technical analysis and the impact significance criteria.

3.11.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for land use and land use planning were derived from Appendix G of the CEQA Guidelines. Impacts to land use and land use planning are considered significant if the Proposed Project would:

40) physically divide an established community; or

41) 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.

3.11.4.3 Impact Discussion

Threshold 1: Would the Project physically divide an established community?

No Impact. The Proposed Project would be constructed on land within an existing State Park, which is part of a larger unit known as the Tijuana River National Estuarine Reserve Research Center (TRNERR). The surrounding area is primarily used for open space and agriculture. The nearest populated community is located approximately 2.8 northeast from the Project Area within the City of San Diego Otay Mesa-Nestor Community Planning Area. Given the distance to this community, the Proposed Project would not physically divide or restrict access to the Otay Mesa-Nestor Community Planning Area or any other community. Therefore, no impact would occur.

Threshold 2: Would the Project 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?

Less than Significant Impact. As previously stated within Section 3.11.3, there are various applicable policies from local land use plans that are relevant to the Proposed Project although the Project is not subject to the local policies. Table 3.11-2 details the consistency with applicable policies from the County of San Diego Local Coastal Program Land Use Plan, Tijuana River Valley Local Coastal Program Land Use Plan, City of San Diego General Plan, and City of Imperial Beach Land Use Plan to show the Proposed Project's less than significant impact.

Table 3.11-2. Land Use Plan Policy Consistency

Land Use Plan	Policy	Project Consistency with Policy
County of San Diego Local Coastal Program Land Use Plan	*Policy 2.11* Changes to existing public access ways required as part of an existing Coastal Development Permit shall not allow a reduction in access. Any such changes to public access would be required to be reviewed through a Coastal Development Permit amendment process.	The Project would be consistent with this policy as the proposed activities would improve access within Border Field State Park, the Tijuana River National Estuarine Research Center, and Monument Mesa. The Project design would address seasonal flooding of the existing roadway, Monument Road, to improve coastal public access to BFSP. The Project will be reviewed through the Coastal Development Permit review process.

Table 3.11-2. Land Use Plan Policy Consistency

Land Use Plan	Policy	Project Consistency with Policy
Tijuana River Valley Local Coastal Program Land Use Plan	*MSCP Open Space Goal 1* Restore the Tijuana River Valley to a broad natural floodplain containing riparian and wetland habitats, bounded by high mesas and deep canyons with chapparal, sage scrub, and grasslands.	The Proposed Project would include the removal of the existing north-south segment of Monument Road. Existing wetlands and other habitat within the estuary experiences degradation from storm runoff from the nearby drainages of Goat Canyon and Yogurt Canyon. Flooding within the Project Area has simultaneously degraded wetland habitats within the TRNERR. As part of the Proposed Project, restoration of coastal wetlands, transitional habitat, and native uplands would align with the Project objective of improving habitat for sensitive, threatened, and endangered plants and animals. Thus, the Project is consistent with this policy.
City of San Diego General Plan Land Use Element	*Policy LU-F.2* Review public and private projects to ensure that they do not adversely affect the General Plan and community plans. Evaluate whether proposed projects implement specified land use, density/intensity, design guidelines, and other General Plan and community plan policies including open space preservation, community identity, mobility, and public facilities.	The Project Area is located within the cities of San Diego and Imperial Beach on parcels with a land use designation of Park, Open Space, & Recreation and Public Facility. Additionally, the land use designation of the parcels is compatible with the zoning designation of the Project parcels; Agricultural – Residential (AR-1-1) and Public Facility (PF). The Proposed Project would not alter the land use on the parcels, would not adversely affect the General Plan and community plans, and would continue to operate as a State Park with no habitable structures present on the Project Site. Therefore, the Project is consistent with this policy.
City of Imperial Beach General Plan Land Use Element	*Policy L-1 Land Use Map.* Land uses shall be regulated as shown on the Land Use Map.	As previously stated, the existing land use designation and zoning designation of the Project parcels are consistent. The Proposed Project would not alter the existing use of the parcels as a State Park and consistency with the City of San Diego and City of Imperial Beach land use map. The Project is consistent with this policy.

3.11.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSR, or mitigation measures are required.

3.11.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.12 Mineral Resources

3.12.1 Introduction

This section describes the environmental and regulatory setting for mineral resources. Included is a review of existing conditions, a summary of applicable policies and regulations related to mineral resources, and an analysis of the environmental impacts associated with construction, operation, and maintenance of the Proposed Project.

3.12.2 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed by inorganic processes and organic substances. Minable minerals are defined as a deposit of ore or minerals having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area. The conservation, extraction, and processing of mineral resources is essential to meeting the needs of society.

The Surface Mining and Reclamation Act (SMARA) of 1975 states that cities and counties shall adopt ordinances "...that establish procedures for the review and approval of reclamation plans and financial assurances and the issuance of a permit to conduct surface mining operations..." (PRC Section 2774). The intent of this legislation is to ensure the prevention or mitigation of the adverse environmental impacts of mining, the reclamation of mined lands, and the production and conservation of mineral resources are consistent with recreation, watershed, wildlife, and public safety objectives (PRC Section 2712).

SMARA requires the State Geologist to classify land into Mineral Resource Zones (MRZs) according to the known or inferred mineral potential of that land. The process is based solely on geology, without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision makers and considered before land use decisions, which could preclude mining, are made. Areas subject to California mineral land classification studies are divided into the following MRZ categories that reflect varying degrees of mineral potential:

- *MRZ-1:* Areas where no significant mineral resources are present or where it is judged that little likelihood exists for their presence.
- *MRZ-2:* Areas where significant mineral resources are identified.
- *MRZ-3:* Areas that contain known mineral deposits with undetermined mineral resource significance.
- *MRZ-4:* Areas with unknown mineral resource significance where geologic information does not rule out either the presence or absence of mineral resources.

3.12.2.1 Regional Mineral Resources

Regionally important mineral resources in the San Diego region include construction aggregate materials (sand, gravel, and crushed rock), industrial and chemical mineral materials (limestone, dolomite, and marble), and metallic and rare materials (precious metals, gemstones, iron and other ferro-alloy metals, copper, lead, zinc, and optical-grade calcite). Mineral resources can be found in the region in deposits formed during the Quaternary, Tertiary, and Cretaceous Ages (San Diego County 2021).

3.12.2.2 Local Mineral Resources

The City of San Diego's important mineral resources include salt, sand, and gravel. Extraction of sand, rock, and gravel still occurs in Mission Valley, Carroll Canyon, and Mission Gorge (City of San Diego 2024).

According to the Department of Conservation and San Diego Association of Governments, the Project Area is located in an area designated as MRZ-2 (San Diego County 2021). In general, the MRZ-2 areas are concentrated along major drainages such as the Otay River, the Tijuana River, the San Diego River, Carroll Canyon, and the San Dieguito River (City of San Diego 2024). Mineral deposits that are acceptable for use as Portland Cement Concrete grade aggregate are the rarest and most valuable of aggregate resources. The location of San Diego's high-quality mineral resource areas is within MRZ-2 areas (City of San Diego 2024).

Mineral resources are known to exist within the general area as the Tijuana River flows north of the Project site and is the site for sand and gravel mineral deposits. The Nelson Sloan Quarry is approximately 2.5 east of the proposed Project site and was an active sand and gravel quarry until mining operations ceased in 2002. The Project Site is located within a National Estuarine Research Reserve, National Wildlife Refuge, and State Park, thus, protected from activities of mineral extraction.

3.12.3 Regulatory Setting

3.12.3.1 Federal

There are no applicable federal regulations for this issue area.

3.12.3.2 State

<u>Surface Mining and Reclamation Act of 1975</u>

SMARA requires cities and counties to incorporate in their general plans certain mapped designations, including lands categorized as MRZs. MRZ classifications are used to communicate information concerning the location of mineral resources. Mineral lands are mapped according to jurisdictional boundaries (e.g., counties, groups of counties, or major parts of counties), mapping all mineral commodities in the area, including aggregate. Priority is given to areas where future mineral resource extraction could be precluded by incompatible land use or to mineral resources likely to be mined during the 50-year period following their classification.

Public Resources Code Section 5001 – 5019.5

California Public Resources Code Section 5001 – 5019.5 specifies state requirements for commercial exploitation of resources in units of the State Park System. Section 5001.65 states the following:

(a) Commercial exploitation of resources in units of the state park system is prohibited,

(b) The taking of mineral specimens for recreational purposes from state beaches, state recreation areas, or state vehicular recreation areas is permitted upon receiving prior approval of the director.

3.12.4 Impacts Analysis

3.12.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.12.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for aesthetics were derived from Appendix G of the CEQA Guidelines. Impacts to aesthetics are considered significant if the Proposed Project would:

42) result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or

43) result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

3.12.4.3 Impact Discussion

Threshold 1: Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. Portions of the Project Area are classified within MRZ-2, as designated by the State Geologist. Sand and gravel deposits, designated as construction materials regionally significant to the County of San Diego, occur along the Tijuana River that flows north of the Project Area. According to Public Resources Code Section 5001.65, mineral extraction is not permitted within units of the State Park System. Therefore, the Project Area is protected as a State Park from activities of mineral extraction and implementation of the Project would have no impact on the loss of availability of mineral resources that would be of value to the region and the residents of the state.

Threshold 2: Would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The Proposed Project includes habitat restoration to improve habitats for sensitive, threatened, and endangered plants and animals, including resident and migratory wildlife. Restoration activities include eliminating vehicle access to the existing north-south paved roadway and restoring wetland and riparian habitats, including salt marsh restoration.

Portions of the Project Site are classified within MRZ-2, as designated by the State Geologist. Sand and gravel deposits, designated as locally significant to the City of San Diego, occur along the Tijuana River that flows north of the Project Area. According to Public Resources Code Section 5001.65, mineral extraction is not permitted within units of the State Park System. Therefore, the Project Area is protected as a State Park from activities of mineral extraction and implementation of the Project would have no impact on the loss of availability of a locally-important mineral resource delineated on a local general plan, specific plan or other land use plan.

3.12.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.12.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.13 Noise

3.13.1 Introduction

This section discusses the affected environment and regulatory setting of the Proposed Project related to noise. Noise impacts are considered significant if the Proposed Project would (1) 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, (2) result in generation of excess groundborne vibration or groundborne noise levels, or, (3) for a project within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people be residing or working in the project area to excessive noise levels.

The analysis is based on the following technical document included as an appendix:

- Air Quality and Greenhouse Gas Emissions Assessment (ECORP 2025; Appendix D).

3.13.2 Environmental Setting

3.13.2.1 Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- *Equivalent Noise Level (L_{eq})* is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- *Day-Night Average (L_{dn})* is a 24-hour average L_{eq} with a 10 A-weighted decibel (dBA) "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- *Community Noise Equivalent Level (CNEL)* is a 24-hour average L_{eq} with a 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by several sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations.

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 decibels (dB) for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2017). Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (USEPA 1971).

The manner in which older structures in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer structures is generally 30 dBA or more (Harris Miller Miller & Hanson Inc. 2006).

Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60- to 70 dBA range, and high, above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding dBA increases, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0 dBA change is considered a just-perceivable difference.
- A change in level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.
- A 10.0 dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

Sensitive Noise Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The nearest noise sensitive receptor to the Project Area is a single-family residence approximately 0.81 mile east of the linear Project Area. A campground is located approximately 0.17 mile east of the Project Area boundary. While the campsite is closer than the nearest residence, it is considered a voluntary and temporary place of occupancy and is therefore not typically treated as a noise-sensitive receptor under standard land use planning guidelines.

3.13.2.2 Vibration Sources and Characteristics

Ground vibration can be measured several ways to quantify the amplitude of vibration produced, including through Peak Particle Velocity (PPV) or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively.

Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

3.13.2.3 Existing Ambient Noise Environment

The Project Area consists of two linear sites extending through BFSP, which is located within the Tijuana River National Estuarine Research Reserve in the southwestern corner of the U.S., approximately 15 miles south of San Diego. When open to the public, the park provides restrooms, picnic areas, barbecues, horse corrals, interpretive displays, and scenic views across the beach and estuary (California Department of Parks and Recreation 2025). Coastal parks close to urban areas are affected by a blend of natural and artificial noise. Natural noise sources include the rhythmic crashing of ocean waves, bird calls, other wildlife activity, and wind. Anthropogenic noise sources include border patrol operations and vehicle traffic, park visitors, equestrian use, and occasional overhead aircraft activity from the Imperial Beach Naval Outlying Landing Field, which is located approximately 1.36 miles north of the Proposed Project.

The American National Standards Institute (ANSI) Standard 12.9-2013/Part 3 "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present" provides a table of approximate background sound levels in L_{dn}, daytime L_{eq}, and nighttime L_{eq}, based on land use and population density. The ANSI standard estimation divides land uses into six distinct categories. Descriptions of these land use categories, along with the typical daytime and nighttime levels, are provided in Table 3.13-1. At times, one could reasonably expect the occurrence of periods that are both louder and quieter than the levels listed in the table. ANSI notes, "*95% prediction*

interval [confidence interval] is on the order of +/- 10 dB." The majority of the Project Area would be considered ambient noise Category 5 or 6 and is subject to typical noise levels ranging from 42 dBA L_{dn} to 47 dBA L_{dn}.

Table 3.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

Category	Land Use	Description	People per Square Mile	Typical L_{dn}	Day L_{eq}	Night L_{eq}
				(dBA)		
1	Noisy Commercial & Industrial Areas and Very Noisy Residential Areas	Very heavy traffic conditions, such as in busy, downtown commercial areas; at intersections for mass transportation or other vehicles, including elevated trains, heavy motor trucks, and other heavy traffic; and at street corners where many motor buses and heavy trucks accelerate.	63,840	67	66	58
2	Moderate Commercial & Industrial Areas and Noisy Residential Areas	Heavy traffic areas with conditions similar to Category 1, but with somewhat less traffic; routes of relatively heavy or fast automobile traffic, but where heavy truck traffic is not extremely dense.	20,000	62	61	54
3	Quiet Commercial, Industrial Areas and Normal Urban & Noisy Suburban Residential Areas	Light traffic conditions where no mass-transportation vehicles and relatively few automobiles and trucks pass, and where these vehicles generally travel at moderate speeds; residential areas and commercial streets, and intersections, with little traffic, compose this category.	6,384	57	55	49
4	Quiet Urban & Normal Suburban Residential Areas	These areas are similar to Category 3, but for this group, the background is either distant traffic or is unidentifiable; typically, the population density is one-third the density of Category 3.	2,000	52	50	44
5	Quiet Residential Areas	These areas are isolated, far from significant sources of sound, and may be situated in shielded areas, such as a small wooded valley.	638	47	45	39
6	Very Quiet Sparse Suburban or rural Residential Areas	These areas are similar to Category 4 but are usually in sparse suburban or rural areas; and, for this group, there are few if any nearby sources of sound.	200	42	40	34

Source: ANSI 2013

Notes: ANSI = American National Standards Institute; dBA = A-weighted decibels; L_{dn} = Day-Night Average; L_{eq} = Equivalent Noise Level

3.13.3 Regulatory Setting

3.13.3.1 State

California Department of Transportation

In 2020, Caltrans published the Transportation and Construction Vibration Manual (Caltrans 2020b). The manual provides general guidance on vibration issues associated with the construction and operation of projects concerning human perception and structural damage.

3.13.3.2 Local

City of San Diego General Plan

The City of San Diego's General Plan Noise Element provides noise policies to manage sources of noise and protect noise sensitive land uses. The General Plan contains the following policies to address noise:

- *Goal NE-A:* Consider existing and future noise levels when making land use planning decisions to minimize people's exposure to excessive noise.
  - *Policy NE-A.1:* Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses.
  - *Policy NE-A.4:* Require an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use - Noise Compatibility Guidelines (Table NE-3), so that noise mitigation measures can be included in the project design to meet the noise guidelines.
- *Goal NE-G:* Minimal exposure of residential and other noise-sensitive land uses to excessive construction, refuse vehicles, parking lot sweeper-related noise and public noise.
  - *Policy NE-G.1:* Implement limits on the hours of operation for nonemergency construction and refuse vehicle and parking lot sweeper activity in residential areas and areas abutting residential areas.
- *Goal NE-I:* Attenuate the effect of noise on future residential and other noise-sensitive land uses by applying feasible noise mitigation measures.
  - *Policy NE-I.3:* Consider noise attenuation measures and techniques addressed by the Noise Element, as well as other feasible attenuation measures not addressed as potential mitigation measures, to reduce the effect of noise on future residential and other noise-sensitive land uses to an acceptable noise level.

City of San Diego Municipal Code

Section 59.5.0401 of the City of San Diego's Municipal Code establishes noise level limits and construction noise regulation. It is unlawful for any person to generate noise that results in a one-hour average sound

level exceeding 50 dBA L_{eq} at a single-family residential property between the hours of 7:00 a.m. to 7:00 p.m. Construction activities that produce disturbing, excessive, or offensive noise are prohibited between the hours of 7:00 p.m. and 7:00 a.m. on any day, as well as on Sundays and legal holidays. Additionally, construction is not permitted to generate an average sound level greater than 75 dBA between 7:00 a.m. and 7:00 p.m. when measured at or beyond the property line of any residential use (City of San Diego 2019).

City of Imperial Beach General Plan

The City of Imperial Beach's General Plan Noise Element provides noise policies to manage sources of noise and protect noise sensitive land uses. The General Plan contains the following policies to address noise:

- *Goal 12 Excessive Noise:* It is the intent of the City to regulate and control unnecessary excessive and annoying sounds and vibrations emanating from uses and activities within the City, and to prohibit such sounds and vibrations as are detrimental to public health, welfare and safety of its residents.
    - *N-1 Noise Ordinance:* The City shall develop and adopt an ordinance to control noise levels. The ordinance shall set forth specific noise levels (dB meter readings) that are unacceptable and not permitted in the City.

City of Imperial Beach Municipal Code

While the City of Imperial Beach does not specify quantitative noise thresholds in its Municipal Code, its regulations do prohibit "unreasonably loud or disturbing unnecessary noises" as outlined in Section 9.32.010 of Chapter 9.32. Furthermore, Section 9.32.020(H) states that construction activities generating disturbing noise are prohibited from 7:00 a.m. to 7:00 p.m. on weekdays, 8:00 a.m. to 5:00 p.m. on Saturdays, and entirely on Sundays and federal holidays—unless approved in advance or required for emergency health and safety repairs. These provisions underscore a qualitative, context-based approach to noise regulation that relies on the perceived disruption to community well-being.

3.13.4 Impact Analysis

3.13.4.1 Methodology

This analysis of the existing and future noise environments is based on empirical observations and noise prediction modeling. Predicted construction noise levels were calculated utilizing the FHWA's Roadway Construction Noise Model (2006). Groundborne vibration levels associated with construction-related activities for the Project have been evaluated utilizing typical groundborne vibration levels associated with construction equipment. Potential groundborne vibration impacts related to structural damage and human annoyance were evaluated, taking into account the distance from construction activities to nearby structures and typically applied criteria for structural damage and human annoyance. Project operational traffic noise and onsite operational noise are addressed qualitatively.

3.13.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project and alternatives. The following significance criteria for aesthetics were derived from Appendix G of the CEQA Guidelines. Impacts to aesthetics are considered significant if the Proposed Project or alternatives would:

- result in generation of 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;
- result in generation of excessive ground-borne vibration or ground-borne noise levels; or
- for a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project Area to excessive noise levels.

As the Project spans two jurisdictions, the City of Imperial Beach and the City of San Diego, the allowable hours of construction established in each City's Municipal Code are applied based on the location of construction activity. Project construction noise levels are compared to the 75 dBA construction noise threshold presented in the City of San Diego Municipal Code, as the City of Imperial Beach does not identify a construction noise standard. Neither City regulates vibrations associated with construction; however, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020b) recommended construction vibration standard of 0.3 inch per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. The Project would not be a source of groundborne vibration during operations. The increase in transportation-related noise during operations and on-site operational noise associated with the Proposed Project is discussed qualitatively as the Project involves upgrades to an existing state park.

3.13.4.3 Impact Discussion

Threshold 1: Would the Project result in generation of 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?

Project Construction Noise

Onsite Construction Noise

Construction noise associated with the Proposed Project would be temporary and would vary depending on the specific nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., site preparation, excavation, paving). Noise generated by construction equipment, including earth movers, pile drivers, and portable generators, can reach high

levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

Information about construction equipment used during construction phases was derived from CalEEMod, which is designed to calculate air pollutant emissions from construction activity but contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. The model was updated to incorporate additional equipment specified by the Project Proponent not previously represented in the CalEEMod defaults for the modeled land use.

The western segment of the Project Area (including the equestrian parking lot and approximately 700 feet of roadway) is located in the City of Imperial Beach and the remainder of the Project Area is located in the City of San Diego. The City of Imperial Beach does not promulgate a numeric threshold pertaining to the noise associated with construction. This is due to the fact that construction noise is temporary, short term, intermittent in nature, and would cease on completion of the Project. However, as previously described, the City of Imperial Beach prohibits construction noise between the hours of 7:00 p.m. and 7:00 a.m., Monday through Friday; 5:00 p.m. and 8:00 a.m. on Saturday; and anytime on a federal holiday or Sunday (Municipal Code Chapter 9.32). Because DPR has no departmental policies regarding construction noise, it typically adheres to local standards and will follow these construction guidelines. The City of San Diego prohibits construction activity that generates offensive noise between the hours of 7:00 p.m. and 7:00 a.m. on any day, as well as on Sundays and federal holidays. Additionally, the City of San Diego's Municipal Code promulgates that construction is not permitted to generate an average sound level greater than 75 dBA between 7:00 a.m. and 7:00 p.m. when measured at or beyond the property line of any residential use.

A previous Fifth District of Appeal decision held that the use of an absolute noise threshold for evaluating all ambient noise impacts violated CEQA because it did not provide a "complete picture" of the noise impacts that may result from implementation of the ordinance. As such, the Proposed Project's construction noise is estimated and then added to a representative ambient baseline noise level informed by ANSI (see Table 3.13-1). As previously described, the dB scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. For instance, when combining two separate sources where one of the noise sources is 10 dB or more, greater than the other noise source, the noise contribution of the quieter source is virtually completely obscured by the louder source.

The nearest sensitive receptor to the Project Area is a single-family residence approximately 0.81 mile to the east of the linear Project boundary. To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors and in order to evaluate the potential health-related effects (physical damage to the ear) from construction noise, the construction equipment noise levels were calculated using the FHWA's Roadway Noise Construction Model and compared against the construction-related noise level threshold of 75 dBA set by the City of San Diego Municipal Code Section 59.5.0401.

To ensure the calculated construction noise levels attributable to the Proposed Project includes potential effects from all alternative projects, Project construction noise is modeled from the point closest to the nearest sensitive receptor. The anticipated short-term construction noise levels generated for the necessary equipment for each phase of construction are presented in Table 3.13-2.

Table 3.13-2. Construction Average (dBA) Noise Levels at Nearest Receptor

Construction Phase	Average Ambient Noise Level*	Exterior Construction Noise Level @ Closest Noise Sensitive Receptor	Existing Ambient Noise + Exterior Construction Noise Levels	Construction Noise Standard	Exceeds Standards?
	(dBA L_{eq})				
Linear Grubbing and Land Clearing	40.0	46.5	47.4	75	No
Linear Grading and Excavation		51.5	51.8	75	No
Linear Drainage, Utilities, and Sub-Grade		51.2	51.5	75	No
Linear Paving		46.5	47.4	75	No
Demolition		47.8	48.5	75	No
Site Preparation		49.0	49.5	75	No
Grading		48.6	49.2	75	No
Paving		43.0	44.8	75	No
Painting		35.0	41.2	75	No

Source: Construction noise levels were calculated by ECORP using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix H for Model Data Outputs.

Notes: ANSI = American National Standards Institute; CalEEMod = California Emissions Estimator Model; dBA = A-weighted decibels; FHWA = Federal Highway Administration; L_{dn} = Day-Night Average (Noise Level); L_{eq} = Equivalent Noise Level

*Average ambient noise levels of the Project Area were estimated using the ANSI Standard 12.9-2013/Part 3 "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present" table of approximate background sound levels in L_{dn}, daytime L_{eq}, and nighttime L_{eq}, based on land use and population density identified in Table 3.13-1.

Table 3.13-2. Construction Average (dBA) Noise Levels at Nearest Receptor

Construction Phase	Average Ambient Noise Level*	Exterior Construction Noise Level @ Closest Noise Sensitive Receptor	Existing Ambient Noise + Exterior Construction Noise Levels	Construction Noise Standard	Exceeds Standards?
	(dBA L_{eq})				

Construction equipment used during construction derived from CalEEMod. CalEEMod is designed to calculate air pollutant emissions from construction activity but contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. Construction noise was measured from the point closest to the nearest sensitive receptor, which is 0.81 mile (4,276 feet) distant. L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

As shown in Table 3.13-3, the Project's contribution of construction noise combined with the ambient noise environment would not exceed the 75 dBA City of San Diego construction noise threshold during any phase of construction at the nearby noise-sensitive receptor. It is noted that construction noise was modeled on a worst-case basis and is considered in addition to ambient noise levels currently experienced in the Project Area. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction. This impact is less than significant.

Offsite Construction Worker Trips

Project construction would result in additional traffic on adjacent roadways over the period that construction occurs. According to CalEEMod, which is used to predict the number of construction-related automotive trips, the maximum number of Project construction trips traveling to and from the Project Area during a single construction phase would not be expected to exceed 205 daily trips in total. According to the Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol, a doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3 dBA change is considered a just-perceivable difference). Construction access to the Project Area would be provided via Monument Road located in the City of San Diego. The City of San Diego publishes Average Daily Traffic (ADT) counts for roadway segments, including portions of Monument Road (City of San Diego 2025). The most recent available count, conducted on December 15, 2016, recorded 2,347 daily vehicles on the segment of Monument Road between Hollister Street and Dairy Mart Road, located approximately 1.26 miles from the Project Area. Given the existing traffic volume, the additional construction-related trips would not double traffic on this roadway segment and, therefore, would not result in a perceptible increase in traffic noise. Furthermore, construction-related traffic would be temporary and would cease upon completion of the Project. As such, this impact is less than significant.

Project Operational Noise

Offsite Operational Traffic Noise

The Project proposes to demolish the flood-prone segment of Monument Road, realignment to improve accessibility, instillation of box culverts and headwall systems to elevate low-lying sections, and upgrades to the equestrian parking lot located at an existing state park. Currently, Monument Road experiences seasonal flooding that often results in prolonged closures. Once completed, the improved accessibility may lead to more frequent vehicle trips, potentially increasing traffic noise compared to current conditions. To conservatively estimate potential increases in park usage and traffic, the full 418-acre BFSP area was modeled in CalEEMod as if operating as a city park. This approach ensures a broad and conservative analysis of visitor-related vehicle trips that could contribute to traffic noise on nearby roads. CalEEMod does not account for the specific operational features of a state park with realigned roads, due to limitations in its land use categories. Even under conservative assumptions, the Project is not expected to generate more than 915 daily vehicle trips during operations.

For comparison, the City of San Diego recorded an ADT count of 2,347 vehicles on the Monument Road segment between Hollister Street and Dairy Mart Road (about 1.26 miles from the Project Area) as of December 15, 2016. Since the Project would not double the current traffic volumes on nearby roadways, any increase in traffic noise would likely result in a higher frequency of noise events, but not a perceptible increase in overall noise levels. Operational traffic noise would result in a less than significant impact.

Onsite Operational Noise

The Project includes improvements to an existing state park that would enhance access and amenities. These upgrades may slightly increase park visitation and recreational activity, including equestrian and pedestrian use. However, these uses are already established in BFSP and the surrounding Tijuana River Valley, and any increase in activity would be consistent with what is typical for a regional park. As a result, the Project is not expected to generate noise levels higher than what currently occurs in the area, and the overall noise impact would be less than significant.

Threshold 2: Would the Project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Less than Significant Impact.

The nearest sensitive receptor to the Project Area is a single-family residence approximately 0.81 mile east of the linear Project Area.

Construction-Generated Vibration

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Project would be primarily associated with short-term construction-related activities. Construction in the Project Area would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads

through the ground and diminishes in magnitude with increases in distance. The majority of construction equipment used during future construction allowed by the Project would not be situated at any one location during construction activities, but rather spread throughout a construction site and at various distances from sensitive receptors. The primary vibration-generating activities would occur during grading and placement of box culverts and headwall systems. Table 3.13-3 shows the typical vibration levels produced by construction equipment at 50 feet.

Table 3.13-3. Representative Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 50 Feet (inches per second)	Vibration Velocity Level at 50 Feet (VdB)
Pile Driver (Impact)	0.225	95
Pile Driver (Sonic)	0.059	84
Vibratory Roller	0.073	85
Hoe Ram	0.031	78
Large Bulldozer	0.031	78
Caisson Drilling	0.031	78
Loaded Trucks	0.026	77
Jackhammer	0.012	70
Small Bulldozer	0.001	49

Source: Caltrans 2020b

Notes: VdB = vibration decibels

The City of Imperial Beach nor the City of San Diego regulate or have a numeric threshold associated with construction vibrations. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020b) recommended standard of 0.3 inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. The nearest structure of concern to the construction site is a residential building east of the Project Area approximately 0.81 mile distant.

Based on the representative vibration levels presented for various construction equipment types in Table 3.13-3 and the construction vibration assessment methodology published by the Federal Transit Administration (FTA), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

$$[PPVequip = PPVref \times (25/D)^{1.5}]$$

Construction vibration was measured from the perimeter of the Project Area. Table 3.13-4 presents the expected Project-related vibration levels at a distance of 0.81 mile.

Table 3.13-4. Construction Vibration Levels at 0.81 Mile							
Receiver Peak Particle Velocity Levels (inches/second)*					Peak Vibration	Threshold	Exceed Threshold?
Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jack-Hammer	Pile Driver	Vibratory Roller			
0.000040	0.000034	0.000016	0.000076	0.000094	0.000094	0.3	No

Notes: *Based on the Vibration Source Levels of Construction Equipment included on Table 3.13-3 (Caltrans 2020b). Distance to the nearest structure of concern is approximately 0.81 mile measured from Project Area construction.

As shown in Table 3.13-5, vibration as a result of onsite construction activities on the Project Area would not exceed 0.3 PPV at the nearest structure of concern. Thus, onsite Project construction would not exceed the recommended threshold, and construction vibration would have a less than significant impact.

Project Operational Vibration

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. While the Project could accommodate heavy-duty trucks (such as horse trailers), these vehicles would not generate groundborne vibrations that would result in excessive vibration levels. Therefore, the Project would result in negligible groundborne vibration impacts during operations. This impact is less than significant.

Threshold 3: For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project Area to excessive noise levels?

No Impact. The Proposed Project is located approximately 1.36 miles south of the Imperial Beach Naval Outlying Landing Field. The Proposed Project is not located within the 65 dBA CNEL noise contour for the Imperial Beach Naval Outlying Landing Field and would not expose those visiting the Project Area to excessive aviation noise levels (Naval Base Coronado 2011). Therefore, no impact would occur.

3.13.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.13.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation

No SPRs, PSRs, or mitigation measures are required.

3.14 Population and Housing

3.14.1 Introduction

This section discusses the potential environmental effects of the Proposed Project related to population and housing. Impacts to population and housing are considered significant if the Proposed Project would (1) induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); (2) displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or (3) displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

3.14.2 Environmental Setting

The Proposed Project is located in the Cities of San Diego and Imperial Beach, in the southwest corner of San Diego County.

3.14.2.1 Population

San Diego's population changes and estimates from 1980 to 2050, including the Cities of San Diego and Imperial Beach, are included in Table 3.14-1 below.

Table 3.14-1. San Diego County Population Trends

City/ County	Population							
	1980	1990	2000	2010	2020	2030	2040	2050
City of San Diego	875,538	1,110,549	1,223,400	1,301,617	1,421,462	1,545,834	1,612,004	1,633,002
City of Imperial Beach	22,689	26,512	26,992	26,234	26,137	–	–	–
San Diego County	1,870,000	2,500,000	2,810,000	3,100,000	3,330,000	3,350,000	3,430,000	3,400,000

Source: City of San Diego 2024; San Diego Association of Governments 2024; U.S. Census Bureau 2000, 2024

3.14.2.2 Housing

Currently, DPR employs Park Aides, Education Specialists, Maintenance Aides, and a variety of staff in collaboration with TRNERR to assist maintaining BFSP and the TRNERR Visitor Center. No onsite housing for employees is offered. Additionally, BFSP does not offer camping within the park for visitors.

3.14.3 Regulatory Setting

No federal, State, or local regulations related to population and housing are applicable to the BFSP planning area.

3.14.4 Impacts Analysis

3.14.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.14.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for population and housing were derived from Appendix G of the CEQA Guidelines. Impacts to population and housing are considered significant if the Proposed Project would:

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

45) displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere.

3.14.4.3 Impact Discussion

Threshold 1: Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The Proposed Project includes improving the existing roadway, Monument Road, in order to restore and maintain year-round access to BFSP and improve the health of the Tijuana Estuary. Improvements to Monument Road in the Project Area include an increased elevation of the roadway and installation of culverts to ensure resilience from sea level rise, water surface elevations, and the sedimentation rates of Goat Canyon and Yogurt Canyon.

Implementation of the Proposed Project would not induce substantial unplanned population growth, either directly or indirectly. As previously stated, DPR employs staff to maintain BFSP and the TRNERR. No onsite housing is offered for employees, nor is overnight camping allowed in the Park.

Construction is anticipated to occur over a 12-month period. Workers would be expected to commute to the Project Area from local and regional towns and cities, rather than relocate. Therefore, no impact would occur.

Threshold 2: Would the Project displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. For the reasons discussed in the analysis of Threshold 1, construction and operation of the new road, and decommissioning of the existing road would not result in the displacement of existing

homes, necessitating the need to construct replacement housing elsewhere. Therefore, the Project would have no impact with regard to the displacement of existing housing.

3.14.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.14.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.15 Public Services

3.15.1 Introduction

This section describes the affected environment and regulatory setting pertaining to public services, which include fire and protection, schools, and other governmental offices/facilities. This section also addresses the potential impacts on public services that would result from implementation of the Proposed Project and the mitigation measures to reduce these potential impacts. Information for this section was taken from numerous sources, including websites and service agency plans. Impacts to public services are deemed significant if the Project would (1) induce substantial population growth in an area, either directly (by proposing new homes and businesses) or indirectly (through extension of roads or other infrastructure); (2) displace substantial numbers of existing housing, creating the need for construction of new housing elsewhere; or (3) displace substantial numbers of people, necessitating the construction of new housing elsewhere.

3.15.2 Environmental Setting

3.15.2.1 Fire Protection

Fire and emergency medical services in the Project Area are provided by the City of San Diego Fire-Rescue Department (SDFD) and State Parks rangers.

SDFD is responsible for the preparation, maintenance, and execution of Fire Preparedness and Management Plans. SDFD coordinates with other local city and fire district departments, the San Diego County Fire Authority, California Department of Forestry and Fire Protection, and the federal fire departments through mutual aid agreements (City of San Diego 2024).

State Parks rangers address all State, County, and local laws except major investigations using specialized detective services. Rangers respond from the BFSP entrance center, located at the Park entrance.

The Project Area is primarily undeveloped and presents no major interference with implementation of emergency response services. Via Monument Road, the Project Area is easily accessible from I-5. Emergency response for the Project Area and surrounding area is provided, initially, by the City from Station 29 in San Ysidro. Station 29 is located at 198 West San Ysidro Boulevard and is staffed with City firefighters and paramedics.

3.15.2.2 Law Enforcement

San Diego Police Department (SDPD), San Diego County Sheriff's Department, and State Park rangers are primarily responsible for police patrol and protection services in the Project Area.

SDPD provides patrol, traffic, investigative, records, laboratory, and support services. The SDPD service area encompasses approximately 372.4 square miles in the City and serves a population of approximately 1.41 million people. SDPD has divided that City's neighborhoods into nine patrol division: Central, Eastern, Mid-City, Northeastern, Northern, Northwestern, Southeastern, Southern, and Western (City of San Diego

2024). The Project is located within the Southern Division, serviced by the San Diego Police Department located at 1120 27th Street in San Diego, approximately 5.6-miles from the Project Area.

The San Diego County Sheriff's Imperial Beach Substation is located at 845 Imperial Beach Boulevard, approximately 7.2-miles from the Project Area. The Sheriff's Office operates three shifts per day in Imperial Beach with a maximum of two patrol units per shift serving the City. One patrol unit serves Citywide. A second unit is known as the Beach Patrol and operates a four-wheel drive vehicle instead of a regular patrol car. The Beach Patrol operates three shifts a day for a total of 24 hours. Although the beach patrol responds to calls throughout Imperial Beach, its focus is on Seacoast Drive, Pier Plaza and the beach area (City of Imperial Beach 2024).

State Parks rangers address all state, county, and local laws except major investigations using specialized detective services. Rangers respond from the BFSP entrance center, located at the Park entrance.

3.15.2.3 Schools

City of San Diego

The San Diego Unified School District (SDUSD) is a kindergarten through 12th grade (K-12) school district and provides educational services to approximately 80 percent of the City. In addition to SDUSD, there are 16 smaller school districts, including elementary and secondary levels, which service the outlying northern, eastern, and southern areas of the City (City of San Diego 2023b). There are 286 schools within SDUSD.

South Bay Union School District (SBUSD) serves populations in south San Diego as well as Imperial Beach and San Ysidro for pre-kindergarten through eighth grade. The SBUSD presently has 12 elementary schools and one preschool site within its district. Berry Elementary School is located north of the Project Area, approximately 1.8-miles in distance (SBUSD 2025).

Sweetwater Union High School District (SUHSD) serves approximately 34,000 students for seventh through twelfth grade across 32 campuses in the cities of San Diego, Imperial Beach, Chula Vista, and National City (SUHSD 2025). Southwest High School is located approximately 2 miles northeast of the Project Area.

City of Imperial Beach

As stated above, SBUSD provides elementary public school education in Imperial Beach. Six of SBUSD's elementary school sites are located within the City limits of Imperial Beach, including Oneonta Elementary School which is located approximately 1.9 miles north of the Project Area (City of Imperial Beach 2024).

SUHSD's Mar Vista High School is located in the City of Imperial Beach, approximately 2.4 miles north of the Project Area.

3.15.2.4 Parks

The cities of San Diego and Imperial Beach offer a variety of recreational opportunities including regional parks, city parks, state parks, scientific research areas, and other recreational opportunities. The Project

Area is located in BFSP which is part of the TRNERR. Parks and other recreational resources are discussed further in Section 3.16, *Recreation*.

3.15.3 Regulatory Setting

3.15.3.1 Federal

There are no applicable federal regulations for this issue area.

3.15.3.2 State

California Department of Forestry and Fire Protection

Under Title 14 of the CCR, California Department of Forestry and Fire Protection (CAL FIRE) has the primary responsibility for implementing wildfire planning and protection for State Responsibility Area (SRA). CAL FIRE develops regulations and issues fire-safe clearances for land within a fire district of the SRA. More than 31 million acres of California's privately-owned wildlands are under CAL FIRE's jurisdiction.

CAL FIRE adopted Fire Hazard Severity Zone maps for SRAs and Local Responsibility Areas (LRAs) in 2007. Fire Hazard is a way to measure the physical fire behavior so that people can predict the damage a fire is likely to cause. Fire hazard measurement includes the speed at which a wildfire moves, the amount of heat the fire produces, and most importantly, the burning fire brands that the fire sends ahead of the flaming front. The Project Area is not located within an SRA, but it is located within an unincorporated LRA (CAL FIRE 2023).

Beyond its wildland firefighting role, CAL FIRE is an "all-risk" department. It may very well be a CAL FIRE engine and crew that is dispatched to the scene of an auto accident, or to a home where a child has become the victim of a drowning incident. The Department is always ready to respond to medical aids; hazardous material spills; swift water rescues; search and rescue missions; civil disturbances; train wrecks; floods, earthquakes and more. Through contracts with local government, CAL FIRE provides emergency services in 36 of California's 58 counties (CAL FIRE 2024).

Quimby Act

The Quimby Act (California Government Code Section 66477) was established by the California legislature in 1965 to preserve open space and parkland in the rapidly urbanizing areas of the state. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance.

3.15.4 Impact Analysis

3.15.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.15.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for aesthetics were derived from Appendix G of the CEQA Guidelines. Impacts to aesthetics are considered significant if the Proposed Project would 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: (i) fire protection, (ii) police protection, (iii) schools, (iv) parks, and (v) other public facilities.

3.15.4.3 Impact Discussion

Threshold 1: Would the Project 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:

(v) fire protection

(vi) police protection

(vii) schools

(viii) parks

(ix) other public facilities

i) Fire Protection

Less than Significant Impact. Construction and operation of the Project is not anticipated to generate a need for new or expanded fire protection services or facilities. The Project does not propose any new residences, buildings, structures, or facilities that would require additional demands for fire protection services.

Implementation of the Project is not expected to increase the demand for fire protection and would not result in any increase to emergency response times. Therefore, no adverse impacts to fire protection services or facilities are anticipated, and impacts would be less than significant.

ii) Law Enforcement

Less than Significant Impact. The proposed Project objectives of removing, upgrading, and relocating portions of Monument Road to improve the health and function of the Tijuana Estuary and address seasonal flooding of the existing roadway to improve coastal public access to BFSP would not result in any population growth or substantial new operational activities that would require additional police protection services. Impacts would be less than significant.

iii) Schools

Less than Significant Impact. The demand for new or expanded school facilities and services is determined by permanent increases to the local population. Implementation of the Project would not directly or indirectly cause an increase in residential population or a substantial increase in workforce population that would require new or expanded schools. No long-term operational workforce is proposed as part of the restoration Project. Habitat restoration, resilience, and access improvements at BFSP would not result in an increase in population growth and would not require the construction of new school facilities. Therefore, impacts would be less than significant.

iv) Parks

Less than Significant Impact. The Project would not increase the permanent population of the local area. The temporary increase of workers in the area is not expected to impact the use of existing Border Field State Park since it has been closed to public access due to flooding. Implementation of the Project would not result in the need for new or expanded park facilities, and therefore impacts would be less than significant.

v) Other Public Facilities

Less than Significant Impact. The increase in temporary workers to the area during construction is not expected to cause a direct increase in demand for other public services or facilities, including libraries and hospitals. Implementation of the Project would not directly cause an increase in residential population or a substantial increase in workforce population resulting in the need for new or expanded public facilities. Therefore, impacts are determined to be less than significant.

3.15.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.15.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.16 Recreation

3.16.1 Introduction

This section discusses impacts associated with recreational resources. Impacts to recreational resources are considered significant if the Proposed Project (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; or (2) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

3.16.2 Environmental Setting

3.16.2.1 Border Field State Park

Border Field State Park is located in the very southwestern corner of the United States, immediately north of the Unites States-Mexico International Border. BFSP spans 418 acres and is part of the 278-unit California Park System. BFSP provides restrooms, picnic areas, barbeques, horse corrals, interpretive displays, and scenic views across the beach and Tijuana Estuary. Within the park, beach access is provided in several locations:

- *Beach Access*. Direct vertical access to the beach is provided via the parking area on the coastal strand directly adjacent to the beach. Additionally, a lateral passive access-way exists along the beach.
- *Monument Mesa Access*. Access to the beach is provided via an active access-way along the top of the mesa.

Beach access is supported by a 280-car parking lot, picnic sites, and restrooms on Monument Mesa and a parking area at a horse staging area.

Monument Road is BFSP's sole public access entrance road. Monument Road is subject to seasonal flooding in several locations due to storm runoff. As the only access road through BFSP connecting visitors to Monument Mesa, Monument Road has been damaged by years of cross-border sedimentation and flooding resulting in road closures for eight (8) months out of the year and more recently for even longer periods of time. Currently, BFSP remains temporarily closed.

<u>Tijuana River National Estuarine Research Reserve</u>

BFSP is located within a larger unit called the Tijuana River National Estuarine Research Reserve. The area within TRNERR represents about 2,500 acres in the downstream terminus of the Tijuana River watershed. TRNERR is the largest, most intact coastal wetland in the region and provides habitat for sensitive, threatened, and endangered plants and animals, including residents and migratory wildlife. TRNERR is comprised of BFSP and Tijuana Slough National Wildlife Refuge. The Reserve offers 4 miles of walking trails, taking visitors into prime bird watching areas and down to the river mouth where the Tijuana River meets the Pacific Ocean.

TRNERR is linked to two federal land preservation networks: the National Estuarine Research Reserve System, administered by the National Oceanic and Atmospheric Administration, and the National Wildlife Refuge System, administered by USFWS. USFWS is primarily responsible for the management of the Reserve's resources and coordinates with the California Department of Parks and Recreation in managing their lands as a seamless Reserve.

Tijuana Slough National Wildlife Refuge

North of the Project Area is the Tijuana Slough National Wildlife Refuge. Tijuana Slough is a 1,072-acre wetland located where the Tijuana River meets the sea and is part of the 2,500-acre TRNERR.

The refuge was established in 1980 under authority of the Endangered Species Act of 1973. Currently, the Refuge is managed as part of the San Diego National Wildlife Refuge Complex which comprises Naval Weapons Station Seal Beach, San Diego Bay National Wildlife Refuge (NWR), and San Diego NWR.

3.16.3 Regulatory Setting

3.16.3.1 Federal

There are no applicable federal regulations for this issue area.

3.16.3.2 State

Quimby Act

The Quimby Act (California Government Code Section 66477) was established by the California legislature in 1965 to preserve open space and parkland in the rapidly urbanizing areas of the state. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate land for parks, pay an in-lieu fee, or perform a combination of the two. The Quimby Act requires a city or county to adopt standards for recreational facilities in its general plan recreation element if it is to adopt a parkland dedication/fee ordinance. The County has traditionally chosen not to enforce the Quimby Act; however, it reserves the right to enforce it in the future.

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the California Coastal Act. There are no polices relevant to utilities and services systems.

3.16.4 Impacts Analysis

3.16.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.16.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for recreation were derived from Appendix G of the CEQA Guidelines. Impacts to recreation are considered significant if the Proposed Project would:

46) 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

47) include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

3.16.4.3 Impact Discussion

Threshold 1: Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less than Significant Impact. The Project proposes to remove, upgrade, and relocate portions of Monument Road to improve the health and function of the Tijuana Estuary; maximize the resilience of Monument Road from the effects of SLR; and address seasonal flooding of the existing roadway to improve coastal access to BFSP. BFSP is identified as an Open Space Park in the City of San Diego's General Plan. Due to current flooding conditions, BFSP remains temporarily closed to public access. The Proposed Project would improve the existing access road, Monument Road, to be more flood resilient through the installation of culverts, elevation of the existing roadway, and paving of Monument Road. The proposed road improvements would continue to accommodate two lanes in each direction, designed to accommodate a standard 45-foot bus, enhancing vehicular access.

Additional improvements to the existing equestrian staging area would include the construction of an aggregate surface equestrian parking lot off Beach Access Road near the terminus of Monument Road. Providing equestrian parking stalls and eight horse corrals would enhance recreational user benefits. The redesign of the existing entrance parking lot and proposed installation of an automated pay machine at the BFSP entrance would be an improvement compared to existing conditions.

As the Proposed Project focuses on restoring and enhancing existing recreational facilities to address flooding issues, improvements would allow for an increase in visitation and access. The proposed improvements at BFSP would not allow for overnight accommodation or include the construction of

habitable structures. Consistent with the Park, Open Space, & Recreation and Open Space land use designations, the Proposed Project would have a less than significant impact on existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would occur or be accelerated.

Threshold 2: Would the Project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Less than Significant Impact. The Proposed Project would improve the existing access road, Monument Road, to be more flood resilient through the installation of culverts, elevation of the existing roadway, and paving of Monument Road. The proposed road improvements would continue to accommodate two lanes in each direction, designed to accommodate a standard 45-foot bus, enhancing vehicular access.

Additional improvements to the existing equestrian staging area would include the construction of an aggregate surface equestrian parking lot off Beach Access Road near the terminus of Monument Road. Providing equestrian parking stalls and eight horse corrals would enhance recreational user benefits. The redesign of the existing entrance parking lot would be an improvement compared to existing conditions.

Once constructed, the new facilities would accommodate coastal and inland recreational visitors and provide an improved and more cohesive experience. Since the Proposed Project involves restoration and enhancement of recreational facilities and would not result in substantial additional employees or population, no additional recreational facilities would be required to be constructed or expanded as a result of the Proposed Project.

3.16.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.16.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.17 Transportation

3.17.1 Introduction

This section discusses impacts associated related to transportation generated by the construction and operation of the Proposed Project. This section includes a summary of applicable regulations related to transportation; a description of the existing transportation and circulation conditions regionally and in and around the Project Area; and an evaluation of the potential impacts of the Proposed Project, including cumulative impacts, related to transportation.

3.17.2 Environmental Setting

The Project Area is located in the cities of San Diego and Imperial Beach. The surrounding land uses are primarily designated *Open Space*, *Public Facility*, and *Park, Open Space, & Recreation*. Access from public roads to the Project Area would be via Monument Road, primarily accessed from local and collector roads within San Diego. The nearest freeway is I-5, east of the Project Area, accessed from Dairy Mart Road.

The existing alignment of Monument Road, within BFSP, serves as the sole public access entrance road and stretches approximately 1.35 miles. The east-west segments of Monument Road extend approximately 0.9 miles from the Park entrance and connect to the existing equestrian area and Monument Mesa. The east-west segments are bisected by an existing 0.5-mile north-south segment that concurrently bisects several types of wetland habitats. Monument Road serves as two-lane collector roadway that accommodates vehicle traffic, horseback riding, hiking, and bicycling in BFSP.

Monument Road currently lies lower than the surrounding areas, resulting in flooding after rainfall events. Due to flooding, access to BFSP remains temporarily closed.

The Proposed Project includes the following road improvements:

- *Proposed North-South Realignment*. Construction of a new 30-foot-wide Class II base road over the existing unpaved road that starts to the east of the existing entrance kiosk on Monument Road, passes over the Goat Canyon sediment basins, runs along the base of Bunker Hill, and connects to the existing east-west segment of Monument Road. This portion of the road is 4,670 feet long. The total length of the Class II base road including a portion in the proposed east-west roadway is 6,000 feet.
- *Proposed East-West Roadway Elevation*. Creation of approximately 625 feet of elevated asphalt concrete (AC) roadway on Class II base road and installation of three box culverts and headwall systems. Each box culvert is a precast 7-foot-wide by 3-foot-high reinforced concrete box. The road would be elevated 5 feet above its existing grade to accommodate the box culverts and headwall systems and elevated 4 feet above existing grade for the roadway segment west of the culvert crossing.
- *Yogurt Canyon Culvert and Access Road*. Installation of three proposed box culverts with headwall system and improvements to the existing roadway segment that provides access to Monument Mesa. The road would be elevated 5 feet above existing grade to accommodate the box culvert

structure and elevated 4 feet above existing grade for the roadway segment west of the culvert crossing.

3.17.2.1 Major Highways

I-5 is the only major transportation route near the Project Area. This Interstate would provide regional access to the general vicinity of the Proposed Project during the construction and operation phases. I-5 is a major freeway that extends north from the Mexican border to the Canadian border and provides access for goods movement, shipping, and travel. This highway crosses the southern portion of the City of San Diego and is designated as major highway by the City of San Diego General Plan Mobility Element due to its significance for regional and interstate travel, as well as for the movement of goods and people (City of San Diego 2024). It is anticipated that during construction, primary access to the Project Area will originate via I-5 to exit 2, Dairy Mart Road; a paved local road featuring one lane of traffic in each direction (north and south). From there, traffic will travel southbound along Dairy Mart Road/Monument Road to the proposed Project Area.

3.17.2.2 Collector Roads

Most roadways in the immediate Project Area vicinity consist of collector roads. Effective evaluation of the traffic impacts associated with the Proposed Project requires an understanding of the existing transportation system within the project study area. The transportation network facilities within the Proposed Project study area include the north-south roadways of Hollister Street, Dairy Mart Road, and Saturn Boulevard. East-west roads include Saturn Boulevard and Monument Road. The project site is in a rural environment, and no pedestrian, bicycle, or transit facilities are present within a 0.5-mile walking distance of the Proposed Project (San Diego Association of Governments 2024).

3.17.2.3 Airports

There are no airports in the vicinity of the Project Area. The nearest airport to the Project Area is the Imperial Beach Naval Outlying Landing Field (NOLF), approximately 4.4 miles north of the Project Area. According to the City of San Diego Mobility Element, NOLF serves as an important location for naval helicopter training (City of San Diego 2024).

3.17.2.4 Public Transportation

Public transportation in the Project Area is provided by the metropolitan planning organization, San Diego Association of Governments, and operated by the Metropolitan Transit System (MTS). MTS operates the Iris TC Loop on Hollister Avenue and I-5, northeast of the Project Area.

3.17.2.5 Non-Motorized Transportation

There are currently no dedicated pedestrian or bicycle facilities in the immediate vicinity of the Project Area or along the surrounding roadways. Within BFSP, Monument Road serves as a multi-modal roadway that accommodates vehicle traffic, horseback riding, hiking, and bicycling, connecting to various trails.

3.17.3 Regulatory Setting

3.17.3.1 Federal

No federal plans, policies, regulations, or laws related to transportation apply to the Proposed Project.

3.17.3.2 State

Senate Bill 743

On September 27, 2013, Governor Edmund G. Brown, Jr. signed Senate Bill (SB) 743, which was intended to streamline review under the CEQA process for several categories of development projects, including the development of infill projects in transit priority areas, and to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas (GHG) emissions.

In addition, SB 743 revises the metric for determining impacts relative to transportation to Vehicle Miles Traveled (VMT), replacing the use of Level of Service (LOS) in CEQA documents. Previously, transportation impacts under CEQA focused on the delay that vehicles experience at intersections and on roadway segments, utilizing a metric of LOS. Mitigation for vehicular delay oftentimes requires increasing roadway capacity. Capacity enhancements have been proven to induce additional travel, generating additional GHG emissions. Capacity enhancements may also remove rights-of-way available for pedestrian and bicycle facilities and may generally discourage alternative modes of transportation. The use of VMT as a transportation impact metric promotes the state's goals of reducing GHG emissions and traffic-related air pollution by promoting the development of a multimodal transportation system and providing clean, efficient access to destinations.

California Department of Transportation

Caltrans has jurisdiction over state highways and sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. The Project Area is located within the jurisdiction of Caltrans District 11. The proposed improvements to Monument Road, within BFSP, are classified as low-volume rural roads in the Caltrans Highway Design Manual. The proposed design of Monument Road improvements would be based on the current Caltrans Highway Design Manual.

In addition, Caltrans issued the Transportation Analysis Framework: Evaluating Transportation Impacts of State Highway System Projects (Caltrans 2020), which is one component of a set of materials prepared by Caltrans to guide the implementation of SB 743. The purpose of this document is to assist Caltrans district staff and others responsible for assessing likely transportation impacts as part of environmental review of proposed projects on the state highway system by providing guidance on the preferred approach for analyzing the VMT attributable to proposed transportation projects (induced travel) in various project settings.

3.17.4 Impacts Analysis

3.17.4.1 Methodology

The current CEQA Guidelines require that transportation impacts be evaluated based on VMT rather than LOS or any other measure of a project's effect on automobile delay. The Governor's Office of Planning and Research (OPR) approved the addition of new Section 15064.3, "Determining the Significance of Transportation Impacts" to the State's CEQA Guidelines, compliance with which is required beginning July 1, 2020. The Updated CEQA Guidelines state that "generally, VMT is the most appropriate measure of transportation impacts" and define VMT as "the amount and distance of automobile travel attributable to a project." It should be noted that "automobile" refers to on-road passenger vehicles, specifically cars and light trucks. OPR has clarified in the Technical Advisory and recent informational presentations that heavy-duty truck VMT is not required to be included in the estimation of a project's VMT. Other relevant considerations may include the effects of the project on transit and non-motorized travel.

The new Section 15064.3(b), "Criteria for Analyzing Transportation Impacts," states "If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate."

This section includes qualitative analysis of VMT based on the requirements of the current CEQA Guidelines and the City's guidelines for analysis of transportation impacts.

3.17.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project and alternatives. The following significance criteria for aesthetics were derived from Appendix G of the CEQA Guidelines. Impacts to aesthetics are considered significant if the Proposed Project or alternatives would:

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

49) conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b);

50) substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or

51) result in inadequate emergency access.

3.17.4.3 Impact Discussion

Threshold 1: Would the Project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact. This Project will not conflict with any program, plan, ordinance, or policy regarding these modes of transportation. Surrounding uses include *Open Space, Public Facility, and Park, Open Space & Recreation,* and no existing transit stops are located within a half mile of the Project Area.

Construction and operation of the Proposed Project would not itself generate traffic; however, associated equestrian and road improvements would provide additional and improved coastal access within the Project Area. These circulat0ion improvements would not induce substantial additional trips but would encourage multi-modal transportation, safe from flooding hazards. Therefore, the proposed improvements are consistent with adopted transportations plans and policies and impacts would be less than significant.

Threshold 2: Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

Less than Significant Impact. CEQA Guidelines Section 15064.3, subdivision (b) outlines that VMT is the most appropriate measure of transportation impacts and states that VMT refers to the amount and distance of automobile travel attributable to a project. The Proposed Project would not result in any changes to the land uses or transportation system within BFSP and no increase in VMT would occur.

At the time of this analysis, BFSP remains temporarily closed to public access due to hazards from flooding. After completion of the Proposed Project, road improvements and installation of infrastructure would improve the existing Monument Road to be more flood resilient and improve safety and accessibility. Road improvements within the Project Area would relocate the primary access road, Monument Road, to pass over Goat Canyon, run along the base of Bunker Hill, and connect to the east-west segment of Monument Road. Relocation of Monument Road would, thus, abandon and remove the existing north-south paved roadway and restore the roadway to various wetland and riparian habitats. Under the Proposed Project, the roadway improvements would relocate the route of Monument Road, maintain access to the Monument Mesa Day Use Area. While these improvements may encourage access throughout BFSP, they would not create substantial new recreational opportunities compared to existing conditions that would entice people to travel to the area and increase VMT. BFSP entrance would undergo minor redesign, however no new entrances to the Project Area would be constructed. The Proposed Project would be less than significant and would not be inconsistent with CEQA Guidelines § 15064.3, subdivision (b).

Threshold 3: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. Implementation of the Project would not involve construction of roads or permanent design features that would present hazardous roadway and traffic conditions. The Project would construct a new 30-foot-wide base road over the existing north-south alignment of unpaved road;

elevate the existing east-west Monument Road segment to provide resiliency from sea level rise; install box culverts and headwall systems underneath elevated road segments to manage storm runoff from Goat and Yogurt Canyon; and install driveway and parking lot improvements at the equestrian parking lot to further minimize wetland impacts. The Proposed Project roadway elements would improve overall access throughout BFSP and would be designed based on the current Caltrans Highway Design Manual to accommodate a standard 45-foot bus template, improving access for emergency vehicles. The proposed road improvements and installation of new road infrastructure would not increase hazards due to a design feature or incompatible uses because the Proposed Project would be designed and constructed in compliance with the Caltrans Highway Design Manual. Thus, the Project would have a less than significant impact.

Threshold 4: Would the Project result in inadequate emergency access?

Less than Significant Impact. As previously stated, the Proposed Project's roadway elements would improve overall access throughout BFSP and would be designed based on the current Caltrans Highway Design Manual to accommodate a standard 45-foot bus template, improving access for emergency vehicles. Construction and operational activities would not impact emergency access as BFSP is currently closed to public access due to hazards from flooding. As such, the Project would have a less than significant impact related to emergency access.

3.17.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.17.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.18 Tribal Cultural Resources

3.18.1 Introduction

This section provides an assessment of potential impacts related to tribal cultural resources that could result from implementation of the Proposed Project. The analysis in this section is based, in part, on consultation with the Native American Heritage Commission (NAHC) and Native American tribes.

3.18.2 Environmental Setting

3.18.2.1 Ethnohistory

Kumeyaay territory included a vastly varied terrain, ranging from coastal beaches and lagoons, across the mountains, and down into the arid desert. According to the Kumeyaay themselves, "knowledge of the environment was essential to ensuring the proper times and places for movement of people, planting, harvesting and maintaining the land and water resources" (Kumeyaay Diegueno Land Conservancy [KDLC] 2017). The keepers of this knowledge were the Kusiiaay "experts in guiding and teaching people" and specialists in "many different aspects of what we would now call medicine, astronomy, engineering, biology and psychology" (KDLC 2017).

The precontact ancestors of the Kumeyaay people were expert hunters, environmental managers, horticulturalists, harvesters, craftspersons, and artists (Bean and Lawton 1973; Gee 1972; KDLC 2017; Luomala 1978; Shipek 1982). They used pottery bowls, pots, and jars, baskets, net bags, digging and gathering sticks, manos and metates, mortars and pestles, and various wood, fiber, stone, shell, and bone utensils for collecting and processing vegetal foods and materials (Kroeber 1976; KDLC 2017; Luomala 1978). Terrestrial hunting was typically done with bow and arrow, throwing stick, or net. Fire was used for heating, cooking, pottery manufacture, protection, and for brush burning - to scare up and drive game as well as for vegetation management (Bean and Lawton 1973; Gee 1972; Gifford 1931; KDLC 2017; Luomala 1978). Bows were made of mesquite, screwbean, or willow with a sinew string, and arrows were made of arrowweed and/or cane with a wooden or stone point that was attached by sinew (Gifford 1931).

Kumeyaay society was organized around Clans, which were called *Sh'mull* (KDLC 2017). Relationships between the clans were complex, with overlapping territories, resource usage, ceremonial sites, and resources, but they would come together for ceremonies, gatherings, and occasionally for defense against enemies (KDLC 2017). Habitation was organized around a central primary village with several outlier homesteads located at small water sources, springs, or at the mouths of secondary creeks (Shipek 1982). Campsites were selected for accessibility to water, drainages, availability of boulder outcrops or other natural protection from weather and ambush, and the abundance of flora and fauna (Luomala 1978). Kumeyaay structures varied by region and use. The more permanent dwellings were domed or gabled, with a slightly sunken floor, and were constructed of a tied-pole framework overlain with brush thatch and sometimes a mud and grass covering (Kroeber 1976; Luomala 1978). Materials such as tule reeds, used in construction of these structures, would expand when wet, providing a water-tight seal, while in drier times the thatching would shrink, allowing greater ventilation (KDLC 2017).

Due to the mild climate of the San Diego region, precontact Kumeyaay people wore few articles of clothing. In the colder months, robes of rabbit skins, willow bark, or buckskin were used (Gifford 1931; Luomala 1978). Women typically wore one- or two-piece bark or braided fiber aprons (Luomala 1978). Although Kumeyaay people usually went barefoot, agave-fiber sandals were used for traveling over rough or thorny terrain (Kroeber 1976). Women wore twined or coiled basketry caps, and the men wore coiled caps (Kroeber 1976; Luomala 1978). Other adornments included bone, shell, or stick ornaments for nose or ear piercings, shell bead necklaces, and shell pendants (Gifford 1931; Luomala 1978). Hair was worn long with bangs for both men and women, except when it was cut short for mourning (Gifford 1931; Kroeber 1976; Luomala 1978). Tattooing was practiced by both sexes but may have been more prevalent among women due to its place as part of the adolescent ceremony for girls (Gifford 1931; Kroeber 1976). Piercing (ears and nasal septum) was also practiced, as was face painting (Gifford 1931; Luomala 1978; Shipek 1970).

The Iipay and Tipai groups practiced shamanism, utilizing the toloache (Datura) initiation customs that had been learned from the Luiseños and Gabrielinos to the north; while the Kamia practiced the system of song-myth cycles that came from the Colorado River region (Kroeber 1971). Items such as stone, cane, or ceramic pipes; pottery, tortoise shell, gourd, and deer-hoof rattles; and crescentic stones were used in ceremonies and rituals (Gifford 1931; Kroeber 1976; Luomala 1978).

The Kumeyaay groups all cremated their dead. The body and its possessions were burned on a pyre over a pit (Luomala 1978). After the cremation of the body, the ash, bones, and unburned fragments of possessions were gathered up and placed in a pottery jar that was then capped and buried or placed among remote rocks (Kroeber 1976; Luomala 1978).

3.18.2.2 Tribal Consultation Summary (Assembly Bill 52)

Initial Consultation (2016–2017)

The NAHC was contacted on November 21, 2016 on behalf of the Border Field State Park Renovations for Public Use Project, and requested a Local Government Tribal Consultation List, compliant with CEQA and Assembly Bill (AB) 52, as well as a Sacred Lands File (SLF) Search request. The NAHC responded on November 22, 2016, with a Tribal Consultation List and a letter stating that the SLF Search results were positive, sites are located within the identified Area of Potential Effects (APE), and to contact the Kwaaymii Laguna Band of Mission Indians for more information about those sites. The response letter also stated to contact all the tribes on the attached consultation list, as the SLF Search is not exhaustive. The Tribal Consultation contact list included 15 contacts of representatives for 13 different local tribes.

Tribal consultation letters were sent on February 8, 2017, to the following 13 tribes on the Tribal Consultation List:

- Barona Group of the Capitan Grande
- Campo Band of Mission Indians
- Ewiiaapaayp Tribal Office

- Iipay Nation of Santa Ysabel
- Inaja Band of Mission Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Mission Indians
- La Posta Band of Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Mission Indians
- San Pasqual Band of Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

Follow-up emails and phone calls were made on March 1, 2017, to all Tribal Representatives listed on the NAHC list. Contacts with listed email addresses were sent digital versions of the consultation letter with a follow up request for comments. Phone calls were made to contacts without a listed email address, and unless otherwise noted, voicemails were left for the appropriate contacts.

A representative from Barona Group of the Capitan Grande indicated that the Clifford LaChappa is no longer their chairperson (as listed on the NAHC Contact List), and a DPR archaeologist left a voicemail for the new chairperson, Thorpe Romero, requesting comment. No response was received.

A representative from Campo Band of Mission Indians indicated that their chairperson was in a meeting, but they would check their email for the letter and would respond if needed. No additional response was received.

A representative from the Inaja Band of Mission Indians stated that they had no questions or comments as the APE is far away from their tribal lands.

A representative of Sycuan Band of the Kumeyaay Nation stated that they received the consultation letter, and that Lisa Haas will be commenting on it soon. No additional response was received.

A representative from Vieja Band of Kumeyaay Indians notified the CSP archaeologist that their chairperson was out of town, and that the NAHC provided email address was out of date, and an updated email address was provided. The consultation letter was forwarded to the new contact person. No additional response was received.

On April 20, 2017, a representative of Jamul Indian Village replied via email to the original consultation letter requesting additional information about the Project. In a follow-up phone conversation, the representative communicated their concerns about the sensitivity of the Project Area and requested that a culturally affiliated monitor be present for any ground disturbance. They said they may also want a future site visit for the monitors. On July 24, 2017, in response to a District-led consultation on the interpretative portion of the Project, Jamul Indian Village also expressed interest in attending the public meetings and

workshops for the Proposed Project in addition to a request to be included in all processes pertaining to the Project. No further responses were received from any of the parties who had not already replied.

CSP entered into a contract agreement with Red Tail Monitoring & Research, Inc., to provide Kumeyaay tribal monitoring for the 2017 geotechnical testing, which occurred on September 7 and 8, 2017.

Re-Initiation (2022–2024)

Tribal consultation was re-initiated for this Project in November 2022, specifically for Geotechnical testing. A CSP archaeologist contacted the NAHC on November 2, 2022, and submitted a SLF and Native American Contacts List Request. This request was submitted for the "General Plan (Senate Bill [SB] 18)" level tribal consultation list, not the CEQA/AB 52 list. The SB 18–level list typically includes more tribal representatives than the CEQA-level list.

The NAHC responded on December 9, 2022, with a Tribal Consultation List and a letter stating that the SLF Search results were positive, sites are located within the identified APE, and to contact the Kwaaymii Laguna Band of Mission Indians for more information about those sites. The Tribal Consultation contact list included 20 contacts of representatives for 13 different local tribes.

Tribal consultation letters were sent to the following tribes on the NAHC provided Tribal Consultation List on February 8, 2023, to both physical addresses and email addresses, as available:

- Barona Group of the Capitan Grande
- Campo Band of Diegueño Mission Indians
- Ewiiaapaayp Band of Kumeyaay Indians
- Iipay Nation of Santa Ysabel
- Inaja-Cosmit Band of Indians
- Jamul Indian Village
- Kwaaymii Laguna Band of Mission Indians
- La Posta Band of Diegueño Mission Indians
- Manzanita Band of Kumeyaay Nation
- Mesa Grande Band of Diegueño Mission Indians
- San Pasqual Band of Diegueño Mission Indians
- Sycuan Band of the Kumeyaay Nation
- Viejas Band of Kumeyaay Indians

On February 9, 2023, a representative of La Posta Band of Diegueño Mission Indians responded via email requesting information about the results of the 2017 geotechnical testing, asked if anything was found,

and suggested that tribal monitors should be on site. The Tribe responded via email on February 10, 2023, that nothing cultural was observed during the 2017 geotechnical testing.

An email response was also received from a representative of Viejas Band of Kumeyaay Indians stating that Native representation should be present for ground disturbance and that Viejas band can provide monitoring services if a more local band is unavailable.

Follow up phone calls were made to those who had not yet responded on February 21 and 22, 2023. Representatives from Barona Group of the Capitan Grande stated that they would defer to Jamul's suggestions.

A representative of Ewiiaapaayp Band of Kumeyaay Indians started that they had no concerns with the proposed geotechnical testing for this project.

A representative of Iipay Nation of Santa Ysabel provided an email address to be sent a digital copy of the consultation letter but stated that the Project would be more appropriately in Sycuan and Viejas territory and he would reach back out if he had any concerns upon reviewing the digital letter. No additional responses were noted.

Lisa Cumper, a representative of Jamul Indian Village, responded in the same manner as in 2017 and requested that Jamul provide tribal monitors for the Project work.

On March 5, 2023, a representative of San Pasqual Band of Diegueño Mission Indians replied via email and requested a meeting the following week with the San Diego Coast District Archaeologist and Tribal Liaison. It is unclear if this meeting occurred.

An additional follow up call was made to the Kwaaymii Laguna Band of Mission Indians on March 6, 2023. A return voicemail was left on March 9, 2023, indicating that the Project Area is very culturally sensitive, there are human remains in the area, and that the Tribe is opposed to any ground disturbance that happens without a qualified archaeologist and tribal representative present. For any additional details on the consultation outreach, refer to the summary of consultation correspondence for the 2022 to 2023 outreach.

CSP entered into a contract agreement with Jamul Indian Village to provide Native American Monitoring services for the 2023 geotechnical testing, which occurred on September 18, 2023.

In 2024, the Project team determined that additional geotechnical testing was needed, so the CSP lead project archaeologist re-initiated consultation with the tribes that previously expressed interest in the geotechnical testing for the Project, including Viejas Band of Kumeyaay Indians, San Pasqual Band of Diegueño Mission Indians, and Jamul Indian Village. The Jamul Indian Village representative asked if it was possible to use ground-penetrating radar instead of geotechnical testing so the Project would avoid ground disturbance, but the Project design team indicated that was not possible. Jamul Indian Village requested to provide a tribal monitor for the geotechnical testing. The Viejas Band of Kumeyaay Indians responded that a tribal monitor would be needed for the work but deferred to Jamul Indian Village to provide monitors. No response was received from San Pasqual Band of Diegueño Mission Indians.

CSP entered into a contract agreement with Jamul Indian Village to provide Native American Monitoring services for the geotechnical testing, which occurred on July 7, 10, and 11, 2025.

2025 Consultation

A CSP archaeologist contacted the NAHC on May 12, 2025, on behalf of the Proposed Project, and requested a Local Government Tribal Consultation List, compliant with CEQA and AB 52, as well as a SLF Search request.

The NAHC responded on May 28, 2025, with a Tribal Consultation List and a letter stating that the SLF Search results were positive, sites are located within the identified APE, and to contact the Kwaaymii Laguna Band of Mission Indians for more information about those sites. The Tribal Consultation contact list included 19 contacts of representatives for 13 different local tribes.

Tribal consultation letters were sent out on July 14, 2025, to all physical addresses on the Consultation List. The 13 tribes on the Tribal Consultation List are the same as those on the 2022 to 2023 list.

An email response was received from a representative of Viejas Band of Kumeyaay Indians on July 22, 2025, requesting that a Kumeyaay Cultural Monitor be onsite for ground disturbing activities and to inform them of any new developments, such as inadvertent encounter of cultural artifacts, cremation sites, or human remains. If a tribe with closer proximity to the Project wishes to monitor, Viejas will defer to them.

A follow up email was sent on July 28, 2025, to all contacts with an email address listed on the Consultation List, including a copy of the mailed Consultation Letter. A representative of Campo Band of Diegueño Mission Indians sent an email on August 1, 2025, stating that he received the Consultation Letter and would like to formally discuss the Proposed Project and requested consultation. The consultation meeting occurred on September 3rd, 2025 between DPR representatives and Campo Band of Diegueño Mission Indians Tribal Historic Preservation Officer Daniel Tsosie.

- During the meeting, Mr. Tsosie expressed the following points on behalf of the Campo Band of Diegueño Mission Indians:
- Campo officially requests involvement as a project participant and to provide tribal monitoring for the project.
- Site boundaries are based on incomplete data and may not be accurate. The entire landscape should be considered as a cultural resource and the project has high potential for adverse effects.
- Impacts to tribal cultural resources should be avoided.
- Tribal monitors and archaeological monitors should be present for all ground disturbance, even outside of known sites, because of the high potential for buried resources in this alluvial environment.

- Campo's preference is to keep removed soils/ trench spoils onsite at Border field, as close as possible to where they originated, and if soil containing any potential cultural material is moved outside of the site, the new location should be recorded.
- If any cultural resources/ features such as midden deposits are encountered, those spoils should be screened, but otherwise no screening of trenching spoils would be needed.
- No artifact collection is to occur for this project; artifacts and other cultural materials are to stay on site as close as possible to their original location.
- Campo recommends fencing project work limits to protect nearby sites from accidental vehicle impacts. Details of project work limit fencing and other BMPs have not been fully worked out yet.
    - DPR to follow up with Campo to discuss fencing and BMPs once plans are farther along.
- Campo was not able to immediately answer the question of whether there are any *tribal cultural resources* (TCRs) other than the known archaeological sites in the vicinity of the project.
    - Ethnographic research in tribal files would have to be conducted to be able to provide any additional information about TCRs.
    - DPR and Campo to follow up on potential scope and compensation for ethnographic research.

No other responses have been received to date. If ethnographic research identifies any additional TCRs, and/or if any additional consultation occurs while the EIR is in draft stage, a summary will be included in the Final EIR.

3.18.3 Regulatory Setting

3.18.3.1 Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) was enacted in 1966 to protect historic and archaeological sites. It also provides the legal framework for most state and local preservation laws. The NHPA established the National Register of Historic Places, created the Advisory Council on Historic Preservation, authorized funding for state programs with participation by local governments, and established a review process for protecting cultural resources.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act (NAGPRA) was passed in 1990 to provide for the protection and return of Native American human remains, funerary belongings, sacred objects, and objects of cultural patrimony to lineal descendants, culturally-affiliated Indian Tribes, and Native Hawaiian organizations. Federal agencies and museums, universities, state agencies, local governments, or any institution that receives Federal funds must comply with NAGPRA.

3.18.3.2 State

Native American Heritage Commission

Public Resources Code (PRC) Section 5097.91 established the NAHC, the duties of which include inventorying places of religious or social significance to Native Americans and identifying known graves and cemeteries of Native Americans on private lands. PRC Section 5097.98 specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a county coroner.

Assembly Bill 52 and Related Public Resources Code Sections

AB 52 was approved by California State Governor Edmund Gerald "Jerry" Brown, Jr. on September 25, 2014. The act amended California PRC Section 5097.94, and added PRC Sections 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, and 21084.3. AB 52 applies specifically to projects for which a Notice of Preparation or a Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration (MND) will be filed on or after July 1, 2015. The primary intent of AB 52 was to include California Native American Tribes early in the environmental review process and to establish a new category of resources related to Native Americans that require consideration under CEQA, known as tribal cultural resources. PRC Section 21074(a)(1) and (2) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe" that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources, or a resource that is determined to be a tribal cultural resource by a lead agency, in its discretion and supported by substantial evidence. On July 30, 2016, the California Natural Resources Agency adopted the final text for tribal cultural resources update to CEQA Guidelines Appendix G, which was approved by the Office of Administrative Law on September 27, 2016.

PRC Section 21080.3.1 requires that within 14 days of a lead agency determining that an application for a project is complete, or a decision by a public agency to undertake a project, the lead agency provide formal notification to the designated contact, or a tribal representative, of California Native American Tribes that are traditionally and culturally affiliated with the geographic area of the project (as defined in PRC Section 21073) and who have requested in writing to be informed by the lead agency (PRC Section 21080.3.1(b)). Tribes interested in consultation must respond in writing within 30 days from receipt of the lead agency's formal notification and the lead agency must begin consultation within 30 days of receiving the tribe's request for consultation (PRC Sections 21080.3.1(d) and 21080.3.1(e)).

PRC Section 21080.3.2(a) identifies the following as potential consultation discussion topics: the type of environmental review necessary; the significance of tribal cultural resources; the significance of the project's impacts on the tribal cultural resources; project alternatives or appropriate measures for preservation; and mitigation measures. Consultation is considered concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or (2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC Section 21080.3.2(b)).

If a California Native American tribe has requested consultation pursuant to Section 21080.3.1 and has failed to provide comments to the lead agency, or otherwise failed to engage in the consultation process, or if the lead agency has complied with Section 21080.3.1(d) and the California Native American tribe has failed to request consultation within 30 days, the lead agency may certify an EIR or adopt an MND (PRC Section 21082.3(d)(2) and (3)).

PRC Section 21082.3(c)(1) states that any information, including, but not limited to, the location, description, and use of the tribal cultural resources, that is submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public without the prior consent of the tribe that provided the information. If the lead agency publishes any information submitted by a California Native American tribe during the consultation or environmental review process, that information shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public.

California Native American Graves Protection and Repatriation Act of 2001

The California NAGPRA was passed in 2001 and requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate tribes. Under California NAGPRA, the NAHC was granted oversight authority. California NAGPRA was amended in 2020 by AB 275 to add additional NAHC responsibilities, including maintaining a list of California Indian tribes and their state aboriginal territories, adopting mediation procedures, and publishing notices of completion of preliminary inventories and summaries on the NAHC website.

California Public Records Act

California Public Records Act Sections 6254(r) and 6254.10 were enacted to protect archaeological sites from unauthorized excavation, looting, or vandalism. Section 6254(r) explicitly authorizes public agencies to withhold information from the public related to "Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission." Section 6254.10 specifically exempts from disclosure requests for "records that relate to archaeological site information and reports maintained by, or in the possession of, DPR, the State Historical Resources Commission, the State Lands Commission, the NAHC, another state agency, or a local agency, including the records that the agency obtains through a consultation process between a California Native American tribe and a state or local agency."

Executive Order B-10-11

Every state agency and department shall encourage communication and consultation with Native American Tribes.

California Department of Parks and Recreation Consultation Policy (Departmental Notice 2007-05)

DPR recognizes its special responsibility as the steward of many sites of cultural and spiritual significance to living Native peoples of California. Therefore, it is the policy of California State Parks to engage in open, respectful, ongoing consultation with appropriate Native California Indian tribes or groups in the proper management of areas, places, objects or burials associated with their heritage, sacred sites, and traditional cultural properties or cultural traditions in the State Park System.

Prior to implementing projects or policies that may have impacts to Native California Indian sites within the State Park System, DPR will actively consult with local Native California Indian tribes regarding the protection, preservation and/or mitigation of cultural sites and sacred sites in the State Park System.

3.18.4 Impact Analysis

3.18.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.18.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for tribal cultural resources were derived from Appendix G of the CEQA Guidelines. Impacts to tribal cultural resources are considered significant if the Proposed Project would:

- cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    - (x) 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
    - (xi) 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.

3.18.4.3 Impact Discussion

Threshold 1: Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- ***(i) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or***
- ***(ii) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.***

Less than Significant with SPRs and PSRs Incorporated. While the NAHC Sacred Lands File search was positive for the general area, the Project APE does not overlap the sacred site area. Tribal consultation throughout the Project planning process indicates that the entire Project Area is sensitive for tribal cultural resources. Known tribal cultural resources include archaeological sites CA-SDI-222, Isolate P-37-02061, and the buried precontact components of CA-SDI-13485 and CA-SDI-16047. (Please see Cultural Resources Section 3.5 for details and analysis regarding these archaeological sites). There is also the potential that additional unidentified tribal cultural resources are present within the Project Area. Implementation of SPRs TCR-3, TCR-4, and TCR-7; PSRs TCR- 1, TCR-5, and TCR-6; and Mitigation Measure TCR-2 below would reduce the level of potential impact to less than significant.

3.18.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

TCR-1 (PSR): An additional records search of ethnographic information held by the Campo Band of Diegueño Mission Indians shall be completed to ensure that all potential tribal cultural resources potentially present in or near the Project Area have been identified prior to the Project start.

TCR-2 (MM): In the vicinity of CA-SDI-13485 and CA-SDI-16047, the maximum depth of Project excavation shall be constrained to 3 feet below current ground surface to ensure avoidance of known significant, intact tribal cultural resources.

TCR-3 (SPR): A Kumeyaay cultural monitor and an archaeological monitor shall be present for all ground-disturbing activities associated with this Project to identify any tribal cultural resources that may be present subsurface in the Project Area.

TCR-4 (SPR): If any potentially significant tribal cultural resources are encountered during Project work, work shall cease in the immediate vicinity until cultural resource specialists and tribal representatives can record and evaluate the resource and recommend appropriate

treatment measures. Avoidance is the preferred treatment method for tribal cultural resources.

TCR-5 (PSR): No artifact collection shall occur as part of this Project.

TCR-6 (PSR): It is recommended that all soil/sediment removed during grading and trenching be kept within Border Field State Park and replaced as close as possible to its point of origin. If material from within an archaeological site boundary is redeposited outside of the site, the redeposit location(s) shall be recorded on DPR 523 site record update(s).

TCR-7 (SPR): A DPR 523 site record or site record update form shall be prepared for any cultural resources newly identified or updated during the course of the Project.

3.18.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, and Mitigation Measures

With the implementation of SPRs, PSRs, and mitigation impacts to tribal cultural resources would be less than significant.

3.19 Utilities and Service Systems

3.19.1 Introduction

This section describes the affected environment and regulatory setting of the Project relating to demand for operational utilities (i.e., water supply, stormwater, electricity, natural gas, telecommunications, and solid waste disposal). This section describes existing infrastructure and levels of service and evaluates whether any improvements would be required to accommodate the Project. Impacts to utilities and service systems resources are considered significant if the Proposed Project would (1) exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; (2) require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; (3) require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; (4) have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; (5) result in determination by the wastewater treatment provider which serves or may serve the project that is adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; (6) be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or (7) comply with federal, state, and local statutes and regulations related to solid waste.

3.19.2 Environmental Setting

The Project Area is located within a larger unit called the Tijuana River National Estuarine Research Reserve, which is approximately 2,500 acres in size. The Project Area is located in the very southwestern corner of the United States, in the cities of San Diego and Imperial Beach.

3.19.2.1 Water Supply

Within the City of San Diego, water is imported from the Colorado River and the Sacramento Delta via the California Aqueduct (State Water Project). The City has no direct control over the imported water supply but is a member agency of the San Diego County Water Authority, which is responsible for securing the San Diego region's water supply from the Metropolitan Water District of Southern California. The City's Public Utility District (PUD) treats and delivers a current average of approximately 175,000 acre-feet per year of water to approximately 1.4 million residents. The water system extends over approximately 400 square miles, including approximately 340 square miles in the City. PUDs' potable water system serves the City and certain surrounding areas, including both retail and wholesale customers. The project areas are all located within PUD's water service area. To offset potable (drinking) water demands, the City owns and operates two water reclamation plants and a recycled water distribution system that delivers recycled water for non-potable water uses. A small percentage of the annual water supply is sourced from local supplies including groundwater, reservoirs, and recycled water. According to the City of San Diego Urban Water Management Plan, the City's water demands are projected to increase by approximately 25,000 acre-feet per year (City of San Diego 2020). Through its newest initiative, San Diego's Pure Water program will provide nearly half of San Diego's water locally by the end of 2035.

The City of Imperial Beach services potable water from the Californian-American Water Company (CAWC). Currently, CAWC services approximately 20,300 customers via individual connections to lateral mains generally running beneath north-south streets. According to the City of Imperial Beach General Plan, water usage of the city is proportional to the CAWC service area and water demands are minimal.

3.19.2.2 Wastewater Treatment

The City of San Diego provides regional wastewater treatment and disposal services for the Project Area through its Metropolitan Sewerage System. The Metropolitan Sewerage System collects, treats and disposes wastewater for approximately 450 square miles and approximately 2.2 million people within the San Diego region. The City's three water treatment plants Alvarado, Miramar and Otay have a combined permitted total capacity of approximately 378 million gallons per day (gpd). PUD maintains and operates numerous water pump stations within over 130 pressure zones (within the City's retail service area), and numerous treated water storage facilities.

3.19.2.3 Stormwater Infrastructure

According to the City of San Diego General Plan EIR, the City of San Diego's stormwater system is maintained by the City's Stormwater Department (City of San Diego 2024). It consists of drainage and conveyance facilities such as underground storm drainpipes, culverts, outfalls, pump stations, open flood risk management channels, and more. This infrastructure collects and conveys stormwater and other runoff downstream. Storm drains are designed to handle normal water flow, but occasionally during heavy rain flooding will occur. The City's Stormwater Department is responsible for the inspection, maintenance, and repair of the City's 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.

3.19.2.4 Electricity and Natural Gas Service

San Diego Gas & Electric (SDG&E) is the owner and operator of electricity transmission, distribution, and natural gas distribution infrastructure in San Diego County, and currently provides gas and electric services to the project areas. SDG&E is regulated by the California Public Utilities Commission. The California Public Utilities Commission sets the gas and electricity rates for SDG&E and is responsible for making sure that California utilities customers have safe and reliable utility service at reasonable rates, protecting utilities customers from fraud, and promoting the health of California's economy.

SDG&E supplies customers with electricity generated both locally and outside of the utility's service territory, with local facilities currently capable of generating a total of approximately 3,100 megawatts of power. SDG&E owns and contracts with generation facilities both within and outside its service territory, and power is also produced in local facilities that are non-utility owned (SDG&E 2021).

Natural gas is imported into the San Diego region by pipeline after being produced at any of several major supply basins located from Texas to Alberta, Canada. Although the San Diego region has access to all of these basins by interstate pipeline, the final delivery into the SDG&E system is dependent on just

one Southern California Gas Company pipeline that enters San Diego County from Orange County located along Interstate 5.

Natural gas consumption by sector varies somewhat each year. In general, power plants account for the highest percentage of natural gas consumption in the San Diego region. Residential consumption of natural gas for heating and cooking is the second highest percentage, followed by cogeneration, commercial and industrial consumption, and natural gas fueled vehicles.

3.19.2.5 Telecommunications

Communications systems for telephones, computers, and cable television are serviced by utility providers such as AT&T, Cox, Spectrum (formerly Time Warner), and other independent cable companies. In addition, television services are available from the two satellite services, Direct TV and Dish. Facilities are located above and below ground within private easements. The City of San Diego also works with service providers to underground overhead wires, cables, conductors, and other structures associated with communication systems in residential areas in accordance with the City's Municipal Code.

3.19.2.6 Solid Waste

In the Project Area, solid waste collection is provided by a private waste hauler. Solid waste in San Diego County is disposed of at a variety of landfills. The Otay Landfill are disposal facilities that serve the Project Area, permitted to receive a maximum of 6,700 tons of waste per day. As of 2016, remaining capacity at this landfill was estimated to be approximately 21 million cubic yards. As of 2023, the landfill's estimated cease operation date was determined to be 2030 (CalRecycle 2023).

3.19.3 Regulatory Setting

3.19.3.1 Federal

<u>Clean Water Act</u>

The Clean Water Act (CWA) is the cornerstone of surface water quality protection in the United States. The statute employs a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based on biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards.

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p),

which establishes a framework for regulating municipal and industrial stormwater discharges, including discharges associated with construction activities, under the NPDES program.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA), passed by Congress in 1974, authorizes the federal government to set national standards for drinking water. These National Primary Drinking Water Regulations protect against both naturally occurring and artificial contaminants. The SDWA sets enforceable maximum contaminant levels for drinking water and all water providers in the United States, excluding private wells serving fewer than 25 people, must treat water to remove contaminants.

The 1986 amendments to the SDWA and the 1987 amendments to the CWA established the U.S. Environmental Protection Agency (USEPA) as the primary authority for water programs throughout the country. The USEPA is the federal agency responsible for providing clean and safe surface water, groundwater, and drinking water, and protecting and restoring aquatic ecosystems. USEPA Region 9 (Pacific Southwest) includes Arizona, California, Hawaii, Nevada, the Pacific Islands (Northern Marianas, Guam, and American Samoa), and a minimum of 148 Tribal Nations located within Arizona, California, and Nevada.

3.19.3.2 State

California Coastal Act

The California Coastal Act governs development within the Coastal Zone. Chapter 3 of the Coastal Act, Coastal Resources Planning and Management Policies, includes policies that constitute the standards for the adequacy of local coastal programs and development subject to the California Coastal Act. There are no polices relevant to utilities and services systems.

State Water Resources Control Board

The main responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). The SWRCB sets statewide policy for the application of State and federal laws and regulations. The RWQCBs endorse and implement Water Quality Control Plans (Basin Plans), which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The Project Area falls within the jurisdiction of the San Diego RWQCB (SWRCB 2022).

California Department of Water Resources

The California Department of Water Resources is in charge of protecting, conserving, developing, and managing much of California's water supply. These responsibilities include preventing and responding to floods, droughts, and catastrophic events; informing and educating the public on water issues; developing scientific solutions; restoring habitats; planning for future water needs, impacts from climate change, and flood protection; constructing and maintaining facilities; generating power; ensuring public safety; and providing recreational events.

California Water Code Section 13260

California Water Code Section 13260 requires any person who discharges waste, not including a community sewer system, or proposes to discharge waste that could affect the quality of waters of the State to submit a report of waste discharge to the applicable RWQCB. Any Project activity that would be applicable under California Water Code Section 13260 would be reported to the San Diego RWQCB.

California Integrated Solid Waste Management Act of 1989 or Assembly Bill 939

Pursuant to the California Integrated Solid Waste Management Act of 1989 (PRC Section 40050, et seq.) or AB 939, all cities in California need to decrease the amount of solid waste disposed in landfills. AB 939 required a reduction of 25 percent by 1995 and 50 percent by 2000. Contracts that include work that would generate solid waste, such as construction and demolition debris, have been targeted for participation in source-reduction, reuse, and recycling programs. Contractors are encouraged to manage solid waste generated by the work to divert waste from disposal in landfills (particularly Class III landfills) and maximize source reduction, reuse, and recycling of construction and demolition debris.

Assembly Bill 341

Since the passage of AB 939, diversion rates in California have decreased to approximately 65 percent, the statewide recycling rate to approximately 50 percent, and the beverage container recycling rate to approximately 80 percent. In 2011, the State passed AB 341, which created a policy goal that a minimum of 75 percent of solid waste must be reduced, recycled, or composted by the year 2020. The State established the following strategies to achieve that 75 percent goal:

- Moving organics out of the landfill;
- Expanding the recycling/manufacturing infrastructure;
- Exploring new approaches for State and local funding of sustainable waste management programs;
- Promoting State procurement of post-consumer recycled content products; and
- Promoting extended producer responsibility.

The State recommended legislative and regulatory changes including mandatory organics recycling, solid waste facility inspections, and revising packaging in order to achieve the strategies above. In regard to construction and demolition, the State recommended an expansion of California Green Building Code standards that incentivize green building practices and increase diversion of recoverable construction and demolition materials. Currently, standards require 50 percent waste diversion on construction and some renovation Projects, though this may be raised to 65 percent for nonresidential construction in upcoming changes to the standards. The State also encourages the recovery of construction and demolition materials suitable for reuse, compost or anaerobic digestion before residual wastes are considered for energy recovery.

3.19.4 Impact Analysis

3.19.4.1 Methodology

Potential impacts to utilities and service systems associated with construction and operation of the Project have been analyzed using a variety of resources, including multiple online sources and published documents. In addition, current data obtained from the County and State of California about the capacity of landfills was used to identify potential impacts. Using these resources and professional judgment, impacts were evaluated according to significance criteria established in Appendix G of the CEQA Guidelines and described below.

3.19.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for utilities and service systems were derived from Appendix G of the CEQA Guidelines. Impacts to utilities and service systems are considered significant if the Proposed Project would:

52) require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

53) have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years;

54) 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;

55) generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or

56) comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

3.19.4.3 Impact Discussion

Threshold 1: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact. Utilities within the Project Area include water, storm drains, electrical lines, gas lines, and telecommunication lines. The Project proposes existing above-grade electrical and telephone lines would be removed or undergrounded, as part of the habitat restoration and consistent

with the City of Imperial Beach General Plan policy. Additionally, new electrical lines and 6-inch water mains are proposed to be trenched within the new roadway alignment.

Water

During construction, water would be primarily used for dust suppression and soil compaction during ground-disturbing activities. Water is expected to be brought in by truck during construction and would not result in a long-term demand. The Project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects and impacts would be less than significant.

Wastewater Treatment

A minimal amount of wastewater would be generated from the construction of the Project. The Project would not require connection to any septic systems or sewer infrastructure. Temporary sanitary facilities such as portable restrooms would be provided during construction and would not require a water supply. Wastewater would be contained within portable toilet facilities and portable hand washing facilities, then disposed of at an approved offsite disposal site. No offsite sewage or disposal connections to a municipal sewer system are present within the Project Area and are not proposed for the Project. Therefore, construction of the Project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects and impacts would be less than significant.

Stormwater Drainage

The Project would include minimal excavation and grading during site preparation, which would alter the existing drainage patterns onsite. However, the Project would be designed so the control of runoff would be maintained or improved over the runoff conditions currently found at the Project Area prior to construction. The Project would be required to adhere to San Diego County stormwater requirements, which include BMPs to address stormwater controls on both management of runoff volume and water quality, including controlling erosion and protection of water quality of stormwater runoff. Additionally, in compliance with National Pollutant Discharge Elimination System General Construction Permit requirements, the Project would design and submit a site-specific Storm Water Pollution Prevention Plan (SWPPP) to minimize the discharge of wastewater during construction and a Water Quality Management Plan that include BMPs for runoff control.

Therefore, the Project would not result in the relocation or construction of new or expanded stormwater drainage facilities; the construction or relocation of which could cause significant environmental effects and impacts would be less than significant.

Electric Power

Electricity is not anticipated to be consumed in large quantities during the construction phase, as the equipment and vehicles used are typically diesel- or gasoline-powered. The Project Area is within SDG&E's service territory; however, the Project does not propose new uses that are dependent on

electrical energy. Construction of the Project would not displace existing electrical facilities and would tie into existing facilities. Relocation of electrical facilities would not be required. Therefore, construction and installation of the new electrical infrastructure would potentially cause a temporary environmental effect on electrical power; the disturbance would be minimal and short-lived and impacts would be less than significant.

Natural Gas

No natural gas pipelines are present within the Project Area. Natural gas would not be required for the construction of the Project. As the construction of the Project would not require or result in the relocation or construction of new or expanded natural gas facilities, no impact would occur.

Telecommunications

No telecommunication facilities are present within the Project Area. Telecommunication facilities would not be required for the construction of the Project. As the construction of the Project would not require or result in the relocation or construction of new or expanded telecommunication facilities, no impact would occur.

Threshold 2: Would the Project have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Less than Significant Impact. Water service for the Project Area is provided by the City of San Diego's Public Utility District. The various components for the Proposed Project would not require the establishment of new or expanded water entitlements in order to serve the proposed development during normal, dry, and multiple dry years.

Short-term construction activities would require minimal water and are not expected to have adverse impacts to the existing water system or cause a demand that would result in the construction of new water treatment facilities or the expansion of existing facilities. As previously identified, water is expected to be brought in by truck during construction. In addition, the construction contractor would comply with all State and local water conservation regulations and construction site best management practices would be implemented to reduce water use where feasible and ensure no inefficient water use occurs during construction. Therefore, impacts would be less than significant.

Threshold 3: Would the Project result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?

No Impact. Wastewater treatment within the Project Area is provided by on-site wastewater treatment facilities and there are no current sewer connections serving the Project area. Wastewater treatment for other sewer connections within the vicinity of the City of San Diego is provided by the Metropolitan Sewage System.

As proposed, the Project does not include habitable structures, and Project occupants would be limited to park visitors. The proposed Project activities would restore and maintain year-round access to BFSP,

Monument Mesa, and the coastline in conformity with the public access and public recreation policies of the Local Coastal Program. No wastewater would be generated, and the septic system would continue to be utilized throughout the Project Area. Therefore, the Project would not cause an impact to the wastewater service.

Threshold 4: Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. As previously described, solid waste disposal services in the Project Area are primarily provided by private waste haulers contracted with the City of San Diego. All waste within the Project vicinity is transported to the Otay Landfill, located approximately 9 miles from the Project Area. The Proposed Project would generate solid waste during construction and operation as a result of daily operations of visitor services. Construction activities associated with the Proposed Project would generate solid waste as a result of culvert removal, curb removal, guard rail removal, clearing and grubbing brush and debris disposal. Generation of the construction debris and waste material would be short-term in nature and would not have the capability to substantially affect the capacity of regional landfills. The Proposed Project would be compliant with the City of San Diego Construction & Demolition Debris Deposit Ordinance which requires that the majority of construction, demolition and remodeling projects requiring building, combination and demolition permits divert construction and demolition debris from landfill disposal.

No new demand for solid waste services would be generated with Project operation as no new facilities that would generate solid waste are proposed. The various components for the Proposed Project would not generate solid waste in excess of the capacity of existing infrastructure or impact local solid waste reduction goals. Therefore, the impact would be less than significant.

Construction

Threshold 5: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The Proposed Project would generate solid waste related to park visitors and DPR facilities. Operation of the existing public restroom building, park facilities, and concessions would all be subject to federal, state, and local regulations to minimize the amount of waste material entering local landfills, including AB 341 and AB 1826, which would reduce solid waste generated by these uses through implementation of recycling and organic waste recycling programs. These facilities would also replace existing similar uses and do not include any land uses that would generate substantial quantities of solid waste in conflict with federal, state, or local reduction requirements.

Construction activities would result in solid waste generation from culvert removal, curb removal, guard rail removal, clearing and grubbing brush and debris disposal. The proposed Project would comply with all statutes and regulations related to solid waste including California Green Building Standards Code Section 5.408, which require recycling or reuse of at least 50 percent of nonhazardous construction and demolition waste from nonresidential construction operations.

3.19.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.19.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.20 Wildfire

3.20.1 Introduction

This section describes the affected environment and regulatory setting for wildland wildfire. The section includes the physical and regulatory setting for the Proposed Project, the methods used in evaluating these potential impacts, the criteria used to examine the significance of the potential impacts, and an analysis of the potential impacts from wildfire. Impacts to wildfires are considered significant if the Proposed Project would (1) substantially impair an adopted emergency response plan or emergency evaluation plan; (2) 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; (3) require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or (4) expose people or structures to significant risks, including downslope or downstream flood or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

The analysis is based on the following:

- CAL FIRE City of San Diego & City of Imperial Beach Fire Hazards Severity Zones (FHSZ) Maps (CAL FIRE 2024).

3.20.2 Environmental Setting

3.20.2.1 Site Characteristics and Fire Environment

BFSP is located at 1500 Monument Road in the cities of San Diego and Imperial Beach in the extreme southwest corner of California, and immediately north of the United States-Mexico International Border. The Park is part of a larger unit called the Tijuana River National Estuarine Research Reserve, comprised of sand dunes and salt marshes. With elevations ranging from approximately 45 feet above msl at Goat Canyon to approximately 10 feet above msl at the connection to the southern east-west segment of Monument Road.

CAL FIRE classifies FHSZs based on factors including fuel, slope, and fire weather to identify the degree of fire hazard throughout California (i.e., moderate, high, or very high). Although FHSZs do not predict where or when a wildfire will occur, they do identify areas where wildfire hazards could be more severe. According to the City of San Diego and City of Imperial Beach State Responsibility Areas (SRAs) Fire Hazard Severity Zones map, the Project Area is not located within an SRA or Federal Responsibility Area. However, the Project Area is found within a LRA and overlaps with the Very High, High, and Moderate FHSZs (CAL FIRE 2025).

3.20.2.2 Fire History

An understanding of fire history can provide crucial information regarding fire frequency, fire type, most vulnerable Project areas, and significant ignition sources. Fire history represented in this section uses the CAL FIRE's Fire and Resources Assessment Program database (CAL FIRE 2022). Based on a review of these maps, two fires have been recorded to have burned across the Project Area since 1950. In 1953, the Lazy A Fire burned 363.17 acres, spanning across the United States-Mexico International Border, south of Monument Road within the Project Area. The Assist #49 Fire, located within the Project Area along Monument Road, occurred on October 26, 1983, and burned a total of 130.88 acres (CAL FIRE 2024).

3.20.2.3 Fire Protection Services

Fire and emergency medical services in the Project Area are provided by the City of San Diego Fire-Rescue Department (SDFD) responsibility area. SDFD is responsible for the preparation, maintenance, and execution of Fire Preparedness and Management Plans. SDFD coordinates with other local city and fire district departments, the San Diego County Fire Authority, California Department of Forestry and Fire Protection, and the federal fire departments through mutual aid agreements (City of San Diego 2024).

The Project Area is primarily undeveloped and presents no major interference with implementation of emergency response services. Via Monument Road, the Project Area is easily accessible from I-5. Emergency response for the Project Area and surrounding area is provided, initially, by the City from Station 29 in San Ysidro. Station 29 is located at 198 West San Ysidro Boulevard and is staffed with City firefighters and paramedics.

3.20.2.4 Vegetation (Fuels)

The type and condition of vegetation plays a significant role in wildfire spread occurrence. Certain plant types are more susceptible to burning or once ignited, burn with greater intensity. Dense or overgrown vegetation increases the amount of combustible material available to fuel a fire; the ratio of living to dead plant matter is also important.

3.20.3 Regulatory Setting

3.20.3.1 Federal

The Project is located within the Tijuana River National Estuarine Research Reserve which is a state-federal partnership between the National Oceanic and Atmospheric Administration and DPR . There are no federal regulations that apply to the Project pertaining to wildfire.

3.20.3.2 State

<u>2022 California Fire Code</u>

The 2022 California Fire Code (24 CCR 9) establishes regulations to protect against the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises. The Fire Code

also provides requirements to provide safety for, and assistance to firefighters and emergency responders during emergency operations. The Fire Code provisions apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure throughout California. Chapter 6 (Building Services and Systems) of the Code focuses on building systems and services as they relate to potential safety hazards and when and how they should be installed. Building services and systems are addressed and include emergency and standby power systems, electrical equipment, wiring and hazards, and stationary storage battery systems. Chapter 33 (Fire Safety During Construction and Demolition) of the Code describes general fire safety precautions to manage required levels of fire protection, limit fire spread, establish the correct operation of equipment, and promote prompt response to fire emergencies. The Fire Code includes regulations regarding fire-resistance-rated construction, fire protection systems such as alarm and sprinkler systems (for inhabited structures), fire service features such as fire apparatus access roads, means of egress, fire safety during construction and demolition, and wildland-urban interface areas.

2022 California Building Code, Chapter 7A

Chapter 7 of the 2016 California Building Code outlines the materials, systems, and/or assemblies used in the exterior design and construction of new buildings found within a Wildland-Urban Interface Fire Area. A Wildland-Urban Interface Area is defined in Section 702A as a geographical area identified by the state as a "Fire Hazard Severity Zone" in accordance with the Public Resources Code Sections 4201 to 4204 and Government Code Sections 51175 to 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires. The building code describes the materials, systems, and assemblies used for structural fire resistance and fire-resistance-rated construction separation of adjacent spaces to safeguard against the spread of fire and smoke within a building and the spread of fire to or from buildings.

Public Resources Code 4291 to 4299

California Public Resources Code Sections 4291 to 4299 et seq. states that brush, flammable vegetation, or combustible growth within 100 feet of buildings be maintained. Vegetation that is more than 30 feet from the building, less than 18 inches high, and is important for soil stability may be preserved, as may single specimens of trees or other vegetation that is maintained to manage fuels and not form a means of rapid-fire transmission from other nearby vegetation to a structure. California Public Resources Code Sections 4291 to 4299 et seq. applies to both high fire threat districts, which is decided by the California Public Utilities Commission pursuant to its rulemaking authority, and SRAs. Additionally, the Public Resources Code outlines infraction fees, certification, and compliance procedures applicable with state and local building standards, including those described in Government Code Section 51189(b).

3.20.3.3 Regional

County of San Diego Emergency Operations Plan

Adopted in 2022, the San Diego County Emergency Operations Plan identifies a comprehensive emergency management system which provides for a planned response to disaster situations associated with natural disasters, technological incidents, terrorism and nuclear-related incidents. The plan delineates

operational concepts relating to various emergency situations, identifies components of the Emergency Management Organization, and describes the overall responsibilities for protecting life and property and assuring the overall wellbeing of the population (San Diego County 2022).

County of San Diego Multi-Jurisdictional Hazard Mitigation Plan

The County of San Diego's Multi-Jurisdictional Hazard Mitigation Plan was adopted in 2023. The plan identifies risks and ways to minimize damage by natural and human-caused disasters. It describes historical fires that have occurred in San Diego County, outreach to residents, wildfire risk assessment, and recommended mitigation actions. Each hazard was assessed and based on historical data and probability of future events. The overall significance of wildfire/structure fire is high, likely to occur with severe strength (San Diego County 2023).

County of San Diego Wildfire Resilience Review

The 2019 County of San Diego Resilience Review Report focuses on strategies to enhance community resilience against wildfires and improve preparedness, response, and recovery efforts in unincorporated areas. The review process identifies gaps in wildfire preparedness and response and recommends adoption of 16 principal objectives across three focus areas: pre-fire, response, and recovery (WRR 2019).

3.20.4 Impact Analysis

3.20.4.1 Methodology

The impact analysis is based on an assessment of baseline conditions relevant to the Project Area and an assessment of Project-related effects on baseline conditions during Project construction, operation, and maintenance using appropriate technical analysis and the impact significance criteria.

3.20.4.2 Thresholds of Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the Proposed Project. The following significance criteria for wildfire were derived from Appendix G of the CEQA Guidelines. Wildfire impacts are considered significant if the Proposed Project would:

1) substantially impair an adopted emergency response plan or emergency evacuation plan;
2) 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;
3) require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
4) 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.

3.20.4.3 Impact Discussion

Threshold 1: Would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact. According to the County of San Diego Multi-Jurisdictional Hazard Mitigation Plan and County of San Diego Operational Area Emergency Operations Plan, the Project is not located within an identified evacuation route. Monument Road serves as the main access road to BFSP and has been temporarily closed to hiking, biking, equestrian activity, and vehicles due to cross-border sedimentation and flooding. The Proposed Project would result in the restoration of Monument Road, realigning and elevating two segments along the existing north-south and east-west segment of Monument Road. Restoration of the roadway would construct a new aggregate-surfaced pavement and would be designed to accommodate large emergency response vehicles, such as fire trucks, to service BFSP and Monument Mesa. The Project does not include any development that would impair the use of nearby roadways or designated evacuation routes. Further, the Project does not include any habitable structures nor would the Project result in population growth in the region, which could affect emergency response. Therefore, the impact would be less than significant.

Threshold 2: Would the Project 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?

Less than Significant Impact. The Project is located within a Very High FHSZ and topography of the Project Area exhibits a diverse coastal topography with salt marshes and sand dune formations. The Project is located in a non-urbanized area on parcels with a land use designation of Park, Open Space, & Recreation and Public Facility and is surrounded by other Park, Open Space, & Recreation uses. Within the Project Area, Goat Canyon and Yogurt Canyon exhibit steep hillsides and would be susceptible to additional risk associated with the rapid spread of wildfire. The Project does not include habitable structures, and Project occupants would be limited to park visitors.

Habitat restoration of upland habitat could increase the spread of wildfire on and off the site. Restoration of the Project site would introduce new potential sources of ignition during Project construction activities, as well as when final restoration conditions are achieved. However, an increase in riparian bank habitats would effectively create more inundated areas less susceptible to catching fire. Thus, restoration activities would further reduce the fuel ignition and fire hazards. Impacts would be less than significant.

Threshold 3: Would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less than Significant Impact. As proposed, the Project would include the installation and maintenance of associated infrastructure, including improved roadways, water connections, and power lines. The Proposed Project would demolish the existing pavement along the southern east-west segment of Monument Road, and design and construct a new aggregate-surfaced pavement, and a small section of asphalt concrete, along the proposed road alignment. The existing alignment along Monument Road

exhibits an existing dirt roadway that provides public access to BFSP and Monument Mesa, when flooding is not in occurrence. The proposed improvements to the existing roadway, Monument Road, would be designed to reduce flooding and sediment deposition. The proposed design of Monument Road would accommodate trucks with horse trailers, large tour buses, and large emergency response vehicles, such as fire trucks. The proposed road widths (12 feet travel lanes) are designed based on the current Caltrans Highway Deign Manual. Therefore, the Project would result in improved access by fire and emergency vehicles.

In addition, an existing 6-inch water main, electrical/telephone line, and electrical pull boxes are located along the north-south segment of Monument Road. As proposed, the Project would remove above grade fixtures and trench utilities underground. The new electrical lines would introduce new potential sources of ignition to the Project Area; however, the new electrical lines and 6-inch water main would be placed underground, continuing power and service to the Project Area. The installation of utilities would additionally require clearing and grubbing of existing vegetation within the area. Therefore, the Project would not result in increased fire risks that could result in temporary or ongoing impacts to the environment. Impacts would be less than significant.

Threshold 4: Would the Project 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?

Less than Significant Impact. According to the City of San Diego Seismic Safety Study Geologic Hazards and Faults Map, the Project Area is not within a landslide hazard category area (City of San Diego 2008). The map designates the site as primarily "High Potential" for liquefaction and "Low to Moderate Risk" in the south due to level/sloping terrain.

As proposed, the Project would address seasonal flooding within the Project Area, which is caused by storm runoff flows from the nearby drainages of Goat Canyon and Yogurt Canyon. Roadway improvements would largely elevate segments of Monument Road above the base flood elevation and would install seven precast culverts at three locations. Proposed culverts would allow more sediment to pass beneath Monument Road than existing conditions, thus reducing the sediment deposition rate south of Monument Road and contributing to a reduction in flooding.

With consideration to the intent of the Project; implementation of construction BMPs to stabilize slopes, control erosion, and protect water quality; appropriate compaction and protection of fill slopes; and installation of native vegetation, potential impacts associated with post-fire flooding, runoff, or slope instability are considered less than significant.

3.20.5 Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

3.20.6 Level of Significance with Standard Project Requirements, Project Specific Requirements, or Mitigation Measures

No SPRs, PSRs, or mitigation measures are required.

4.0 OTHER ENVIRONMENTAL CONSIDERATIONS

This section provides brief discussions of other topics specifically mandated by the California Environmental Quality Act (CEQA). These topics include the following:

- Unavoidable significant adverse impacts
- Significant irreversible environmental changes
- Growth-inducing impacts
- Cumulative impacts

4.1 Significant Unavoidable Adverse Impacts

Section 15126.2(c) of the State CEQA Guidelines require that an Environmental Impact Report (EIR) describe any significant impacts, including those that can be mitigated but not reduced to a less-than-significant level. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications, and the reasons why a project is being proposed, notwithstanding their effect, should also be described.

A significant and unavoidable impact is one that would cause a substantial adverse effect on the environment and for which no mitigation is available to reduce the impact to a less-than-significant level. As discussed in Sections 3.1 through 3.20 of the Draft EIR, the proposed Border Field State Park (BFSP) Resilience, Access, and Habitat Restoration Project (Project) would not result in any significant impact that cannot be avoided. All significant impacts resulting from the Proposed Project would be less than significant with Standard Project Requirements (SPRs), Project Specific Requirements (PSRs) or reduced to less than significant with the mitigation measures identified in each of the individual resource sections in Chapter 3.0 and the Executive Summary, Section ES.8, Summary of Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures of this Draft EIR.

4.2 Effects Found Not To Be Significant

Section 21100(c) of the Public Resources Code requires that an EIR contain a statement briefly explaining the reasons why various possible significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR.

The analysis in this Draft EIR determined that the Proposed Project would result in no impacts or less than significant impacts to aesthetics, agriculture and forestry resources, air quality, energy, greenhouse gas (GHG) emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation, utilities and service systems, and wildfire. Impacts to biological resources, cultural resources, geology and soils, and tribal cultural resources would be less than significant with SPRs BIO-1 through BIO-3, BIO-6, BIO -7, CUL-1, CUL-4 through CUL-6, and TCR-3, TCR-4 and TCR-7 and PSRs BIO-4, BIO-5, BIO-8, BIO-9, CUL-2, TCR-1, TCR-5, and TCR-6, and would be reduced to less than significant with Mitigation Measures CUL-3, GEO-1,

and TCR-2, which are included in this EIR's Executive Summary, Section ES.8, Summary of Impacts and Standard Project Requirements, Project Specific Requirements, and Mitigation Measures.

4.3 Significant Irreversible Environmental Changes

CEQA Guidelines Section 15126(d) requires the discussion of significant irreversible environmental changes that would be caused by the Proposed Project should it be implemented. In accordance with the CEQA Guidelines:

> "… uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damages can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."

4.3.1 Nonrenewable Resources

Nonrenewable resources generally include agricultural land, biological resources, archaeological resources, paleontological resources, mineral deposits, water bodies, and some energy sources. Implementation of the Proposed Project would require the irreversible consumption of natural resources and energy. Natural resource consumption would include lumber and other forest products, sand and gravel, asphalt, steel, copper, other metals, and water. Energy derived from nonrenewable sources, such as fossil and nuclear fuels, would be consumed due to the equipment fuel necessary for construction and transportation uses.

As discussed in this EIR, effects related to agriculture and forestry resources, hydrology and water quality, and mineral resources would have a less than significant impact or no impact. Therefore, no significant irreversible impacts to these resources would occur.

As evaluated in Section 3.4 Biological Resources of this EIR, development of the Proposed Project could result in potentially significant impacts to candidate, sensitive, or special-status species; riparian and other sensitive habitats, and wetlands; however, these impacts would be less than significant with implementation of SPRs BIO-1 through BIO-3, BIO-6, and BIO-7 and PSRs BIO-4, BIO-5, BIO-8, and BIO-9. These SPRs and PSRs require fencing of environmentally sensitive areas, environmental awareness training, pre-construction surveys and monitoring, construction BMPs, specific work windows where and when work may occur, and avoidance of sensitive areas, where feasible.

As evaluated in Section 3.5 Cultural Resources of this EIR, one known historical resource intersects with the Project Area of Potential Effects (APE): CA-SDI-22220, Monument Road. The California Department of Parks and Recreation has determined that the roadway is not eligible for listing on the California Register of Historical Resources (CRHR) or National Register of Historic Places (NRHP) under any Criterion. The Project is not anticipated to cause significant impacts to the significance of the historic road. Since the Proposed Project includes subsurface excavation up to depths of approximately 3 feet, there remains the possibility that unknown subsurface cultural resources qualifying as historical or

archaeological resources could be encountered. Therefore, impacts to unknown cultural resources that could qualify as significant historical resources would be less than significant through the implementation of SPRs CUL-1, CUL-4 through CUL-6, PSR CUL-2 and Mitigation Measure CUL-3. These measures outline requirements for the inadvertent discovery of archeological resources during construction, environmental sensitive area fencing, excavation limits, personnel training, monitoring and requirements for the inadvertent discovery of human remains during construction.

As evaluated in Section 3.7 Geology and Soils of this EIR, it is possible, though unlikely, that paleontological resources might be encountered if excavations exceed a depth of 6 feet below the ground surface in the Project Area. This could result in a potentially significant impact if paleontological resources are encountered and inadvertently destroyed during ground-disturbing activities. The inadvertent discovery of a paleontological resource during construction cannot be entirely discounted; therefore, implementation of Mitigation Measures GEO-1 would reduce impacts to less than significant. Mitigation Measure GEO-1 requires that all onsite workers complete a Paleontological Worker Environmental Awareness Program.

As evaluated in Section 3.18 Tribal Cultural Resources, tribal consultation throughout the Project planning process indicates the entire Project Area is sensitive for tribal cultural resources. There is also potential that additional unidentified tribal cultural resources are present within the Project Area. Impacts to tribal cultural resources would be less than significant with the implementation of SPRs TCR-3, TCR-4, and TCR-7; PSRs TCR-1, TCR-5, and TCR-6; and Mitigation Measure TCR-2. These SPRs, PSRs, and Mitigation Measure require an additional records search, maximum excavation depth, cultural monitoring, restricts artifact collection, provides guidance for sediment removal, and requires site record forms for cultural resources.

4.3.2 Accidental Hazardous Release

As discussed in Section 3.9, some hazardous materials, such as fuels, would be used in the Project Area during construction. However, the use of such materials for the construction of the Proposed Project would not create a significant hazard to the public because the release of any construction-related spills would be prevented through the implementation of BMPs listed in the SWPPP.

BFSP is an existing recreational park and roadways within the park are not used for routine transport, use, storage, or disposal of hazardous materials. Once construction is complete, the Project would be able to maintain year-round access to BFSP, Monument Mesa, and the coastline and Monument Road would continue to operate as a primary access road to these natural amenities.

4.4 Growth-Inducing Impacts

CEQA Guidelines Section 15126(e) requires the EIR to discuss how the Proposed Project "could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment" as well as:

> … the characteristic of some projects which may encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

4.4.1 Economic Growth

In the short term, the Proposed Project would induce economic growth by introducing temporary employment opportunities associated with the construction of the Project. The onsite construction workforce is expected to commute to the Project Area from local and regional towns and cities, rather than relocate.

Once construction is completed, the number of staff onsite would not increase from existing conditions. California State Parks employs approximately 30 staff members on a full or part-time basis to maintain, patrol, and provide park-related services for BFSP and the Tijuana River National Estuarine Research Reserve (TRNERR). No onsite housing is offered for employees nor is overnight camping allowed in the Park.

4.4.2 Population Growth and Housing

The Proposed Project is located in the Cities of San Diego and Imperial Beach, in the southwest corner of San Diego County. The population of the City of San Diego was 1,421,462 in 2020 while the population of the City of Imperial Beach in the same year was 26,137. Population projections for the City of San Diego show an increase in population to approximately 1,633,002 by 2050 (City of San Diego 2024; San Diego Association Of Governments 2024; U.S. Census Bureau 2000, 2024).

The Project does not include the construction of any new homes or businesses and would not directly induce population growth. Currently, California State Parks employs Scientists, Park Aides, Education and Interpretive Specialists, Maintenance Aides, and a variety of other staff in collaboration with TRNERR to assist maintaining BFSP and the TRNERR Visitor Center. No onsite housing for employees is offered. Additionally, BFSP does not offer camping within the park for visitors.

As previously stated, the onsite construction workforce is expected to commute to the Project Area from local and regional towns and cities, rather than relocate. Construction is anticipated to occur over a 12-month period. Additionally, the number of staff onsite would not increase from existing conditions.

4.5 Cumulative Impacts

CEQA Guidelines Section 15130(a) requires an EIR to discuss cumulative impacts "when the project's incremental effect is cumulatively considerable." Cumulatively considerable, as defined in Section 15065(a)(3), means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

Under Section 15130(b), an adequate discussion of significant cumulative impacts should include:

- 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, or
- a summary of projections contained in an adopted local, regional, or statewide plan, or related planning document that describes or evaluates conditions contributing to the cumulative effect. Any such document shall be referenced and made available to the public at a location specified by the lead agency;
- the nature of each environmental resource, project location, and project type should be considered when determining related projects;
- the lead agency should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation; or
- reasonable, feasible options to mitigate or avoid the project's contribution to any significant cumulative effects.

Table 4.5-1 lists currently planned and probable future projects within approximately 2 miles of the Project Area. This analysis used a 2-mile radius to capture reasonably foreseeable development that would be likely to use or affect similar resources as the Proposed Project. This EIR generally used the list of projects in Table 4.5-1 for all cumulative impact discussions with the exception of those analyses that require more of a regional analysis such as air quality.

Table 4.5-1. Cumulative Projects List

Project #	Project Name	Location	Description	Project Status	Distance from Project
1	Tijuana Estuary Tidal Restoration Program II Phase I	BFSP and Tijuana Slough National Wildlife Refuge	Restore approximately 68 acres of coastal wetlands and 15 acres of native transitional and upland habitat within the Tijuana Estuary.	CEQA/NEPA complete. Regulatory permits in review. Design 60% Planned implementation 2026.	Adjacent
2	AC Water & Sewer Group 1040 (W)	Hollister Street and Monument Road	Phase 1: Replace approximately 1.42 miles of water mains with new PVC water mains. Phase 2: Replace approximately 2.10 miles of water mains. Includes installation of curb ramps and street restoration.	Construction	1.03 miles

Table 4.5-1. Cumulative Projects List

Project #	Project Name	Location	Description	Project Status	Distance from Project
3	Egger Highland Improvements 1	Egger Highlands, San Diego	Replace 4.15 miles of Vinyl Chloride and PVC sewer mains with new appropriately sized PVC sewer mains, rehabilitate 2.29 miles including point repair, replacing 1.41 miles, abandoning 0.28 mile, and 0.17 mile of new sewer mains.	Construction	1.57 miles
4	Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project	South of Monument Road/Old Dairy Mart Road Intersection	Reuse of excess sediment excavated from flood control facilities and disturbed habitats in Tijuana River Valley towards the restoration of Nelson Sloan Quarry.	CEQA Complete. Regulatory permits in review. Design 80%. Planned implementation 2026	1.87 miles
5	AC Overlay Group 2505	Hollister Street from Leon Avenue to Tocayo Avenue	Grinding, cold milling, hauling and disposal of existing asphalt, concrete, and installation of new pavement and excavation for pavement base repairs.	Design	1.90 miles

Notes: PVC = Polyvinyl Chloride

Source: City of San Diego 2025

4.5.1 Aesthetics

As discussed in Section 3.1, no officially designated state scenic highways are located in the vicinity of the Project Area. Scenic vistas include views of the Pacific Ocean and distant views of Otay Mountain which can be seen from various points throughout BFSP. During construction, the Project where visible and noticeable from a public vantage point, may introduce visual contrast from the presence of construction equipment and would have the potential to create temporary visual impacts within the surrounding areas. Visual changes to the area's scenic views due to construction activities would be temporary and short-term in nature. Completion of the Project would introduce new visual elements into the Project Area; however, these Project components would not impede any scenic vistas and would not be visible from I-5 due to the proposed components low profile and existing intervening vegetation and structures.

Additionally, the Project Area is located within the Tijuana River Estuary, which is considered a visual/scenic resource by the City of Imperial Beach's General Plan. The wetland, riparian, and upland habitats in the Project Area, such as along the north-south segment of Monument Road, would be restored as part of the Proposed Project. Restoration activities would generally improve the overall visual cohesiveness of the natural area.

Cumulative aesthetic impacts could occur if the cumulative projects contribute to visual changes to the landscape that are visible or perceived by the public, either within the same viewshed as the Proposed Project, or as a noticeable element in a cumulative viewing experience. The Egger Highland Improvement 1 Project and AC Overlay Group 2505 Project are not located within the viewshed of the Proposed Project.

Cumulative projects within the same viewshed, such as the Tijuana Estuary Tidal Restoration Program (TETRP) II Phase I Project and the Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project could contribute to visual impacts by adding more construction equipment in the general area, increasing vegetation removal, landform modifications, and other construction-related activities. These visual impacts would be short-term and temporary. The TETRP II Phase I Project and the Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would not result in substantial adverse changes to the existing visual character of the area as they would occur on and provide improvements to visually degraded sites. The TETRP II Phase I Project would occur in the Tijuana Estuary where transitional and upland habitats have been degraded over the past several decades. The Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would occur where existing wastewater and pollution control facilities and border facilities are in place and already contribute to the existing visual character or image of the Tijuana River Valley.

The AC Water & Sewer Group 1040 (W) Project is also located within the viewshed of the Proposed Project. Construction activities would contribute to visual changes in the landscape due to construction equipment in the general area; however, these impacts would be short-term and temporary. Additionally, this project would involve improvements to existing water mains and street restoration. After construction, the roads would be repaved and would not cause any significant visual impacts. Therefore, impacts associated with aesthetics would not be cumulatively significant.

4.5.2 Agriculture and Forestry Resources

As discussed in Section 3.2, the Project is located on parcels with a land use designation of Park, Open Space, & Recreation in the City of San Diego and Open Space in the City of Imperial Beach, and is surrounded by Park, Open Space, & Recreation land uses. According to the DOC California Important Farmland Finder, a majority of the Project Area is classified as Other Land and the portion near the equestrian parking lot is classified as Urban and Built-Up Land. The Proposed Project would result in no conversion of farmland, no conflicts with existing zoning or Williamson Act Contracts, no impacts to forest and timberland resources, and no physical changes in the environment that could result in the conversion of farmland to non-agricultural use. No impacts to agriculture and forestry would occur.

The cumulative projects listed in Table 4.5-1 do not involve any farmland, forest, or timberland resources and would not result in the conversion of farmland. There are no conflicts with existing zoning or Williamson Act Contracts. Therefore, impacts associated with agricultural and forestry resources would not be cumulatively significant.

4.5.3 Air Quality

The geographic scope of potential cumulative impacts to air quality is the San Diego Air Basin, which is governed by the San Diego Air Pollution Control District (SDAPCD). Potential cumulative air quality impacts would result if the cumulative projects' pollutant emissions combined to degrade air quality conditions to below acceptable levels. As shown previously in Table 3.3-5, the SDAPCD adopted emissions-based thresholds of significance for construction and operational activities.

Construction emissions for the Proposed Project would not exceed the SDAPCD significance thresholds for any pollutants. Project operational emissions includes potential emissions from worker commutes and heavy trucks used during maintenance. Operational emissions would not exceed the SDAPCD thresholds, and traffic associated with operations would be negligible and would not result in carbon monoxide hotspots at intersections.

As discussed in Section 3.3, the Project would result in an increase in short-term emissions related to construction and an increase in long-term operational emissions for those pollutants and precursors (reactive organic gases and nitrogen oxide) for which the SDAPCD is in nonattainment (ozone and particulate matter). However, the cumulative emissions associated with the Project would not be considerable because the emissions would not exceed any SDAPCD thresholds. Under this condition, the Project would not make a cumulatively considerable contribution during construction or operations. Additionally, the Project would not conflict with the SDAPCD attainment plans, which address cumulative emissions in the San Diego Air Basin and account for emissions associated with construction activity. As such, the contribution of Project construction and operational emissions to the cumulative air quality impact in the region would be less than significant.

4.5.4 Biological Resources

Cumulative impacts are those caused by the additive effect of multiple direct and indirect impacts to a biological resource over time. A project's direct and indirect impacts may not be individually significant, but the additive effect, when viewed in connection with the impacts of past, present, and probable future projects, may cause the significant loss or degradation of a resource. In addition, multiple different impacts to a resource may be cumulative.

A significant cumulative impact to biological resources would result if the Proposed Project would contribute to cumulative impacts related to sensitive habitat or species, sensitive habitat/natural communities, federally protected wetlands, or wildlife movement corridors.

The Proposed Project would result in potential impacts to special-status plant and wildlife species, which would include migratory birds. However, these impacts would be less than significant with implementation of SPRs and PSRs previously discussed and in consultation with State and federal wildlife agencies.

Present and reasonably foreseeable future projects that could contribute to cumulative impacts to biological resources include projects with grading, paving, landscaping, road, and/or other construction of undeveloped land or with habitat otherwise present.

The two restoration projects, as shown in Table 4.5-1, are located adjacent and within two miles of the Project Area. Implementation of these projects would have beneficial effects to biological resources, similar to the Proposed Project and would contribute to improving habitat where habitat is currently degraded. Impacts to biological resources would be reduced with implementation of mitigation, thus reducing impacts to less than significant or no impact.

The infrastructure projects listed in Table 4.5-1 would be located within the right-of-way or existing easements and would not impact any undeveloped land or habitat. There is no connecting habitat between these projects and the Proposed Project that would be affected. Furthermore, present and reasonably foreseeable future projects would also comply with the requirements of the federal Endangered Species Act (ESA), Migratory Bird Treaty Act, Clean Water Act, California ESA, Native Plant Protection Act, and Porter-Cologne Act and provide mitigation measures as necessary to reduce any impacts to less than significant.

Therefore, cumulative impacts would be less than significant.

4.5.5 Cultural Resources

The geographic scope of potential cumulative impacts to cultural resources is a 1-mile radius from the Project Area. The cultural resources within this radius are expected to be similar to those that occur in the Project Area due to their proximity, similar environments, landforms, and hydrology which are expected to have resulted in similar land-uses over time. The temporal scope for cumulative impacts on cultural resources would be the duration of the Project's ground-disturbing activities.

The AC Water & Sewer Group 1040 (W) Project, Egger Highland Improvement 1 Project, and AC Overlay Group 2505 Project involve the replacement of water infrastructure within the existing disturbed right-of-way. It is unlikely these projects would encounter undiscovered cultural resources.

The TETRP II Phase I Project EIR/EIS notes six archaeological sites within its APE that have data potential and are considered eligible for listing in the NRHP under Criterion D and the CRHR under Criterion 4 due to the potential that these properties may yield important pre-contact or historical information. These sites include historic refuse scatter, munitions and trash scatter, and midden deposits. Since the majority of the TETRP II site is covered in recent sediment deposits, buried stable surfaces below may also contain as yet unknown historical or archaeological resources. Therefore, grading and ground-disturbing activities may have the potential to encounter historical and/or archaeological resources in these sediments. There is no evidence indicating the presence of human remains within the TETRP II site, however it is possible that undiscovered buried human remains may exist on stable sediments that could be exposed during excavation and ground-disturbing activities. Impacts would be reduced to less than significant with the implementation of mitigation measures which involve a monitoring and discovery plan, archaeological and tribal monitoring during ground-disturbing activities, training sessions for construction personnel for the treatment of cultural resources, procedures for the discovery of human remains, and exclusionary fencing to avoid inadvertent disturbance of cultural resources within or in proximity to the APE, staging areas, and access roads (AECOM 2022).

The Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project EIR notes numerous resources surrounding the project site and five resources within the property boundary. Two sites are within the direct project APE and another is adjacent to the APE. The sites within the APE were determined to not be eligible for the NRHP or CRHR. The site adjacent to the APE was recommended as eligible. The EIR determined that there is potential for the presence of unknown cultural resources on the project site based on the limited visibility and high potential for the presence of known archaeological resources in the surrounding area. These cultural resources could be disturbed by site preparation, grading, and sediment sorting. There is no evidence indicating the presence of human remains within the site, however it is possible that undiscovered buried human remains may be encountered during ground-disturbing activities and sediment sorting. Impacts would be reduced to less than significant with the implementation of mitigation measures which involve an archaeological survey prior to ground-exposing or ground-disturbing activities, archeological and tribal monitoring during ground-exposing or ground-disturbing activities, procedures for the discovery of human remains, and an operations and maintenance plan to address the sediment management process and tribal monitoring program (Dudek 2023).

The Proposed Project along with the cumulative projects listed above have determined there is no impact to cultural resources or have provided measures that would avoid significant adverse effects and allow cultural resources data to be protected and preserved. With implementation of the mitigation measures recommended at the Project-specific level, the Proposed Project would cause a less-than-significant cumulative contribution to a potential significant cumulative impact on cultural resources.

4.5.6 Energy

Sources of energy that are relevant to the Proposed Project include electricity, the equipment-fuel necessary for Project construction, and the automotive fuel necessary for Project operations.

The geographic scope for potential cumulative impacts related to electricity is San Diego Gas & Electric's service area. The geographic scope for equipment and vehicle fuel use is within the Project's construction equipment delivery and workers' average travel radius (assumed to be approximately 50 miles for workers) because these are the areas within which energy resources would be demanded and supplied for the Project.

Construction is expected to require the use of non-renewable resources such as gasoline and diesel to power off-road construction equipment and on-road vehicles. The Proposed Project would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation and construction fuels. Although these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

Operational energy consumption in the form of transportation fuel use would be minimal and is predominantly associated with worker commutes and park visitors. Trips to the Project Area would be minimal and would not increase beyond existing conditions.

Cumulative energy impacts of the Proposed Project are less than significant.

4.5.7 Geology and Soils

The geographic scope for potential cumulative impacts related to geology and soils consists of the Project Area and adjacent areas because these impacts tend to be site-specific and depend on local geology and soil conditions.

Construction activities would temporarily increase erosion, runoff, and sedimentation. The Project Proponent would be required to obtain and comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, and implement dust control measures, which would include construction BMPs to control and limit sedimentation and erosion. Soil erosion due to construction of the cumulative projects would be addressed through the implementation of site-specific NPDES permits and construction BMPs. Impacts related to erosion would not be cumulatively significant.

The Project Area is within a seismically active area of California which has a high likelihood of seismic activity such as seismic ground shaking. Damage from seismic ground shaking depends on factors such as the earthquake's magnitude, distance from the epicenter, underlying soils, and the construction material and quality of construction (City of Imperial Beach 2024; City of San Diego 2024). The Proposed Project would introduce construction workers to the Project Area which could expose people to seismic risks. However, BFSP is an existing park that has had visitors and park maintenance staff onsite. Additionally, the Proposed Project is not anticipated to construct any habitable structures. The proposed improvements to the Project Area would not result in an increased risk to people or structures from fault rupture, ground shaking, liquefaction, or landslides. Impacts would be less than significant.

It is possible that the TETRP II Phase I Project and the Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project could be in the construction phase at the same time as the Proposed Project. Each project is subject to regulatory requirements that verify project design and engineering to minimize the risk of increasing geologic hazards. The TETRP II Phase I Project, which is located adjacent to the Proposed Project, proposes estuary restoration and soil management which would require the removal of soil and earthwork in the flat estuary bottoms and local channels (AECOM 2022). These project activities would not be of the nature to cause unstable geologic conditions that could combine with the Proposed Project or other local to projects to create geologic hazards. Impacts related to erosion would not be cumulatively significant.

The Project Area is characterized as Late Quaternary Alluvium and underlain by the San Diego Formation. Based on the likelihood of finding paleontological resources, the Late Quaternary Alluvium deposits was determined to have low paleontological resources sensitivity while the San Diego Formation was determined to have high paleontological resources sensitivity. It is possible, though unlikely, that paleontological resources might be encountered below the ground surface in the Project Area. This could result in potentially significant impact if paleontological resources are encountered and inadvertently destroyed during ground-disturbing activities. Construction of the TETRP II Phase I Project and Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project could overlap with construction of the Proposed Project. If there were paleontological resources that extended across areas of ground disturbance of the Proposed Project and cumulative projects, the projects could result in the loss of paleontological resources. However, implementation of the Project's mitigation measures and the

mitigation measures outlined in the cumulative projects environmental documents would address the inadvertent discovery of paleontological resources. Therefore, although implementation of cumulative projects could have significant effects related to paleontological resources, the Project's contribution to such effects would be less than significant.

4.5.8 Greenhouse Gas Emissions

The CEQA Guidelines clarify that the effects of GHG emissions are cumulative because an individual project of this size and nature is generally of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. Additionally, per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not to be cumulatively considerable if a project complies with adopted programs, plans, policies, or other regulatory strategies to reduce GHG emissions.

As shown in Tables 3.8-2 and 3.8-3 in Section 3.8, Project emissions for construction (853 metric tons during construction) and operation (504 metric tons per year) would not exceed the numeric bright-line threshold of 900 metric tons of carbon dioxide equivalents annually. This threshold is based on a capture rate of 90 percent of land use development projects, which in turn translates into a 90 percent capture rate of all GHG emissions. The 900 metric ton threshold is considered by the California Air Pollution Control Officers Association to be low enough to capture a substantial fraction of future projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions. Additionally, the Proposed Project would be consistent with the goals and policies in the CAPs for the cities of San Diego and Imperial Beach. Under CEQA Guidelines Section 15064(h)(3), the Proposed Project would not be cumulatively considerable because the Project complies with adopted programs, plans, policies, or other regulatory strategies to reduce GHG emissions.

4.5.9 Hazards and Hazardous Materials

The geographic scope for potential cumulative impacts related to hazards and hazardous materials includes the Project Area, a 0.25-mile radius around the Project Area, and nearby roadways that could be used to transport hazardous materials for the Project. A 0.25-mile radius is used as hazards and exposure risks related to hazards and hazardous materials are typically localized in nature since they tend to be related to isolated events and onsite existing hazardous conditions and/or hazards caused by a project's construction or operation.

As discussed in Section 3.9 Hazards and Hazardous Materials, the Proposed Project would not involve the transport, use, or disposal of any hazardous materials beyond those used for fueling and servicing construction equipment onsite. These activities would be short-term and would be subject to federal, state, and local health and safety requirements. Potential impacts that may result from upset or accidents during construction include accidental release of materials such as hydraulic fluid, fuel, oil, grease, and lubricants. Quantities of these hazardous materials would generally be limited and the implementation of the BMPs required by the NPDES Construction General Permit would include containment and spill

response measures. There would be no impact with respect to hazardous emissions or handling of hazardous substances or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school; no impact related to the location of the Project on a listed hazardous materials site; and no impact related to impairment of the implementation of a physical interference with an adopted emergency response plan or emergency evacuation plan. Therefore, the Proposed Project would not cause or contribute to any cumulative effect regarding any of these criteria.

The TETRP II Phase I Project is located within 0.25 mile of the Project Area. Construction equipment would require petroleum products such as fuel, hydraulic fluids, and lubricants. Consistent with standard construction practices, fueling and/or maintenance activities would occur at a designated staging area that would be closed to the public to minimize potential exposure or access to the hazardous materials associated with the construction activities. This project would also require the preparation of a Spill Prevention Control and Containment Plan for hazardous spill containment procedures. Soil management efforts for the TETRP II Phase I Project may result in water quality violations and a public health hazard from exposure to elevated levels of bacteria within portions of the open beach used by recreationalists. In combination with other cumulative projects, which could be implemented at the same time, potential water quality violations would result and would create elevated levels of bacteria. In general, the Proposed Project, TETRP II Phase I Project, and the Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would involve restoration of an estuary and quarry and improvement of pollution in water flows help to improve environmental conditions that could adversely affect human health and safety. Impacts would not be cumulatively considerable.

The Proposed Project would not interfere with any interstates, highways, or prime arterials that would serve as an emergency evacuation route. Additionally, the proposed improved roadways would be designed to be resilient to sea level rise and to accommodate large emergency response vehicles such as fire trucks. This would provide safe public and emergency vehicle access for 100 percent of the route.

The AC Water & Sewer Group 1040 (W) Project, Egger Highland Improvement 1 Project, and AC Overlay Group 2505 Project involve the replacement of water infrastructure within the existing disturbed right-of-way. These projects would affect the local roadways but would provide detour or alternate access routes for emergency vehicles as necessary.

Construction of the TETRP II Phase I Project would require the temporary closure of some trails within BFSP that are utilized by emergency vehicles. Monument Road, a main road for vehicular access, would remain accessible on its eastern segments and alternative access routes would be accessible for emergency vehicles throughout the construction period both to the TETRP project site and beach. The construction activities at the project site would not obstruct or hinder the ability of the local transportation network and designated roads to serve emergency purposes or evacuation routes if an emergency were to occur. The Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would not impede or interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would not be cumulatively significant.

4.5.10 Hydrology and Water Quality

The geographic scope for potential cumulative impacts related to hydrology and water quality includes the Project Area and any waterways, watersheds, and aquifers potentially impacted by the Project's construction and operations.

As discussed in Section 3.10 Hydrology and Water Quality, there would be no impact with conflicting with or obstructing the implementation of a water quality control plan or sustainable groundwater management plan. Therefore, the Project would not cause or contribute to any cumulative impact regarding this impact.

Construction of the Proposed Project would involve the use of heavy equipment (bulldozers, excavators, dump trucks, etc.) for pavement demolition, clearing and grubbing brush, trenching, and installation of roads and other facilities. These activities could cause erosion, generate runoff, or involve the accidental release of pollutants which would degrade water quality. The Proposed Project would comply with the General Construction Permit implementation requirements, which would include the preparation and deployment of a SWPPP and associated BMPs. The water quality impacts during construction would be temporary. Additionally, the Proposed Project components would improve water quality. The Proposed Project would relocate and elevate portions of Monument Road above the base flood elevation to reduce sedimentation and flooding and would restore the surrounding, degraded wetlands. Restoration activities would consist of restoring impacted or degraded habitats to equal or better conditions than before roadway construction and would aim to reduce or eliminate human recreational activities within the natural and restored salt marsh habitats. The reduction in sedimentation and improvement of the estuary would enhance water quality by minimizing erosion, improving filtration, improving tidal prism, and improving circulation and conveyance of flows and sediment.

Construction activities associated with the AC Water & Sewer Group 1040 (W) Project, Egger Highland Improvement 1 Project, and AC Overlay Group 2505 Project would involve the use of heavy machinery for the replacement of water mains within the existing right-of-way. These projects would be required to comply with a SWPPP and implement BMPs to maintain water quality standards.

The TETRP II Phase I Project would involve the use of heavy machinery such as excavators, dredges, trucks, pumping equipment, and grading equipment which could cause erosion, generate runoff, or involve the accidental release of pollutants that would degrade water quality. This project would change some of the estuary's hydrology and drainage patterns; however, the implementation of a SWPPP and project-specific BMPs would minimize impacts to surface drainage patterns, surface runoff, exposure to water-related hazards, erosion, water quality, and soil transport. The TETRP II Phase I Project would also cause a net beneficial impact to the hydrology by improving hydraulic efficiency, tidal prism, improved drainage pathways to the ocean, and overall circulation (AECOM 2022).

The Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would involve grading and restoration of over-steepened and potentially unstable slopes to less steep topography within an abandoned sand and gravel quarry. Construction-related activities that primarily result in sediment releases are related to exposing previously stabilized soils to potential mobilization by rainfall/runoff and wind. Potential impacts of grading activities and non-stormwater runoff on water quality during the

construction phase are mostly associated with sediment and certain non-sediment-related pollutants (Dudek 2023). Adherence to the San Diego Regional MS4 Permit and implementation of a SWPPP with BMPs to reduce onsite and offsite erosion potential would reduce water quality impacts to less than significant.

As described above, the cumulative projects would be required to prepare and implement a SWPPP and implement similar BMPs. These projects would be subject to the same water quality standards or waste discharge requirements. When considered in combination with the effects of other projects, the Project's incremental contribution to potential significant cumulative effect would not be cumulatively significant.

4.5.11 Land Use and Planning

As discussed in Section 3.11 Land Use and Planning, there would be no impact with respect to physically dividing an established community or cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation. The implementation of the Project would not alter the existing land use designated by the City of San Diego and City of Imperial Beach. The Project elements would generally maintain the existing State Park land use and ensure improvements would restore and maintain year-round access to Border Field State Park, Monument Mesa, and the coastline in conformity with the public access and public recreation policies of the Local Coastal Program.

The TETRP II Phase I Project is located in the southern arm of the Tijuana Estuary and is encompassed by TRNERR, which includes Border Field State Park and the Wildlife Refuge. The TETRP II Phase I Project involves restoring approximately 68 acres of coastal wetlands and 15 acres of native transitional and upland habitat within the Tijuana Estuary. The Project is consistent with adopted planning documents and would not physically divide an established community. Therefore, there would be no cumulative impact to land use and planning impacts associated with this project (AECOM 2023).

Additionally, the Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would similarly not be of the nature to result in substantial land use conflicts or incompatibilities. Implementation of the sediment restoration Project would remain consistent with applicable goals and objectives and would therefore, not cause or contribute to any cumulative impact regarding this criterion (Dudek 2023).

As described above, the projects listed in Table 4.5-1 would also be subject to the City's land use and zoning policies and must be consistent prior to development. The Project, in combination with the cumulative projects, would not have cumulatively significant impacts.

4.5.12 Mineral Resources

As discussed in Section 3.12 Mineral Resources, project implementation would have no impact to mineral resources. Mineral resources are known to exist within the general area as the Tijuana River flows north of the Project Site and is the site for sand and gravel mineral deposits. The Nelson Sloan Quarry is approximately 2.5 miles east of the Proposed Project Site and was an active sand and gravel quarry until mining operations ceased in 2002. The Project Site is located within a National Estuarine Research Reserve, National Wildlife Refuge, and State Park, thus, protected from activities of mineral extraction.

The Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project involves the beneficial reuse of excess sediment excavated from managed sources (e.g., sediment basins, flood control facilities and conveyances) from a range of ongoing, approved, and/or permitted sediment management activities (and proposed habitat restoration and enhancement projects) in the Tijuana River Valley towards landform and habitat restoration in the abandoned Quarry (Dudek 2023). In accordance with the grant deed for the property, the site may not be used for mineral production and shall only be used for habitat protection, restoration, and open space. Therefore, the project would not result in the loss of a site or result in the loss of availability of a locally important mineral resource.

Additionally, other cumulative projects listed in Table 4.5-1 would not involve the loss of mineral resources and Border Field State Park Resilient Access and Habitat Restoration Project would not make a cumulatively considerable contribution to a cumulatively significant adverse impact related to mineral resources.

4.5.13 Noise

The geographic scope considered for potential cumulative impacts related to noise is the area within 1 mile of the Project Area because sounds naturally attenuate with distance and topography. The scope for cumulative noise impacts is during the construction and operation of the Project.

As discussed in Section 3.13, the Project would not result in significant impacts related to temporary or permanent increases in noise levels during construction nor would the project result in the generation of excessive ground-borne vibration or ground-borne noise. Additionally, the Project would not expose residents or workers within 2 miles of a public airport to excessive noise levels; therefore, the Project would not cause or contribute to any cumulative impact regarding this criterion.

Cumulative project listed in Table 4.5-1 would similarly generate noise during construction but are separated from the Project Area by over a mile with the exception of the TETRP II Phase I project which is adjacent to the north. When two identical sources each produce sound of the same loudness, the resulting sound level at a given distance would be three A-weighted decibels (dBA) higher than one source under the same conditions. A three dBA change is considered a just-perceivable difference (California Department of Transportation 2013). Given that it is very unlikely that all equipment from the Proposed Project and other nearby projects would be operating at the same time, the noise resulting from construction would not exceed the applicable noise thresholds. Additionally, each of these projects would be required to comply with the applicable construction noise limitations to ensure that the contribution to cumulative noise impacts during construction would be less than significant.

4.5.14 Population and Housing

No significant impacts to population and housing were identified in association with the Proposed Project. While the Proposed Project anticipates construction to begin over a 12-month period starting March 2026, the Project would require a relatively small workforce that would commute daily into the area and return home at the end of the work day. The Proposed Project would not induce substantial unplanned population growth in an area or displace substantial numbers of people or existing housing.

Cumulative project listed in Table 4.5-1 would similarly not impact population and housing within the area. Construction for these projects would require construction crews to commute daily but would not induce substantial unplanned population growth or result in the displacement of existing housing. Therefore, the incremental impacts of the Project, in combination with other projects in the cumulative scenario (even if construction in the immediate area were to occur simultaneously), would not induce substantial in-migration or unplanned population growth. Therefore, the Project would not cause or contribute to a significant, adverse, cumulative impact relating to potential inducement of population growth.

4.5.15 Public Services

The geographic scope considered for potential cumulative impacts related to public services is a 2-mile radius to capture reasonably foreseeable development. The temporal scope for cumulative noise impacts is during the construction and operation phases of the Project.

As discussed in Section 3.15, Public Services, construction and operation would not result in the need for new or physically altered fire or police protection, school, medical, or other public service facilities in order to maintain acceptable service ratios, response times, or other performance objectives.

During construction of the cumulative projects listed in Table 4.5-1, construction workers would be onsite. The increase in people could incrementally increase the need for fire, police, or medical services in the case of an emergency. However, the likelihood of simultaneous emergencies at multiple construction sites which would decrease public service resources is low. No new or physically altered public facilities would be required for the cumulative projects as the increase in construction workers would be temporary and the projects would not cause a permanent increase in population. Therefore, cumulative impacts would be less than significant, and the contribution from the Proposed Project would not be cumulatively considerable.

4.5.16 Recreation

As discussed in Section 3.16, impacts to recreational opportunities or facilities would be less than significant. The Proposed Project would implement various elements at BFSP to improve the health and function of the Tijuana Estuary; maximize the resilience of Monument Road from the effects of future sea level rise; and address seasonal flooding of the existing roadway to improve coastal public access to BFSP. Implementation of the Proposed Project includes habitat restoration, infrastructure improvements, improvements to the existing equestrian staging area, installation of culverts, minor redesign of the existing entrance parking lot and kiosk, and relocation of existing above grade utility fixtures to be located underground. These improvements focus on restoring and enhancing existing recreational facilities to allow for an increase in visitation and access.

The TETRP II Phase I Project is located in the southern arm of the Tijuana Estuary and is encompassed by TRNERR, which includes Border Field State Park and the Wildlife Refuge. The TETRP II Phase I Project involves restoring approximately 68 acres of coastal wetlands and 15 acres of native transitional and upland habitat within the Tijuana Estuary. TETRP II Phase I Project requires the loss of Marsh Trail, which travels along a portion of the southeastern boundary of the project site, along the edge of the Model

Marsh. Although Marsh Trail would be lost due to restoration and enhancement, Marsh Trail does not serve as a connector or other important element of the trail network and will, thus, not impact coastal access. Additionally, during construction of the Proposed Project, access to the TRNERR visitor center will remain open despite the closure of BFSP due to flooding.

The other cumulative projects listed in Table 4.5-1 would also not cause impacts to recreation opportunities, as these projects would not impact the TRNERR recreation system. Therefore, the Project would not cause or contribute to any cumulative impact.

4.5.17 Transportation

Section 3.17 describes the less than significant impacts the Proposed Project would have on transportation within the Project Area. The Project proposes to improve the existing Monument Road to maintain year-round access throughout BFSP, Monument Mesa, and the coastline. Through implementation of the Proposed Project, the existing primary roadway, Monument Road, would be rerouted to pass over Goat Canyon, run along the base of Bunker Hill, and connect to the east-west segment of Monument Road. Improvements would include elevation of the existing roadway, paving of the existing gravel roadway segment, and installation of box culverts to maintain sediment runoff. Currently, due to flooding hazards, BFSP remains closed to the public until flooding conditions have improved to allow for safe circulation within BFSP.

Cumulative projects listed in Table 4.5-1 are located within a 2-mile radius of the Proposed Project Area. The TETRP II Phase I Project is located in the southern arm of the TRNERR and is anticipated to utilize the local circulation system for construction activities and operation. Since the temporary closure of BFSP, the TRNERR has remained open and access to the coast continues to be available. It is anticipated, following construction of the TETRP II Phase I Project, additional traffic trips would be minimal.

Additionally, the Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project estimates the worker and truck trips to and from the Proposed Project with sediment transported from TETRP II site for the first two years (i.e., Year 2024) and from other in-valley sites thereafter (i.e., Year 2026). The project would generate daily trips from 11 workers (i.e., 22 daily trips assuming two trips per worker) and 3 vendor trucks (i.e., 6 daily trips assuming two trips per truck), which would result in a total of 28 daily trips. Access to the Project would be from Monument Road via the unsignalized intersection of Dairy Mart Road/Monument Road. In the occurrence of construction occurring at the same time at both Project sites, Monument Road would generate an increase in daily trips and traffic volume, transporting materials and accounting for daily trips per worker. Since construction-related traffic effects would be short term and periodic, the Proposed Project would not make a cumulatively considerable contribution to a significant cumulative impact related to transportation. A less than significant impact would result pursuant to CEQA.

4.5.18 Tribal Cultural Resources

The geographic scope of potential cumulative impacts to tribal cultural resources is a 1-mile radius around the Project Area. The tribal cultural resources within this radius are expected to be similar to those that occur in the Project Area due to their proximity and similar environments. The scope for cumulative impacts to tribal cultural resources would be the duration of the Project's ground-disturbing activities.

As discussed in Section 3.18, the records search, pedestrian survey, and Sacred Lands File search conducted by the Native American Heritage Commission did indicate the presence of tribal cultural resources within the Project Area. In the event that buried significant tribal cultural resources are encountered during Project construction, mitigation measures are recommended, including cultural resource worker education, cultural resource monitoring, procedures for inadvertent discovery of archaeological resources, and procedures for the inadvertent discovery of human remains.

The same unidentified resources could be affected by the cumulative projects within 1 mile of the Proposed Project as listed in Table 4.5-1. These projects would be subject to regulations concerning tribal resources and would need to implement similar mitigation measures to reduce impacts to unknown tribal cultural resources within the area.

With implementation of such measures, the Project's potential significant impact would be reduced to a less-than-significant level; therefore, the cumulative (less than significant) contribution would not result in a significant cumulative impact to tribal cultural resources.

There is no indication of any existing significant adverse condition relating to the discovery of human remains in the geographic area of cumulative consideration to which the Project or any of the cumulative projects could contribute. The Project would have a less than significant cumulative impact related to the discovery of human remains.

4.5.19 Utilities and Service Systems

The geographic scope considered for potential cumulative impacts related to utilities and service systems includes the water, wastewater, stormwater, and telecommunication facilities that serve the Project Area.

As discussed in Section 3.19 Utilities and Service Systems, the Project would have a less than significant impact to utilities and service systems, associated with the construction of water, wastewater, stormwater, and telecommunication facilities within the Project Area. As part of the Proposed Project, the existing 6-inch water main, electrical/telephone line, and electrical pull boxes along the north-south segment of Monument Road would remain in place. However, above grade fixtures would be removed or undergrounded as part of the habitat restoration.

The cumulative projects listed in Table 4.5-1 would, similarly, not have a significant impact on utilities and service systems within the vicinity. During the construction of the cumulative projects, projects would be subject to the Operations and Maintenance Plans and are designed to avoid interference with existing utilities.

Therefore, the Proposed Project would not make a cumulatively considerable contribution to a cumulative direct or indirect adverse impact to utilities or service systems.

4.5.20 Wildfire

As discussed in Section 3.20, Wildfire, the Project Site is located in a Very High, High, and Moderate Fire Hazard Severity Zone, classified by the California Department of Forestry and Fire Protection (CAL FIRE) (CAL FIRE 2025). The Project is located in a non-urbanized area on parcels with a land use designation of

Park, Open Space, & Recreation and Public Facility and is surrounded by other Park, Open Space, & Recreation uses. Within the Project Area, Goat Canyon and Yogurt Canyon exhibit steep hillsides and would be susceptible to additional risk associated with the rapid spread of wildfire, however, the Project does not include habitable structures and Project occupants would be limited to park visitors.

Other cumulative projects in the area include sediment and tidal restoration projects. The Nelson Sloan Quarry Restoration and Beneficial Reuse of Sediment Project would not exacerbate fire risks but has the potential to introduce new potential ignition sources and fuel sources to the Project Site. Additionally, the TETRP II Phase I Project would result in construction activities and access routes within the areas of Very High fire hazard designations. However, most restoration and enhancement work would occur within the wet marshy areas of the estuary, which are not high fire risk areas and are outside of the Very High fire hazard designations.

Cumulatively considerable projects would be required to comply with state and local fire and building codes, along with project-specific needs assessments and FPP requirements, which would ensure that every project approved for construction includes adequate emergency access. Roads for all projects would be required to meet minimum widths, have all-weather surface, and be capable of supporting the imposed loads of responding emergency apparatus. The Project and all cumulatively considerable projects would be subject to discretionary review by SDFD and would be required to comply with regulations related to fire safety, building construction, access, fire flow, and vegetation management. Therefore, because all projects are required to comply with these requirements, cumulative impacts related to increased wildfire hazards and emergency response and access would be less than significant.

4.6 Mandatory Findings of Significance

4.6.1.1 Impacts on Species

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to (1) substantially reduce the habitat of a fish or wildlife species; (2) cause a fish or wildlife population to drop below self-sustaining levels; or (3) substantially reduce the number or restrict the range of an endangered, rare, or threatened species. Section 3.4 Biological Resources of the Draft EIR fully addresses any Project-related impacts to the reduction of fish or wildlife habitat, reduction of fish or wildlife populations, and reduction or restriction of the range of endangered, rare, or threatened species. As discussed throughout this Draft EIR, the Proposed Project's impacts would remain less than significant with incorporation of SPRs and PSRs. No mitigation measures are required for impacts to biological resources.

4.6.1.2 Impacts on Historical Resources

CEQA Guidelines Section 15065(a)(1) states that a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to eliminate important examples of the major periods of California history or prehistory. Project-related impacts to historical resources, California history and prehistory, and archaeological resources are

addressed in Section 3.5 Cultural Resources. Section 3.7 Geology and Soils and Section 3.18 Tribal Cultural Resources address Project-related impacts to paleontological resources, and tribal cultural resources, respectively. As discussed throughout this Draft EIR, the Proposed Project's impacts would remain less than significant with incorporation of SPRs and PSRs. Mitigation Measures CUL-3 and TCR-2 are identified to ensure that potential impacts to prehistoric and historic resources are reduced to less than significant. Mitigation Measure GEO-1 is identified to ensure that potential impacts to paleontological resources are reduced to less than significant.

4.6.1.3 Impacts on Human Beings

As required by CEQA Guidelines Section 15065(a)(4), a lead agency shall find that a project may have a significant effect on the environment where there is substantial evidence that the project has the potential to cause substantial adverse effects on human beings, either directly or indirectly. CEQA topics that could include direct or indirect impacts that affect human beings include air quality, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, transportation/traffic, and wildfire, which are addressed in Section 3.3 Air Quality, Section 3.8 Greenhouse Gas Emissions, Section 3.9 Hazards and Hazardous Materials, Section 3.10 Hydrology and Water Quality, 3.13 Noise, 3.17 Transportation, and Section 3.20 Wildfire, respectively. No significant impacts would result from implementation of the Proposed Project.

5.0 ALTERNATIVES

5.1 Introduction

As required by the California Environmental Quality Act (CEQA), this chapter describes and analyzes a range of reasonable alternatives to the Border Field State Park Resilience, Access, and Habitat Restoration Project (Project or Proposed Project) that could feasibly attain most of the basic project objectives while avoiding or substantially lessening one or more of the significant impacts of the Proposed Project. No significant impacts were identified for the Proposed Project in this Draft Environmental Impact Report (EIR). Significant impact that were reduced to a less than significant level with implementation of standard project requirements, project specific requirements, or mitigation measures in this Draft EIR include impacts to cultural and tribal cultural resources. This chapter provides a comparative analysis with sufficient detail to foster informed decision making and public participation in the environmental process.

Four alternatives to the Proposed Project are analyzed in this chapter and discussed in terms of their merits relative to the Project:

- Alternative 1 – No Project Alternative
- Alternative 2 – Two-Lane Elevated Road on Fill with Arizona Crossing and Boardwalk
- Alternative 3 – One-Lane Elevated Road with Prefabricated Creek Crossings
- Alternative 4 – Two-Lane Elevated Road with Prefabricated Creek Crossing, Last 2,000 Feet Only

The alternatives analysis consists of an overview of CEQA requirements for alternatives analysis, descriptions of the alternatives evaluated, a comparison between the anticipated environmental effects of the alternatives and those of the Proposed Project, and identification of an environmentally superior alternative.

5.2 Requirements for Alternatives Analysis

In order to fully evaluate the environmental effects of projects, CEQA mandates that an EIR identify ways to mitigate or avoid the significant effects that a project may have on the environment. The discussion of alternatives shall focus on alternatives to the Project or to the location of the Project, which would avoid or substantially lessen the significant effects of the Project, even if these alternatives would impede to some degree the attainment of the Project objectives or be more costly (CEQA Guidelines Section 15126.6[b]).

The California Department of Parks and Recreation (CDPR), acting as the CEQA Lead Agency, is responsible for selecting a range of Project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives addressed in an EIR is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only those the lead agency determines could feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project. CEQA Guidelines Section 15364, define

"feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." The discussion of Project alternatives must include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

This EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and explain the underlying reasons for the lead agency's determination. Under CEQA Guidelines Section 15126.6(e)(1), an EIR must evaluate a "No Project" alternative to allow decision makers to compare the effect of approving the Project to the effect of not approving the Project. The "No Project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or, if no notice of preparation is published, at the time that environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services.

As required under Section 15126.6(e)(2) of the CEQA Guidelines, the EIR must identify the environmentally superior alternative. Pursuant to the CEQA Guidelines, if the No Project Alternative is determined to be the most environmentally superior project, then another alternative among those evaluated must be identified as the environmentally superior alternative.

5.3 Considerations for Selection of Alternatives

In developing the alternatives to be addressed in this chapter, consideration was given to each alternative's ability to meet the basic objectives of the Project and eliminate or substantially reduce any identified environmental impacts.

5.3.1 Project Objectives

Upon development, the Project would achieve the following objectives:

- Resilience:
  - Increase Monument Road, and therefore BFSP's, resilience against annual flooding and long-term coastal sea level rise.
  - Improve hydrologic connectivity for waters flowing from the Goat Canyon and Yogurt Canyon drainages.
- Access:
  - Restore and maintain safe, year-round multi-modal access to key areas of BFSP, including the Monument Mesa Day Use Area and the Park's shoreline.
- Habitat Restoration:
  - Improve biological connectivity and habitat areas for migratory, sensitive, threatened, and endangered plants and wildlife by restoring areas of degraded wetland, riparian, and upland habitats.

5.3.2 Significant Effects of the Proposed Project

Impacts associated with implementation of the Proposed Project are evaluated in Chapters 3 and 4 of this EIR. The Proposed Project would have the potential to cause the following significant but mitigable environmental impact:

- Impacts to cultural, paleontological, and tribal cultural resources

5.4 Alternatives Considered but Eliminated from Further Evaluation

An EIR should identify any alternatives that were considered but rejected by the lead agency and briefly explain the reasons underlying the lead agency's determination. Factors used to eliminate alternatives from detailed consideration include the following:

- Failure to meet most of the basic Project objectives.
- Inability to avoid significant environmental effects (CEQA Guidelines 15126.6[c]).
- An alternative's similarity to others that are addressed in detail.

The following development scenarios were considered and rejected as potential alternatives to implementation of the Proposed Project:

- Elevated Road on Piers or with Vertical Sides
- Increase Annual Maintenance
- Border Patrol Road Option

Per Section 15126.6 of the CEQA Guidelines, the alternatives described below were rejected based on the criteria of not being reasonable, or not feasibly attaining most of the basic objectives of the Project while reducing or avoiding significant effects of the Proposed Project.

5.4.1 Elevated Road on Piers or with Vertical Sides

The first proposed alternative consisted of a 1.5-mile two-lane road that was either elevated on piers or elevated on fill with vertical sides.

This option would provide safe, resilient vehicular access for the entirety of Monument Road and allow for maximum hydrologic connectivity and reduced wetland impacts. The proposed realignment would fulfill the coastal development guidance of managed retreat, as it would move the road from high quality core wetland habitat to a lower quality transitional habitat.

This alternative was rejected for the following reasons:

- The proposed alternative was considered "over-designed" and relied too heavily on "gray infrastructure" for the Park's natural setting.
- Concrete and hardened infrastructure is costly to maintain and remove/adapt to future sea level rise.

- The design elements associated with this alternative would cost an estimated $20,000,000; therefore, exceeding the existing budget.

5.4.2 Increased Annual Maintenance

The second alternative that was considered but rejected, would leave the existing road as is but increase annual maintenance. Annual maintenance would potentially include, but not be limited to, pumping flooded water off the roadway, minor grading, and importing gravel to cover the existing road. The annual cost of maintenance would be approximately $50,000 to $100,000.

This alternative offered a cost effective solution to restore access and safely separate the public from polluted water. It would also reduce impacts to cultural resources.

This alternative was eliminated for the following reasons:

- The proposed alternative does not meet the goal of achieving year-round public access. Access would still be greatly reduced due to delays in implementing maintenance after flooding and immediate repairs would require CDPR employees to work in active sewage flows. Public access would also not be possible during these periods of active rainfall/sewage flow.
- The proposed alternative does not meet long-term resilience goals, as predicted by projections for future sea level rise.
- There would be a potential regulatory concern, as permits would be required to pump water off the road.
- Segments of the roadway needing regular maintenance would fall within known nesting territories for listed bird species. Maintenance in these areas would require ongoing Federal and State consultation and could potentially negatively impact nesting birds, as the occurrence of roadway flooding typically overlaps with the bird breeding season.
- The flooding of the roadway has contributed to degradation of the surrounding wetlands, and increased maintenance would not provide any restorative solutions. Additionally, the pumping of water off the road could lead to further damage of existing wetlands.

5.4.3 Border Patrol Road Option

The third alternative that was considered but rejected, would utilize approximately 2,500 feet of the existing Border Patrol road for final access to Monument Mesa. This alternative would include rerouting of the first 1.2 miles of the two-lane Monument Road, similar to the Proposed Project, to be resilient to sea level rise and flooding using primarily elevated road on fill. Like the Proposed Project, the existing north-south segment of Monument Road would be restored to increase the extent of wetland and riparian habitat, as well as restore upland habitats along a portion of the rerouted road south of Goat Canyon. Access to the existing Border Patrol Road from the realigned segment of Monument Road would be made just east of where the north-south segment connects with the lower east-west segment. The Border Patrol Road is currently elevated along Bunker Hill and is not exposed to seasonal flooding any time of the year. The existing lower east-west segment of Monument Road within the Park boundaries would not be

improved. This alternative would result in reduced wetland impacts in comparison to the Proposed Project but would result in less overall restoration.

This alternative would meet all of the Project objectives; however, the existing Border Patrol Road considered under this alternative, falls outside the boundaries of BFSP and onto federal government property. This roadway section is part of the U.S. Customs and Border Protection's (CBP) Border Barrier secondary barrier system, which is actively used by CBP agents for daily patrol operations. Currently, no public access on this road is authorized. Public access on an active patrol road would hinder CBP's ability to surveil and respond to threats that may occur at the international border. Additionally, the likelihood of reaching an agreement with CBP for year-round public access on their property to reach Monument Mesa would be very low. For this reason, this alternative was rejected.

5.5 Alternatives Carried Forward for Analysis

The following alternatives have been identified and evaluated to provide decision makers with a reasonable range of alternatives that would eliminate or reduce the impacts of the Proposed Project. An EIR need not consider an alternative whose impact cannot be reasonably ascertained and whose implementation is remote or speculative. In accordance with CEQA Guidelines, the alternatives considered in this EIR include those that 1) could accomplish most of the basic objectives of the Project; 2) are reasonably feasible given the nature of the Proposed Project and surrounding land uses; and 3) could avoid or substantially lessen one or more of the significant effects of the Project.

5.5.1 Description of Alternatives

5.5.1.1 Alternative 1 – No Project Alternative

Under the No Project Alternative, the existing Monument Road would remain as is. The existing north-south segment would not be removed and would maintain the connection from the park entrance to Monument Mesa. Park access would continue to be affected by seasonal flooding, prohibiting visitors from accessing Monument Mesa and the coastline for extended periods throughout the year. No habitat restoration would occur.

Alternative 1 would not meet any of the Proposed Project objectives.

5.5.1.2 Alternative 2 – Two-Lane Elevated Road on Fill with Arizona Crossing and Boardwalk

Under Alternative 2, the first 1.2 miles of the two-lane Monument Road, starting from the Park entrance, would be rerouted along the same proposed alignment as the Proposed Project. The last 2,000 feet would be developed to be resilient to sea level rise and flooding using elevated road on fill; however, it would include an Arizona low-water crossing, without any prefabricated creek crossing structure over Yogurt Canyon. An Arizona low-water crossing is a simple type of bridge common in the Southwestern United States, also known as a ford. Arizona low-water crossings allow a waterway to pass over the road and are suitable for crossings where overflow would occur rarely enough not to impede vehicular traffic.

Like the Proposed Project, the wetland and riparian habitats along the north-south segment of Monument Road would be restored, as well as upland habitats along a portion of the rerouted road south of Goat Canyon. In addition to the elevated roadway, the last 2,000 feet would feature a pedestrian boardwalk, running parallel to the road, with interpretive educational materials, along with a parking lot built at the east end of the proposed boardwalk.

Alternative 2 would meet some of the Project objectives but would not elevate the southern east-west segment of Monument Road, or include installation of culverts and associated drainage infrastructure, and thus would not meet the objective of achieving coastal flooding resiliency along this road segment. It does meet the Project's objective of increasing wildlife connectivity and habitat area as the existing North-South Road would be removed and restoration of wetland, riparian, and upland habitats would still occur.

With regard to public access, Alternative 2 would increase the number of days that both vehicle and pedestrian access to Monument Mesa would be feasible; however, it still would not fully meet the objective of providing year-round multi-modal access as the Arizona crossing would not be passable by vehicles during flood events.

Alternative 2 would also have a larger footprint on the east-west segment than the Proposed Project due to the construction of 2,000 feet of boardwalk. The boardwalk could potentially result in an additional 0.55 acres of wetland impacts adjacent to the roadway. Furthermore, this alternative would have the potential for greater disturbance to the cultural resources.

5.5.1.3 Alternative 3 – One-Lane Elevated Road with Prefabricated Creek Crossings

Under Alternative 3, the first 1.2 miles of the two-lane Monument Road, starting from the Park entrance, would be rerouted along the same alignment as the Proposed Project. The last 2,000 feet would be developed to be resilient to sea level rise and flooding using elevated road on fill with the same prefabricated creek crossing structures as the Proposed Project.

Like the Proposed Project, the wetland and riparian habitats along the north-south segment of Monument Road would be restored, as well as upland habitats along a portion of the rerouted road south of Goat Canyon.

The main difference from the Proposed Project is that the last 2,000-foot stretch of Monument Road would be reconstructed as a one-lane road elevated as high as possible within the existing footprint that would be paired with prefabricated creek crossing structures. The one-lane road design would result in a smaller disturbance footprint and less impacts to wetland habitat. However, there would be an increased potential for conflict between vehicles and other multi-modal users.

Alternative 3 would meet all of the Proposed Project objectives except that of safe multi-modal access.

5.5.1.4 Alternative 4 – Develop Only Last 2,000 Feet Alternative

Alternative 4 includes the development of only the last 2,000 feet of the two-lane Monument Road with an elevated road on fill paired with prefabricated creek crossing structures. The existing north-south

segment would not be removed and would continue to serve as the connection from the park entrance to Monument Mesa. No road realignment and no upland or riparian habitat restoration would occur.

Alternative 4 would not meet most of the Project objectives. However, this alternative partially meets the objective of making the east-west stretch more resilient to flooding and sea level rise and would allow for access along a section of the road. Unfortunately, flooding would still occur on the existing north-south stretch and would not allow for year-round access or be resilient to flooding or sea level rise. This alternative would also not improve hydrologic or biological connectivity within the Park. This alternative, though, would reduce impacts to cultural resources.

5.6 Analysis of Alternatives

The following discussion compares the impacts of each alternative with the impacts of the Proposed Project. A conclusion is provided as to whether each alternative would result in one of the following:

- reduction or elimination of the impact;
- a greater impact than the Proposed Project;
- the same impact as the Proposed Project; or
- a new impact in addition to the impacts of the Proposed Project.

5.6.1 Alternative 1 – No Project Alternative

Pursuant to CEQA (§15126.6[e][2]), the No Project Alternative should discuss what would reasonably be expected to occur, based on current plans and consistent with available infrastructure and community services, in the foreseeable future. Under the No Project Alterative, the Proposed Project would not be carried forward and the Project Area would remain under pre-Project conditions. The Project Area is located in Border Field State Park (BFSP), which is currently closed due to continual flooding of both the north-south and lower east-west portions of the existing Monument Road. Under the No Project Alternative, the existing north-south segment of Monument Road would remain as is and would not be removed. Access to BFSP would continue to be limited for extended periods throughout the year and no portion of Monument Road would be improved to address flooding conditions and enhance coastal resiliency to address anticipated sea level rise. The Tijuana River Watershed is expected to continue to deteriorate as no improvements would be implemented that would contribute to habitat restoration and improved hydrologic flow.

5.6.1.1 Impact Analysis

<u>Aesthetics</u>

The Project Area is located within the Tijuana River Watershed, which is considered a visual/scenic resource under the City of Imperial Beach's General Plan. Scenic vistas in the Project Area include the Pacific Ocean and distant views of Otay Mountain which can be seen from various points throughout BFSP.

If the No Project Alternative is implemented, the Proposed Project would not be developed and the Project Area would remain as is. The existing north-south segment of Monument Road would not be removed and would continue to be affected by cross-border flooding and sedimentation. Over time, the north-south segment of Monument Road would further deteriorate and eventually fill in with sediment. The existing wetland and riparian habitats surrounding the north-south sediment would not be restored and would remain in their current degraded state due to sewage-contaminated flood waters and sediment buildup on the road. Therefore, views of the Tijuana River Watershed would not be improved.

BFSP is currently closed to hiking, biking, equestrian activity, and vehicles because of seasonal flooding. The No Project Alternative would not implement any project components that would improve public accessibility or the quality of public views of the site and its surroundings. There would be no temporary presence of construction equipment when compared to the Proposed Project. Due to lack of development under Alternative 1 and the preservation of the existing condition, the No Project Alternative would result in no visual impacts when compared to the Proposed Project; however, there would be no beneficial impacts like those associated with the Proposed Project related to habitat restoration.

Agriculture and Forestry Resources

Under the No Project Alternative, the Project Area's classification under the California Department of Conservation's (DOC) California Important Farmland Finder and zoning designation would remain the same as under the Proposed Project. The Project Area is not located on land classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. The Project Area is located on parcels with a land use designation of Park, Open Space, & Recreation in the City of San Diego and Open Space (OS) in the City of Imperial Beach, and is surrounded by Park, Open Space, & Recreation land uses. This alternative would result in no conversion of farmland, no conflicts with existing zoning or Williamson Act Contracts, no impacts to forest and timberland resources, and no physical changes in the environment that could result in the conversion of farmland to non-agricultural use. No impacts to agriculture and forestry would occur. The Proposed Project would also result in no impact to forestry resources.

Air Quality

Compared to the Proposed Project, there would be no air pollutant emissions associated with Alternative 1 due to lack of development. There would be no air quality impacts associated with construction activities, such as the operation of onsite construction equipment, fugitive dust from site grading activities, and travel by construction workers. Additionally, there would be no new operational emissions from worker commutes and equipment used during periodic maintenance. Overall, implementation of Alternative 1 would result in fewer air quality impacts when compared to the Proposed Project.

Biological Resources

With the implementation of Alternative 1, no development would occur within the Project Area, and therefore, no construction-related impacts to special-status species would occur when compared to the Proposed Project. Additionally, with no development onsite, there would be no construction-related impacts to jurisdictional wetlands when compared to the Proposed Project. Alternative 1 would not

impact biological resources and would not conflict with any local plans or policies protecting biological resources. In summary, due to lack of development, Alternative 1 would have no impacts on biological resources when compared to the Proposed Project. However, the No Project Alternative would not result in any habitat restoration, which is a beneficial impact of the Proposed Project. Continued habitat degradation would be expected with this alternative.

Cultural Resources

Implementation of Alternative 1 would result in no development. Instead, existing open space and recreation uses would remain within the Project Area. There would be no construction and ground-disturbing activity under Alternative 1, therefore there is no potential for impacts to historic or undiscovered archaeological resources, unlike the Proposed Project.

Energy

Under Alternative 1, construction of the Proposed Project would not proceed, and existing uses would remain within the Project Area. Maintaining the existing condition would require substantially less energy when compared to the Proposed Project. The Proposed Project would increase the consumption of electricity, operational diesel, and operational gasoline Countywide by 0.0062, 0.0051, and 0.0057 percent, respectively. Furthermore, implementation of Alternative 1 would not conflict with or obstruct a state or local plan for renewable energy efficiency.

Geology and Soils

Under the No Project Alternative, no Project components would be implemented, and the Project Area would remain as is. Development under the Proposed Project would result in less than significant impacts related to fault rupture, seismic ground shaking, ground failure such as liquefaction, unstable geologic location, and expansive soils. However, without any improvements and continued uncontrolled flood conditions an increase in soil erosion and loss of topsoil would be expected to occur. Compared to the Proposed Project, Alternative 1 would not have the potential to impact previously undocumented paleontological resources within the Project Area.

Greenhouse Gas Emissions

Under Alternative 1, construction of the Proposed Project would not proceed, and existing open space and recreation uses would remain within the Project Area. The would be no construction-related or operational-related greenhouse gas emissions as there would be no development under Alternative 1. This alternative would have fewer greenhouse gas impacts than the Proposed Project because no development would occur.

Hazards and Hazardous Materials

Under the No Project Alternative, no project components would be implemented and BFSP would remain as is. The existing BFSP does not involve the routine transport, use, or disposal of hazardous materials. There would be no significant hazard to the public or environment due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Overall,

Alternative 1 would result in less impacts with respect to hazards and hazardous materials when compared with the Proposed Project.

Hydrology and Water Quality

Under the No Project Alternative, no Project components would be implemented, and existing poor water quality conditions would continue. The rate and amount of surface runoff would not increase more than existing conditions and flood flows would not be impeded or redirected. Flows with sewage contaminated water and mud would continue to flow downstream from Tijuana through the watershed and cause flooding and contamination at multiple locations in the Project Area. No water quality benefits to the watershed would be provided under the No Project Alternative.

No groundwater supplies would be used and groundwater recharge would not be impeded. No construction activities would occur to loosen existing surface soils and sediments and increase the possibility of erosion and siltation. However, the existing sedimentation rates of Goat Canyon and Yogurt Canyon would continue to cause flooding and road closures in the Project Area. Due to lack of development and implementation of flood and coastal resiliency features, the No Project Alternative would result in greater hydrology and water quality impacts when compared to the Proposed Project because continued degradation would be expected with this alternative. Additionally, there would be no beneficial impacts like those associated with the Proposed Project related to habitat restoration.

Land Use and Planning

Under the No Project Alternative, the Proposed Project components would not be implemented and BFSP would remain as is. The Project Area is designated as Park, Open Space, & Recreation in the City of San Diego General Plan and is zoned Agricultural – Residential (AR-1-1), in accordance with the City of San Diego's Zoning Classification. The Park, Open Space, & Recreation land use designation provides for the preservation of land that has distinctive scenic, natural or cultural features; that contributes to community character and form; or that contains environmentally sensitive resources. The Project Area's existing Open Space Park or Preserve is a permitted use. While the use within Border Field State Park is consistent with local land use designations, land use decisions and actions related thereto within State lands preempt local authority. No impacts to land use and planning would occur, similar to the Proposed Project.

Mineral Resources

Under the No Project Alternative, no project components would be implemented and BFSP would remain as is. The existing BFSP is located in an area designated as Mineral Resource Zone (MRZ) 2, according to the Department of Conservation. Despite the presence of sand and mineral deposits within the Project Area, Public Resources Code Section 5001-5019.5 prohibits mineral extraction activities within units of the State Park System. Thus, the No Project Alternative would have no impact on mineral resources, similar to the Proposed Project.

Noise

Under Alternative 1, construction of the Proposed Project would not proceed, and existing uses would remain within the Project Area. There would be no construction-related noise generation, and operational noise would remain unchanged under Alternative 1. Therefore, there would be no noise impacts relative to existing conditions and this alternative would have fewer noise impacts than the Proposed Project because the Proposed Project would generate noise during Project construction. Operational noise from ambient conditions would be similar to the Proposed Project.

Population and Housing

Under the No Project Alternative, no project components would be implemented and BFSP would remain as is. Population and housing for the cities of San Diego and Imperial Beach would therefore remain the same under existing conditions. The existing open space park or preserve use would not cause an increase in population or housing. No impact would occur, similar to the Proposed Project.

Public Services

Under the No Project Alternative, no project components would be implemented and BFSP would remain as is. As the open space park or preserve use would remain the same, there would be no substantial adverse impacts to performance objectives for fire protection, police protection, schools, park, or other public facilities. No impact to public services would occur, similar to the Proposed Project.

Recreation

Under the No Project Alternative, no project components would be implemented and BFSP would remain as is and closed to the public. No construction or improvements to Monument Road within the Project Area would occur. Existing BFSP facilities would continue to be at risk from storm runoff, flooding, and sea level rise and would result in continued physical deterioration. This Alternative would have greater impacts to recreational facilities when compared to the Proposed Project.

Transportation and Circulation

Under the No Project Alternative, no project components would be implemented and existing conditions throughout BFSP would remain the same in terms of seasonal flooding, risk from sea level rise, and disturbances to the Tijuana River National Estuary Research Reserve. Because the No Project Alternative would not implement improvements to the existing Monument Road segments to provide access throughout BFSP, access would continue to be limited and would conflict with adopted goals and policies stated within the San Diego Association Of Governments 2021 Regional Plan, Tijuana River Valley Local Coastal Program Land Use Plan, and the City of Imperial Beach 2018 General Plan. Impacts would be greater under Alternative 1 when compared to the Proposed Project and significant and unavoidable.

Tribal Cultural Resources

Under Alternative 1, construction of the Proposed Project would not proceed, and existing uses would remain within the Project Area. Alternative 1 does not include any ground disturbing activities that could

affect previously unrecorded tribal cultural resources or human remains if present within the Proposed Project Area. As no development would occur under this alternative, there would be fewer impacts than the Proposed Project in this regard.

Utilities and Service Systems

Under the No Project Alternative, no project components would be implemented and existing conditions throughout BFSP would remain the same as existing functions and conditions. The No Project Alternative would not implement the relocation or removal of above-grade utility fixtures or construction of new electrical or water main lines within the new roadway alignment. As the current state of BFSP remains closed to public access, the No Project Alternative would have a less than significant impact to existing utilities or service systems, similar to the Proposed Project.

Wildfire

Under the No Project Alternative, no project components would be implemented and existing conditions throughout BFSP would remain the same in terms of seasonal flooding, risk from sea level rise, and disturbances to the Tijuana River National Estuary Research Reserve. Because the No Project Alternative would not implement improvements to BFSP, the No Project Alternative would not impair an emergency response plan, an emergency evacuation plan, or significantly exacerbate wildfire risks, similar to the Proposed Project.

5.6.1.2 Conclusion

Alternative 1 (No Project Alternative) would allow for the continuance of park, open space and recreation uses and would not include any development. The No Project Alternative would result in the continued access restrictions within the Project Area as no improvements to address existing flooding conditions would be implemented. This alternative would result in limited park access and further physical deterioration of habitat and recreational facilities, when compared to the Proposed Project. Therefore, Alternative 1 would not meet any of the Project Objectives identified.

5.6.2 Alternative 2 – Two-Lane Elevated Road on Fill with Arizona Crossing and Boardwalk

Under Alternative 2, the easternmost 1.2 miles of the two-lane Monument Road would be rerouted along the same proposed alignment as the Proposed Project and would be developed to be resilient to sea level rise and flooding using primarily elevated road on fill; however, it would include an Arizona low-water crossing without any prefabricated creek crossing structures over Yogurt Canyon. Like the Proposed Project, the wetland and riparian habitats along the north-south segment of Monument Road would be restored as well as upland habitats along a portion of the rerouted road south of Goat Canyon. Additionally, instead of a road, the last 2,000 feet would feature a pedestrian boardwalk with interpretive educational materials, along with a parking lot at the east end of the proposed boardwalk.

5.6.2.1 Impact Analysis

Under Alternative 2, the overall disturbance footprint would be the greater but would follow the same alignment as defined for the Proposed Project. All other Project impacts would be the same as under the Project, including the following:

1. Agricultural Resources
2. Cultural Resources
3. Energy
4. Geology and Soils
5. Greenhouse Gas Emissions
6. Hazards and Hazardous Materials
7. Hydrology and Water Quality
8. Land Use and Planning
9. Mineral Resources
10. Noise
11. Population and Housing
12. Public Services
13. Recreation
14. Transportation
15. Tribal Cultural Resources
16. Utilities and Service Systems
17. Wildfire

The remaining environmental issues would, in some cases, result in similar impacts but would be different enough to be discussed separately.

Aesthetics

Similar to the Proposed Project, the development of Alternative 2 would include construction activities such as curb and guard rail removal; pavement demolition; grading; trenching for underground utilities; brush clearing and grubbing; and painting and striping. These visual changes would be transient and short term in nature.

Implementation of Alternative 2 would result in similar impacts to scenic resources when compared to the Proposed Project. Similar to the Proposed Project, implementation of Alternative 2 would result in less

than significant impacts to scenic vistas, and there would be no impact to resources within a state scenic highway because no officially designated or eligible state scenic highways are located within the Project Area. When compared to the Proposed Project, the development of Alternative 2 would be visually consistent with the Proposed Project, but the intensity of development would be less. Alternative 2 would not introduce prefabricated creek crossing structures over Yogurt Canyon and would instead create an Arizona low-water crossing which would be less visually intrusive and the roadway profile would match the existing grade. With the addition of the boardwalk, impacts would be greater than those under the Proposed Project due to the increased intensity of development but still less than significant.

Air Quality

Compared to the Proposed Project, there would be construction emissions associated with Alternative 2, similar to the Proposed Project. There would be no new operational emissions from worker commutes and equipment used during periodic maintenance. While there is a reduced intensity of development because no construction of prefabricated creek crossing structures over Yogurt Canyon would occur, implementation of Alternative 2 would result in the construction of a new boardwalk feature and would require additional ground disturbance to construct a new parking lot at the east end of the proposed boardwalk. Although this alternative would include construction of features not considered as part of the Proposed Project, this alternative would involve less extensive construction and associated equipment use and emissions are anticipated to be equal to or lower than those of the Proposed Project.

Biological Resources

With the implementation of Alternative 2, a higher level of ground disturbance would occur within the Project Area and impacts to special-status species would still occur. Impacts to vegetation communities and habitat would also be higher when compared to the Proposed Project but are expected to be greater due to the construction of the new parking lot and pedestrian boardwalk. Development proposed under this alternative follows the same alignment as the Proposed Project but would not result in the installation of prefabricated creek crossing structures over Yogurt Canyon and would construct a pedestrian boardwalk instead of an elevated road at the southern east-west segment of Monument Road. This alternative includes the construction of a parking lot at the east end of the proposed boardwalk, which would increase the disturbance area when compared to the Proposed Project. Impacts to wetlands are expected to be the same when compared to the Proposed Project. Impacts to vegetation communities and habitat would also be similar when compared to the Proposed Project but would be slightly increased in magnitude because of the proposed parking lot and pedestrian boardwalk. Vehicles driving through the Arizona Crossing could also potentially introduce additional non-native plant species into adjacent wetlands. Less than significant impacts to biological resources under Alternative 2 would be further reduced with the implementation of Standard Project Requirements (SPRs) and Project-Specific Requirements (PSRs), similar to the Proposed Project.

5.6.2.2

5.6.2.3 Conclusion

Under Alternative 2 (Arizona Low-Water Crossing Alternative), impacts related to aesthetics and short-term construction-related air quality emissions would be similar to the Proposed Project because there would not be the introduction of prefabricated, engineered crossings, and the same types and numbers of equipment would be utilized during construction. Alternative 2 does not include the installation of prefabricated creek crossing structures over Goat Canyon but does include a new proposed parking lot and pedestrian boardwalk that is not included within the Proposed Project. These new features would result in increased impacts to biological resources due to the increased footprint when compared to the Proposed Project.

This alternative would result in the restoration of degraded habitat along the north-south segment of Monument Road and would provide improvements that would contribute to future sea level rise and flooding resiliency but not for the entire alignment. This alternative does not fully meet the Project objectives to improve all of Monument Road to be more flood resilient and deliver improvements to achieve long-term coastal resiliency to sea level rise. This alternative would also not provide year-round vehicular access to the coastline.

5.6.3 Alternative 3 – One-Lane Elevated Road with Prefabricated Creek Crossings

Alternative 3 includes the rerouting of the first 1.2 miles of the two-lane Monument Road, similar to the Proposed Project, to be resilient to sea level rise and flooding using primarily elevated road on fill. Like the Proposed Project, the wetland and riparian habitats along the north-south segment of Monument Road would be restored, as well as upland habitats along a portion of the rerouted road south of Goat Canyon. The last 2,000-foot stretch of Monument Road would be reconstructed as a one lane road elevated as high as possible within the existing footprint and paired with prefabricated creek crossing structures.

5.6.3.1 Impact Analysis

Under Alternative 3, the overall disturbance footprint would be smaller and follow the same alignment as defined for the Proposed Project. All other Project impacts would be the same as under the Proposed Project, including the following:

1. Aesthetics
2. Agricultural Resources
3. Air Quality
4. Cultural Resources
5. Energy
6. Geology and Soils
7. Greenhouse Gas Emissions
8. Hazards and Hazardous Materials
9. Hydrology and Water Quality
10. Land Use and Planning
11. Mineral Resources
12. Noise

13. Population and Housing
14. Public Services
15. Recreation
16. Transportation
17. Tribal Cultural Resources
18. Utilities and Service Systems
19. Wildfire

The remaining environmental issue would, in some cases, result in similar impacts but would be different enough to be discussed separately.

Biological Resources

With the implementation of Alternative 3, a smaller level of ground disturbance would occur within the Project Area and less than significant impacts to special-status species would result from construction. Impacts to vegetation communities and habitat would also be less when compared to the Proposed Project. Development proposed under this alternative follows the same alignment as the Proposed Project but would result in the installation of prefabricated creek crossing structures and elevated road segments at the southern east-west segment of Monument Road. Impacts to wetlands would be less when compared to the Proposed Project. Less than significant Impacts to biological resources under Alternative 3 would be further reduced with the incorporation of SPRs and PSRs, similar to the Proposed Project.

5.6.3.2 Conclusion

Under Alternative 3 (One Lane Road Last 2,000 Feet Alternative), impacts related to biological resources impacts would be less than significant with implementation of PSRs and SPRs, which would be less than the Proposed Project. Alternative 3 proposes the installation of a combination of prefabricated creek crossing structures and elevated road segments at the southern east-west segment of Monument Road which would result in decreased impacts to wetlands because of the smaller disturbance footprint.

This alternative would meet all of the Project objectives but would lead to increased conflict between vehicles and multi-modal users, therefore decreasing the safety of the roadway.

5.6.4 Alternative 4 – Two-Lane Elevated Road with Prefabricated Creek Crossing, Last 2,000 Feet Only

Alternative 4 includes the development of only the last 2,000 feet of the two-lane Monument Road using primarily elevated road on fill paired with prefabricated creek crossing structures. The existing north-south segment would not be removed and would maintain the connection from the park entrance to Monument Mesa. No road realignment and no wetland or riparian habitat restoration surrounding the north-south segment would occur.

Alternative 4 would not meet most of the Project objectives but would elevate the southern east-west segment of Monument Road, including installation of culverts and associated drainage infrastructure, and would meet the objective achieving coastal flooding resiliency for this segment of Monument Road only.

5.6.4.1 Impact Analysis

Under Alternative 4, the overall disturbance footprint would be the same and would follow the same alignment as defined for the Proposed Project along the southern east-west segment of Monument Road. No other improvements would occur along the remainder of the alignment. All other Project impacts would be the same as under the Project, including the following:

1. Aesthetics
2. Agricultural Resources
3. Air Quality
4. Energy
5. Geology and Soils
6. Greenhouse Gas Emissions
7. Hazards and Hazardous Materials
8. Hydrology and Water Quality
9. Land Use and Planning
10. Mineral Resources
11. Noise
12. Population and Housing
13. Public Services
14. Recreation
15. Transportation
16. Tribal Cultural Resources
17. Utilities and Service Systems
18. Wildfire

The remaining environmental issue would, in some cases, result in similar impacts but would be different enough to be discussed separately.

<u>Biological Resources</u>

With the implementation of Alternative 4, a reduced level of ground disturbance would occur within the Project Area as it would only be limited to the last 2,000 feet of the alignment along the southern east-west segment. Impacts to special-status species would be reduced. Impacts to vegetation communities and habitat would be reduced when compared to the Proposed Project due to the reduced development

footprint. Development proposed under this alternative follows the same alignment as the Proposed Project but would result in the installation of prefabricated creek crossing structures and elevated road segments at the southern east-west segment of Monument Road. Impacts to wetlands would be greater when compared to the Proposed Project. Less than significant Impacts to biological resources under Alternative 3 would be further reduced with the incorporation of SPRs and PSRs, similar to the Proposed Project.

Cultural Resources

With the implementation of Alternative 4, ground disturbing activity would not be occurring in the area south of Goat Canyon. With this reduced footprint, the potential to impact cultural resources would be reduced in comparison to the Project Alternative.

5.6.4.2 Conclusion

Under Alternative 4 (Develop Only Last 2,000 Feet Alternative), impacts related to biological resources impacts would be less than significant with implementation of PSRs and SPRs, which would be similar to the Proposed Project. Alternative 4 proposes the installation of a combination of prefabricated creek crossing structures and elevated road segments at the southern east-west segment of Monument Road which would result in increased impacts to wetlands because of the larger disturbance footprint. This alternative would not provide year-round access for the entire alignment and access would be limited for significant periods throughout the year.

This alternative would not meet all of the Project objectives. This alternative would not result in the restoration of degraded habitat along the north-south segment of Monument Road and would not provide improvements that would contribute to future sea level rise and flooding resiliency except for the lower east-west segment of Monument Road. This alternative does not fully meet the Project objectives to improve Monument Road to be more flood resilient and deliver improvements to achieve long-term coastal resiliency to sea level rise. This alternative would also not provide year-round vehicular access to the coastline.

5.7 Comparison of Alternatives Evaluated

Table 5-1 provides a comparison of the environmental impacts of each of the Alternatives in relation to the Proposed Project.

Table 5-1. Comparison of Alternatives

Environmental Topic	Proposed Project	Alternative 1 (No Project)	Alternative 2	Alternative 3	Alternative 4
Aesthetics	LTS	LTS (Less)	LTS (Less)	LTS (Similar)	LTS (Similar)
Agriculture and Forestry	NI	NI	NI	NI	NI
Air Quality	LTS	LTS (Less)	LTS (Less)	LTS (Similar)	LTS (Similar)

Table 5-1. Comparison of Alternatives

Environmental Topic	Proposed Project	Alternative 1 (No Project)	Alternative 2	Alternative 3	Alternative 4
Biological Resources	LTS/With Beneficial Effects	NI/Without Beneficial Effects	LTS (Greater)/ With Beneficial Effects	LTS (Less)/ With Beneficial Effects	LTS (Less)/ Without Beneficial Effects
Cultural Resources	LTSM	NI	LTSM (Similar)	LTSM (Similar)	LTS (less)
Energy	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Geology and Soils	LTS	LTS/Increased Soil Erosion	LTS (Similar)	LTS (Similar)	LTS (Similar)
Greenhouse Gas Emissions	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Hazards and Hazardous Materials	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Hydrology and Water Quality	LTS	LTS (Greater)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Land Use and Planning	NI	NI	NI	NI	NI
Mineral Resources	NI	NI	NI	NI	NI
Noise	LTS	LTS (Less)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Population and Housing	NI	NI	NI	NI	NI
Public Services	LTS	LTS (Similar)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Recreation	LTS	LTS (Greater)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Transportation and Circulation	LTS	SU	LTS (Similar)	LTS (Similar)	LTS (Similar)
Tribal Cultural Resources	LTSM	NI	LTSM	LTSM	LTS (Less)
Utilities and Service Systems	LTS	LTS (Similar)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Wildfire	LTS	LTS (Similar)	LTS (Similar)	LTS (Similar)	LTS (Similar)
Meet Project Objectives?	Yes	No	No	Yes	No

Notes: Impact Status: NI=No Impact; LTS = Less Than Significant Impact; LTSM = LTS with Mitigation; SU = Significant and Unavoidable.

5.8 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6(e)(2) indicates that an analysis of alternatives to a project shall identify an Environmentally Superior Alternative among the alternatives evaluated in an EIR. The CEQA Guidelines

also state that should it be determined that the No Project Alternative is the Environmentally Superior Alternative, the EIR shall identify another Environmentally Superior Alternative among the remaining alternatives.

The Proposed Project would not result in any significant and unavoidable environmental impacts. Alternative 3 (One-Lane Elevated Road with Prefabricated Creek Crossings) would be environmentally superior with respect to impacts associated with Biological Resources when compared to the Proposed Project. Alternative 3 (One-Lane Elevated Road with Prefabricated Creek Crossings) would result in less impacts to biological resources and these impacts would still be less than significant even before incorporation of SPRs and PSRs. This alternative would also include the beneficial effects of habitat restoration along the north-south segment of Monument Road. The habitat restoration would also contribute to improving the health and function of the Tijuana River Watershed and would create habitat for sensitive, threatened, and endangered plants and animals. While Alternative 2 would also include the beneficial effects of habitat restoration, this alternative would not result in reduced impacts for aesthetics and air quality and increases biological impacts. However, Alternative 3 would not completely meet all the Project objectives. Alternative 3 would restore and maintain year-round vehicular access to Monument Mesa or the coast and would improve the entirety of Monument Road to be more flood resilient, but it poses severe safety concerns and would increase the potential for vehicle and multi-modal user conflicts on the single-lane portion of the road.

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7.0 LIST OF PREPARERS

7.1 California Department of Parks and Recreation

- Jim Engelke, Project Manager
- Dan Osanna, Resource Services Section Manager
- Brad Michalk, Senior Park and Recreation Specialist
- Lucas Serna, Associate Park & Recreation Specialist
- Debbie Waldecker, Senior Environmental Scientist
- Aly Velloze, Environmental Scientist
- Joanna Collier, Senior State Archaeologist
- Chris Peregrin, TRNERR Manager – Tijuana Estuary Sector

7.2 ECORP Consulting, Inc.

- David Atwater, Senior Environmental Planner/Project Manager
- Samantha Alfaro, Environmental Planner
- Ruby Triguero, Environmental Planner
- Joshua Corona-Bennett, Biology Group Manager
- Kevin Israel, Senior Biologist
- Robert Ramirez, Senior Archaeologist
- Seth Meyers, Air Quality/Greenhouse Gas/Noise/Energy Group Manager
- Rosey Worden, Air Quality/Greenhouse Gas/Noise/Energy Specialist
- Sophia Winter, Air Quality/Greenhouse Gas/Noise/Energy Specialist
- Marc Guidry, GIS Manager
- Jonathon Corbridge, GIS Specialist
- Torrey Rotellini, GIS Specialist
- Devin Keogh, Technical Editor
- Grady Lynch, Copyeditor

7.3 Moffatt & Nichol

- Weixia Jin, Technical Director
- Tonia McMahon, Permitting Task Lead

7.4 Nordby Biological Consulting (Biological Technical Report)

- Chris Nordby, Principal Biologist

7.5 Nova Services (Geotechnical Investigation)

- Tom Canady, PE, Principal Engineer
- John F. O'Brien, PE, GE, Principal Geotechnical Engineer
- W. Lee Vanderhurst, CEG, Senior Geologist

7.6 SoCal Water (Hydrology and Sedimentation Report and Sea Level Rise Report)

- Adam Luke Ph. D
- Brett Sanders, Ph. D

Appendices available upon request