

California Environmental Quality Act
DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Mission Canyon Stream Habitat Restoration Project

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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
API	Area of Potential Impact
APM	Applicant Proposed Measure
APN	Assessor's Parcel Number
BMP	best management practice
BTR	Biological Technical Report
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	methane
CIP	Capital Improvement Plan
City	City of Santa Barbara
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
County	Santa Barbara County
CRHR	California Register of Historic Resources
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dBA	A-weighted decibels
DPM	diesel particulate matter
DPS	distinct population segment
DTSC	Department of Toxic Substances Control
ECAP	Energy and Climate Action Plan
EMFAC2021	Emissions Factor 2021
EPA	U.S. Environmental Protection Agency
ESA	environmentally sensitive area
GHG	greenhouse gas
GPS	Global Positioning System
HRMP	Habitat Restoration and Monitoring Plan
IS	Initial Study
L _{eq}	energy equivalent level
L _{max}	maximum sound level recorded during the measurement interval
LSA	Lake and Streambed Alteration
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MM	Mitigation Measure
MMTCO ₂ e	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MTCO ₂ e	metric tons of carbon dioxide equivalent
N ₂ O	nitrous oxide
NMFS	National Marine Fisheries Service
NO _x	nitrogen oxides



Acronym/Abbreviation	Definition
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NWS	National Weather Service
O ₃	ozone
OHWM	ordinary high water mark
Ozone Plan	2022 Ozone Plan
PAD	Passage Assessment Database
Paleontological Report	Mission Creek Habitat Restoration Project: Paleontological Resources Technical Report
Phase II Cultural Report	Phase 2 Testing Results for Site CA-SBA-2722H, Mission Creek Habitat Restoration Project, Santa Barbara County, California
PM ₁₀	coarse particulate matter; particulate matter 10 microns in diameter or less
PM _{2.5}	fine particulate matter; particulate matter 2.5 microns in diameter or less
PPV	peak particle velocity
PRC	Public Resources Code
PRMMP	Paleontological Resources Monitoring and Mitigation Plan
PRMR	Paleontological Resources Monitoring Report
Proposed Project or Project	Mission Canyon Stream Habitat Restoration Project
PVC	polyvinyl chloride
QSP	Qualified SWPPP Practitioner
ROC	reactive organic compounds
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SBCFD	Santa Barbara County Fire Department
SC	Sidecast
SCA	Society for California Archaeology
SCE	Southern California Edison
SOI	Secretary of the Interior
SO _x	sulfur oxides
SR	State Route
SSC	Species of Special Concern
SWCA	SWCA Environmental Consultants
SWPPP	Stormwater Pollution Prevention Plan
SWPT	southwestern pond turtle
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TIP	Technical Implementation Plan
TMP	Traffic Management Plan
TROW Storm Recovery Project	Storm Event Tunnel Trail Road Repair Project
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
WEAP	Worker Environmental Awareness Program



1.0 INTRODUCTION

1.1 STATUTORY AUTHORITY AND REQUIREMENTS

The California Department of Fish and Wildlife (CDFW) has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of the proposed Mission Canyon Stream Habitat Restoration Project (herein referenced as the “Proposed Project” or “Project”). This IS/MND has been prepared in accordance with the California Environmental Quality Act (CEQA), California Public Resources Code (PRC) Section 21000 et seq., and the CEQA Guidelines, Title 14 California Code of Regulations (CCR) Section 15000 et seq.

Pursuant to CEQA, the lead agency shall conduct an Initial Study (IS) to determine whether the Proposed Project may have a significant adverse effect on the environment. The IS analyzes the environmental factors outlined in Appendix G, Environmental Checklist Form, of the CEQA Guidelines (14 CCR 15000 et seq.) to evaluate whether a proposed project could have a significant effect on the environment. Article 6, Section 15070, Decision to Prepare a Negative Declaration or Mitigated Negative Declaration, of the CEQA Guidelines states the following:

A public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when:

- a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
- b) The initial study identifies potentially significant effects, but:
 - 1) Revisions in the project plans or proposals made by, or agreed to by, the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
 - 2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment (14 CCR 15070).

Based on the analysis of the Proposed Project in this IS, it has been determined that all Project-related environmental impacts would be less than significant with adherence to the mitigation program. Therefore, adoption of an MND will satisfy the requirements of CEQA.

1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over a proposed project. CEQA Guidelines Section 15051(b) directs that, “if the project is to be carried out by a nongovernmental person or entity, the lead agency shall be the public agency with the greatest responsibility for supervising or approving the project as a whole.” The Proposed Project requires discretionary approval from CDFW. CDFW is the lead agency because it has the greatest responsibility for supervising or approving the Project as a whole.

1.3 PURPOSE OF THIS DOCUMENT

The purpose of this document is to evaluate the potential environmental effects of the Proposed Project and to present decision makers and the public with the environmental consequences of the Proposed Project. The environmental documentation and supporting analysis are subject to a public review period. During this review, public agency comments on the document relative to environmental issues should be addressed to CDFW. Following review of any comments received, CDFW will consider these comments as a part of the Project’s environmental review and include them with the IS documentation for consideration by CDFW. The IS/MND is available for a 30-day public review period from February 6, 2024, to March 7, 2024.



Comments should be addressed to:

California Department of Fish and Wildlife, South Coast Region
3030 Old Ranch Parkway, Suite 400
Seal Beach, California 90740
Attn: Frederic (Fritz) Rieman

The address for email comments is: AskR5@wildlife.ca.gov

The IS/MND may be viewed online at <https://www.wildlife.ca.gov/Notices>. In addition, hard copies of the IS/MND and appendices are available for review at the locations listed in Table 1-1, Public Repository Sites, below.

**Table 1-1
Public Repository Sites**

Site	Address	Telephone
Santa Barbara Public Library	40 East Anapamu Street Santa Barbara, California 93101	805.962.7653
CDFW Seal Beach Field Office	3030 Old Ranch Parkway, Suite 400 Seal Beach, California 90720	858.467.4210

After comments are received from the public and reviewing agencies, CDFW will consider those comments and may (1) adopt the MND and approve the Proposed Project, (2) undertake additional environmental studies, or (3) disapprove the Proposed Project.

1.4 DOCUMENT ORGANIZATION

This IS/MND is organized to provide an analysis of the potentially significant environmental impacts and mitigation measures (where required) for the Proposed Project. In order to describe the direct, indirect, and cumulative impacts, as well as mitigation measures for the Proposed Project, this IS/MND is organized as follows:

Chapter 1 Introduction serves as a foreword to the IS/MND, introducing the applicable environmental review procedures, intended uses of the IS/MND, format of the IS/MND, and summary of conclusions of the environmental analysis.

Chapter 2 Project Description provides a description of the Proposed Project components, including construction equipment and schedule.

Chapter 3 Initial Study Checklist provides a description of the existing environmental setting and an analysis of the potentially significant environmental impacts identified for the Proposed Project, if any.

Chapter 4 Environmental Analysis presents the environmental setting and impact analysis for each resource topic.

Chapter 5 Report Preparation Personnel lists members of the team that contributed to the preparation of this IS/MND, as well as their primary responsibility.

Chapter 6 References lists references used in preparation of the IS/MND.

Appendices include various information and technical studies prepared for the Proposed Project, as listed in the table of contents.



1.5 INCORPORATION BY REFERENCE

A list of references is included in Chapter 6, References. The IS/MND has been prepared based on technical studies prepared for the Project and attached as Appendices A through K. The IS/MND reflects the findings of those technical reports and provides mitigation measures and applicant proposed measures, if needed, to reduce or avoid potential environmental impacts of the Project to a less-than-significant level.

Additionally, the following County Comprehensive Plan and Code of Ordinances were utilized in the preparation of this IS and are incorporated into this document by reference. These documents are available for review online or in person at the locations listed below.

- *County of Santa Barbara Comprehensive Plan*
Available online at: <https://www.countyofsb.org/954/Comprehensive-Plan>
Or in person at the County of Santa Barbara Planning and Development Department:
123 East Anapamu Street, Santa Barbara, California 92101
- *Santa Barbara County Code of Ordinances (codified through Ordinance No. 5126)*
Available online at: <https://www.countyofsb.org/988/County-Codes-Regulations>
Or in person at the County of Santa Barbara Planning and Development Department:
123 East Anapamu Street, Santa Barbara, California 92101

1.6 SUMMARY OF FINDINGS

Chapter 4, Environmental Analysis, of this document contains the analysis and discussion of potential environmental impacts of the Proposed Project.

Based on the resource issues evaluated in Chapter 4, it was determined that the Proposed Project would have no impact or a less-than-significant impact on the following resource issue areas:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Energy
- Greenhouse Gas Emissions
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

The following list of resource areas require mitigation to avoid or minimize potential environmental impacts. With implementation of the mitigation identified within this IS/MND, it was determined that the Proposed Project would have a less-than-significant impact on the following resource issue areas:

- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Transportation
- Tribal Cultural Resources
- Wildfire
- Mandatory Findings of Significance



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2.0 PROJECT DESCRIPTION

2.1 INTRODUCTION

In December 2019, Southern California Edison (SCE) performed maintenance operations that consisted of road grading and vegetation management along the Tunnel Trail access road in the Mission Canyon area of Santa Barbara County (County), California (hereafter referenced as the “December 2019 work”). SCE typically maintains dirt roads to allow for access to their existing infrastructure, in this case, transmission towers and associated transmission lines. The December 2019 work went beyond the normal maintenance of the road prism and berms, resulting in an unauthorized discharge of material to the stream and the adjacent upland habitats (Road Areas 1 through 9). While smaller rocks and fine sediment material have settled on the slopes above the creek, larger rocks and additional fine material from the grading discharge have settled in the creek and tributary bottoms. The unauthorized activities in December 2019 caused impacts to Mission Creek and its associated fish and wildlife resources and the native habitats on which they depend.

The U.S. Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board (RWQCB), County, and City of Santa Barbara (City) were made aware of these activities affecting Mission Creek and its tributaries. CDFW determined the activities were subject to Fish and Game Code Section 1602 notification and issued a Notice of Violation (NOV No. 1600-2020-9002-R5) on February 25, 2020. SCE submitted to CDFW a notification per Fish and Game Code Section 1602, identified as Notification No. 1600-2020-0149-R5. On December 3, 2020, the People of the State of California, by and through the Santa Barbara County District Attorney, filed an action in the Santa Barbara County Superior Court against SCE for violations including Fish and Game Code Sections 1602 and 5650. On December 4, 2020, SCE and the Santa Barbara County District Attorney entered into a settlement agreement and stipulated to entry of the final judgment that required SCE to complete the Project, among other things.

The goal of the Project is the restoration of impacted fish and wildlife resources with the objectives of full removal¹ of all sidecast material and restoration of impacted habitat within the Project area to levels that existed prior to the December 2019 work. A highly detailed description of the specifics of implemented and monitoring is included in the Mission Creek Habitat Restoration and Monitoring Plan (hereafter referred to as the HRMP) (Appendix A).

2.2 PROJECT LOCATION

The Project site is located along portions of Mission Creek within Mission Canyon, Santa Barbara County, California (Exhibit 1, Regional Vicinity). The site access coordinates are Latitude: 34.465018, Longitude: 119.712531. The Project is in the Mission Canyon Watershed (Exhibit 2, Project Vicinity). The Project site is in the Mission Creek–Frontal Santa Barbara Channel hydrologic unit (HUC12: 180600130203). Mission Creek flows for 16 miles from its headwaters directly to the Pacific Ocean and is an intermittent stream that is mapped as Freshwater Forested/Shrub Wetland and Riverine in the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI). Mission Creek and its tributaries are considered waters of the United States and waters of the State. Mission Creek in the Project area is an intermittent waterway that has been impacted by current land use practices and drought.

The Project site is in an unincorporated area of the County on two distinct parcels: a majority of the Project site lies within Assessor’s Parcel Number (APN) 153-270-009 (owned by the City), while a small portion (approximately 120 linear feet of road and 0.028 acres of sidecast area) at the northeast corner of the Project site occurs within APN 153-270-028 (under private ownership) (Exhibit 3, Project Site). The Project area is in Sections 33 and 34 of Township

¹ The intent of the Project is to remove all sidecast material remaining on the Project site at the time of construction, with noted constraints identified in Section 2.7.2. For purposes of this assessment, “sidecast material” excludes materials repurposed as building materials (e.g. for berms).



5 North, Range 27 West, San Bernardino meridian, and is depicted on the U.S. Geological Survey (USGS) Santa Barbara, California, 7.5-minute quadrangle map. The Project area is on the southern slopes of the Santa Ynez Mountains, between 900 and 1,500 feet above mean sea level. Aspects are mostly southwest or east and slopes average 40% to 65%.

The total Project footprint encompasses 7.24 acres within Mission Canyon, including 2.48 acres of sidecast removal areas where rock and sediment have slid into Mission Creek’s bed and bank and adjacent upland slopes. The total area of habitat restoration of the Project encompasses 2.60 acres consisting of 2.48 acres of sidecast removal and habitat restoration (of which 1.01 acres are within CDFW/RWQCB regulated areas) and habitat restoration of 0.12 acres of currently unvegetated staging areas (non-sidecast areas). Habitats to be restored by sidecast removal and restoration consist of 1.06 acres of woodland and forest habitats and 1.42 acres of upland habitats. The Project will also implement 0.91 acres of habitat enhancement by seeding exposed road cut areas and conducting species-targeted weed abatement. (A total of 1.27 acres of road cuts will be seeded to make allowances for rock surfaces where seeding may not take hold.)

The Project makes use of 1.8 acres of existing maintenance roads (for vehicular and equipment travel, access to the sites, etc.) and utilizes 0.37 acres of unvegetated parking/storage areas (for storage of materials and staging equipment). The Project also consists of 0.5 acres of berm stabilization or reconstruction and revegetation. A total of 0.27 acres has been identified as contingency areas to allow for foot trails for crews to access sidecast piles and conduct removal operations safely within Road Areas 1 and 2 and Creek Sites 1–4. Following Project activities, disturbance within the contingency buffer will be mapped and restored in accordance with the HRMP (Appendix A).

2.3 PROJECT BACKGROUND

2.3.1 Impacts of December 2019 Work

As described in Section 2.1, Introduction, the December 2019 work went beyond the normal maintenance of the road prism and berms, resulting in unauthorized impacts to Mission Creek and two unnamed tributaries and the adjacent upland habitats. The discharge caused impacts to the slopes below the road, Mission Creek, streambed, trees, sensitive plants, sensitive wildlife, and native habitats.

In total, the December 2019 work impacted 3.51 acres of vegetation. The most prevalent, and thus most impacted, vegetation community within the Project area was Big pod ceanothus chaparral, with Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, *Ceanothus spinosus* – *Ceanothus megacarpus* Association as the second most prevalent and second most impacted. Of the nine vegetation communities impacted, five are state sensitive natural communities. Impacts to vegetation communities resulting from December 2019 work is presented below in Table 2-1.

Table 2-1 Impacts to Vegetation Communities Resulting from December 2019 Work

Vegetation Community	Permanent Berms (acres)	Rock Wall (acres)	Sidecast (acres)	Total (acres)
CDFW Sensitive Communities*				
Big pod ceanothus Chaparral (<i>Ceanothus megacarpus</i> - <i>Salvia millifera</i>) Shrubland Alliance*	0.03	0.02	0.08	0.13
California bay (<i>Umbellularia californica</i>) forest and woodland Alliance*	0.01	0.00	0.08	0.09



Vegetation Community	Permanent Berms (acres)	Rock Wall (acres)	Sidecast (acres)	Total (acres)
Coast live oak woodland Alliance, <i>Quercus agrifolia</i> - <i>Umbellularia californica</i> Association*	0.03	0.00	0.63	0.66
Coastal Sage and Island Scrub Oak Chaparral <i>Quercus dumosa</i> – <i>Quercus pacifica</i> Shrubland Alliance*	0.00	0.00	0.00	0.00
Hairy Leaf – Woolly Leaf Ceanothus Chaparral Alliance Ceanothus (<i>oliganthus</i> , <i>tomentosus</i>) Shrubland Association*	0.03	0.00	0.02	0.05
<i>Sensitive Communities Subtotal</i>	<i>0.1</i>	<i>0.02</i>	<i>0.81</i>	<i>0.93</i>
Non-Sensitive Communities				
Bigpod ceanothus chaparral Alliance	0.15	0.31	0.83	1.29
Coast live oak (<i>Quercus agrifolia</i>) woodland and forest Alliance	0.13	0.08	0.35	0.56
Holly leaf cherry - toyon - greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> Association	0.01	0.00	0.02	0.03
Holly leaf cherry - toyon - greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> - <i>Ceanothus megacarpus</i> Association	0.11	0.12	0.47	0.70
Developed/Disturbed	0.00	0.00	0.00	0.00
<i>Non-Sensitive Communities Subtotal</i>	<i>0.4</i>	<i>0.51</i>	<i>1.67</i>	<i>2.58</i>
Grand Total	0.5	0.53	2.48	3.51

Source: Table 4, HRMP (HELIX 2024, Appendix A).

Note:

* Denotes a CDFW Sensitive Natural Community.

Table 2-2 provides a summary of trees impacted as a result of the December 2019 work.

Table 2-2
Summary of Impacted Trees by Species and Severity

Species	Minor	Moderate	Major	Total
Coast Live Oak	81	19 ¹	5	105 ¹
Bay Laurel	5	6	6	17
Western Sycamore	3	4	1	8
California Buckeye	0	1	0	1
Total	89	30¹	12	131¹

Note:

¹ One additional coast live oak tree was discovered in October 2021 with moderate impacts as a result of the sidecast in the Sidecast 3 Rock Outliers location, which is reflected in this table.

While smaller rocks and fine sediment material have settled on the slopes above the creek, larger rocks and additional fine material have settled in the creek and tributary bottoms. The different areas of discharge deposits have been given an identifier name and number, as described in Section 2.6, Environmental Setting, and as depicted in Exhibits 4a through 4e, Project Areas). The total summary of impacts to Regulatory Areas from the December 2019 work is described in Table 2-3.



**Table 2-3
Summary of Impacts to Regulatory Areas from the December 2019 Work**

Project Site	State and Federal Regulatory Areas			
	USACE (non-wetland waters ¹)		RWQCB/CDFW	
	Square Feet	Volume (Cubic Yards)	Square Feet	Volume (Cubic Yards)
Site 1				
Road Area 1	89.4 (22.0 linear feet)	0.9	16,776.3 (211.3 linear feet)	184.9
Sidecast 3 Rock Outliers	39.2 (15.4 linear feet)	<1.0	3,213.9 (53.4 linear feet)	17
<i>Subtotal</i>	128.6 (37.4 linear feet)	1.9	19,990.2128 (264.7 linear feet)	201.9
Site 3				
Road Area 2	0	0	4,010.1 (139.9 linear feet)	70.5
<i>Subtotal</i>	0	0	4,010.1 (139.9 linear feet)	70.5
Site 4				
Creek Site 1	245.5 (25.8 linear feet)	17.6	1,304.1 (47.6 linear feet)	88.6
Creek Site 2	388.2 (75.1 linear feet)	30.9	3,427.3 (155.8 linear feet)	257.2
Creek Site 3	296.0 (70.0 linear feet)	24.9	4,137.3 (97.2 linear feet)	346.6
Creek Site 4	1076.2 (91.5 linear feet)	51.7	10,267.8 (167.1 linear feet)	439.8
<i>Subtotal</i>	2005.9 (262.4 linear feet)	125.1	19,136.5 (467.7 linear feet)	1,132.2
Site 5				
Creek Site 7	86.9 (21.5 linear feet)	8.4	86.9 (21.5 linear feet)	8.4
<i>Subtotal</i>	86.9 (21.5 linear feet)	8.4	86.5 (21.5 linear feet)	8.4
Road Areas 5–9				
Road Areas 5–9	0	-	923.0 (170.0 linear feet)	-
Total	2,221.4 (321.3 linear feet) (0.06 acres)	135.4	43,772.51 (1,063.8 linear feet) (1.01 acres)	1,413.0

Source: Table 7, HRMP (Appendix A).

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

Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

Lidar surveys were not completed at Creek Site 5; these site calculations are based on site visit and aerial drone footage.

¹ Volumes and linear feet of the USACE (non-wetland waters) impacts are a subset of the RWQCB/CDFW impacts. The total impacts are not additive.

Project engineers conducted remote surveys following the December 2019 work to provide a rough estimate of the quantity of material that was sidecast down the canyon slopes and into Mission Creek (MBI 2020). The estimated volumes of sidecast material were calculated using post-construction lidar survey (MBI 2020) data collected between January and April 2020. The remotely collected data were used to determine two-dimensional surface areas of the sidecast deposits. Pre-construction topography data were not available to compare to post-construction topography, so the depths of sidecast deposits were estimated using photographs and visual observations of the site. Preliminary



volume estimates of the sidecast deposits were calculated by multiplying the surface areas by the corresponding estimated depths.

To plan for the removal of sidecast deposits as part of the HRMP (Appendix A), SCE retained an environmental contractor specializing in environmental remediation. The contractor conducted a field verification in November 2020 to refine the volume estimates and evaluate the composition (proportion of rock and soil) of the sidecast deposits for increased accuracy within the portions of Mission Creek and Road Areas 1 and 2 (AIS 2020) that are within the regulatory jurisdiction of CDFW, RWQCB, and USACE (collectively, Regulatory Areas). The contractor verified each of the deposit areas within Regulatory Areas using maps and data provided by the previously conducted studies using remote detection methods (MBI 2020). Once the contractor identified the deposit areas within Regulatory Areas, the contractor directly inspected each location by accessing them on foot to observe and determine the existing grade and adjacent contours. The contractor then used a combination of a standard grading rod, engineers' tape, and laser to directly measure the dimensions of each deposit, based on the measured depths of the deposit materials and the surface areas. Once the dimensions of the deposits were established, the contractor's technicians used a small hand shovel to observe and determine the make-up of the sidecast materials present within each deposit. The technicians determined that the deposited materials were primarily made up of rock and loose soils that were sidecast downslope from the existing adjacent roadways in 2019. The contractor's field investigators estimated the composition of rock and soil for each deposit area within the Regulatory Areas of Mission Creek and Road Areas 1 and 2 based on the field observations. Upon verifying the field measurements and composite information for each deposit, the contractor used the field data to calculate the volume of each deposit (in cubic yards) to determine the volume of sidecast material that would need to be removed to match the adjacent existing grades. A third field survey was conducted in September 2021, using the same methodology, to collect sidecast volume and location data for the Sidecast 3 (SC 3) Rock Outliers location that was identified in late 2021 (Burton, pers. comm., 2022).

Finally, on August 9 and 10, 2022, a supplemental sidecast survey was performed to collect detailed data on the distribution and composition of sidecast deposits in all upland areas (HELIX 2022). In this survey, depth measurements of the sidecast deposits were collected from 39 sample points across all sidecast areas. These data were instrumental in scoping sidecast removal methodologies (Section 3.1, Background). SCE's environmental contractor used these data to calculate revised sidecast volume estimates in September 2022 following similar methods, as described above (AIS 2022).

Collectively, the refined volume estimates from November 2020, September 2021, and September 2022 are provided in Table 2-4, Sidecast Rock, Boulders, and Sediments within Mission Canyon, below. The data in Table 2-4 represent the best approximation, after multiple field visits, individual site inspections, and detailed data collection, of the volumes of sidecast material deposited by SCE's December 2019 work. The total estimated volume of sidecast material (rock, sediment, and debris) deposited within RWQCB and CDFW Regulatory Areas was approximately 1,413.0 cubic yards, inclusive of the total estimated 135.4 cubic yards of sidecast material within USACE Regulatory Areas. The total estimated volume of sidecast material (rock, sediment, and debris) deposited within upland areas was approximately 1,518.8 cubic yards. Separately, approximately 600 cubic yards, of the aforementioned 1,518.8 cubic yards, was subsequently used to construct roadside berms from the Gate Area through Road Area 9.

Table 2-4. Sidecast¹ Rock, Boulders, and Sediments within Mission Canyon

Site Location	Surface Area (square feet) ²	Estimated Depth (feet) ³	Total Sidecast Volume (cubic yards) ³	Volume within USACE Regulatory Areas (cubic yards) ^{2,3}	Volume within RWQCB/CDFW Regulatory Areas (cubic yards) ^{2,3}
Creek Site 1	1,447.54	1.65	88.6	17.6	88.6
Creek Site 2	3,553.97	1.95	257.2	30.9	257.2
Creek Site 3	4,343.73	2.15	346.6	24.9	346.6
Creek Site 4	10,303.45	1.15	439.8	51.7	439.8



Site Location	Surface Area (square feet) ²	Estimated Depth (feet) ³	Total Sidecast Volume (cubic yards) ³	Volume within USACE Regulatory Areas (cubic yards) ^{2,3}	Volume within RWQCB/CDFW Regulatory Areas (cubic yards) ^{2,3}
Creek Site 5	0	0.0	0.0	0.0	0.0
Creek Site 6	0	0.0	0.0	0.0	0.0
Creek Site 7	6,543.06	Variable	8.44	8.45	8.44
Road Area 1	16,950.87	0.29	184.9	0.9	184.9
Road Area 2	4,044.39	0.47	70.5	0	70.5
SC 1	1,315.20	0.50	24.4	0.0	0.0
SC 2	4,439.44	0.43	71.1	0.0	0.0
SC 3	7,868.09	0.60	176.1	0.0	0.0
SC 3 Rock Outliers ⁴	3,308.75	Variable	17.04	<1.05	17.04
SC 4	5,062.66	0.36	67.5	0.0	0.0
SC 5	6,275.73	0.69	161.2	0.0	0.0
SC 6	1,223.95	0.31	14.2	0.0	0.0
SC 7	2,112.77	0.40	31.4	0.0	0.0
SC 8	141.73	0.15	0.8	0.0	0.0
SC 9	380.20	0.14	2.1	0.0	0.0
SC 10	1,930.86	0.19	14.3	0.0	0.0
SC 11	4,823.73	0.25	44.8	0.0	0.0
SC 12	7,263.89	0.39	107.8	0.0	0.0
SC 13	2,759.72	0.49	51.2	0.0	0.0
SC 14	5,502.01	0.47	102.1	0.0	0.0
SC 15	353.64	0.50	6.6	0.0	0.0
SC 16	755.61	0.41	14.0	0.0	0.0
SC 17	474.37	0.48	8.4	0.0	0.0
SC 18	2,738.19	0.15	15.2	0.0	0.0
SC 19	2,313.10	0.06	5.6	0.0	0.0
Sidecast Total	108,230.65 (2.48 acres)		2,331.8	135.4	1,413.0
Berms			600	0.0	0.0
Grand Total (with Berms)			2,931.8	135.4	1,413.0

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

¹ For purposes of this assessment, "sidecast materials" excludes materials repurposed as building materials (e.g., for berms).

² HELIX 2024.

³ AIS 2022.

⁴ Areas SC 3 and Creek Site 7 were refined following ground-truthing surveys to define sidecast more accurately in this area. While the square footage of impacts changed, there was no change to overall sidecast volume. Updated estimate (Burton, pers. comm., 2022; HELIX 2024).

Sidecast accumulation in Creek Sites 1 through 4 accounts for the majority of impacts to Mission Creek, particularly within the streambed. A detailed description of the sidecast material in each of these locations is provided in the sections below.

2.3.2 Comparative Scoping Analysis

In October 2022, SCE submitted a Supplemental Site Surveys and Comparative Scoping Analysis report to CDFW (Appendix B). The site surveys, scoping exercise, and analysis performed by SCE described in this report were important steps in developing the scope for the Proposed Project. The objective of the scoping exercise and analysis was to evaluate various sidecast removal techniques and identify methods that would result in safely removing the



largest volume of sidecast material possible without causing additional harm to environmental resources. SCE achieved this objective and identified two new methods to extract materials in certain locations that were previously thought to be unrecoverable.

SCE determined that the Proposed Project would be the least impactful of the Project options evaluated. The intent of the Project is to remove all sidecast material remaining on the Project site at the time of Project construction; however, there are some potential constraints to full removal in certain locations as described in Section 2.7.1, Sidecast Removal Methods, below. The Supplemental Site Surveys and Comparative Scoping Analysis (Appendix B) report concluded that SCE's Proposed Project, as described in detail in the HRMP (Appendix A), provides for safe and highly effective methods to fully restore the Mission Canyon areas affected by the December 2019 work in a manner that is least impactful to environmental resources, optimizing the removal of sidecast material while protecting the environment.

2.4 PROJECT OBJECTIVES

SCE proposes to implement the Proposed Project to satisfy its obligation to address impacts associated with the unauthorized December 2019 work in accordance with a December 4, 2020, settlement agreement² between SCE and the Santa Barbara County District Attorney. The objectives of the Proposed Project are the full removal of sidecast material and restoration of impacted habitat within the Project area, including Mission Creek stream habitat, such that it may support native fish use to levels that existed prior to the December 2019 work (HELIX 2024).

The Proposed Project addresses the habitat restoration and remediation of resource impacts to native habitats, trees, sensitive plants, sensitive wildlife, and waters of Mission Creek and adjacent areas. The restoration goals include full sidecast removal to restore stream flows, stabilize soils of the creek bank, repair habitat features such as pools within the stream bed, remediate and mitigate impacts to trees and sensitive plants, and restore all impacted woodland/forest and chaparral habitats. Specifically, the objectives of the Project are as follows:

- Achieve full removal of all sidecast material
- Restore stream hydrology and habitat, including stabilizing creek bank/slopes, and repairing habitat features, such as pools within the stream bed
- Restore and mitigate trees impacted by the December 2019 work
- Restore and mitigate impacted native habitats impacted by the December 2019 work
- Mitigate impacts to sensitive plant species impacted by the December 2019 work

2.5 PROJECT BASELINE AND ASSESSMENT OF IMPACTS

Due to major rainstorm events that impacted the Project site in early 2023, the total volumes of sidecast material remaining on the Project site at the time of Project construction will likely be less than the estimated volumes shown in Table 2-1. Representative photos of the effects of the major rainstorm events to the Project site are included as Attachment C of the HRMP (Appendix A). Sidecast material that has moved outside the Project area due to 2023 rain events is no longer recoverable and will not be collected or removed as part of the Project.

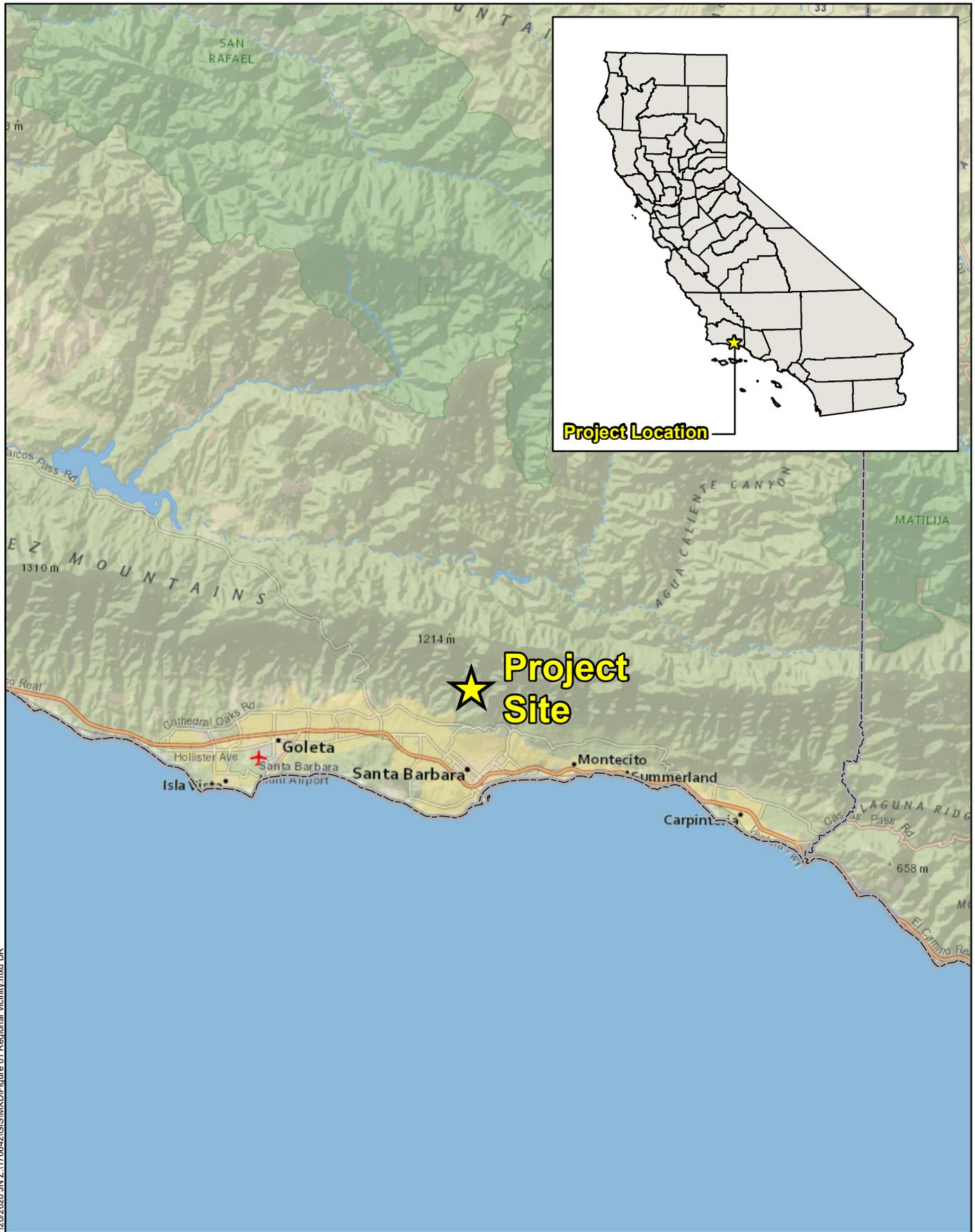
The baseline condition used for the analysis of impacts under CEQA is the existing condition of the Project site at the time of Project initiation, which in this case is the impacted condition where the sidecast material is present within the Project site. However, an assessment of Project impacts relative to this baseline does not account for the temporal loss of stream function and natural habitat or the periodic transport of sidecast material downstream of the Project site

² The Proposed Project would satisfy SCE's obligations under Paragraph 6 of the December 4, 2020, settlement agreement to complete all requirements imposed on SCE by any Lake and Streambed Alteration (LSA) Agreement for the Mission Canyon Stream Habitat Restoration Project described in Notification of Lake or Streambed Alteration No. 1600-2020-0149-R5 submitted to CDFW by SCE under Fish and Game Code Section 1602, as well as requirements from other regulatory agencies.



in the intervening time between now and December 2019 when the unauthorized activities caused the material to be deposited into the Project site from the access road.

To account for a temporal loss of stream function and natural habitat and the periodic transport of sidecast material downstream, and to address any material that cannot be removed and left in place due to infeasibility of removal, the response to remediate the impacts of the December 2019 work would also include the payment of funds by SCE. SCE has committed to provide a minimum of \$700,000.00 into an endowment to be used toward a future separate fish passage or other stream restoration project in the County. Authorization of any such future project would comply with CEQA at the time that a specific project is developed and is not part of the Proposed Project being analyzed in this IS/MND.



7/20/2020, JN.Z1176642\GIS\MXD\Figure 01 Regional Vicinity.mxd DR

MISSION CANYON STREAM HABITAT RESTORATION PROJECT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Regional Vicinity

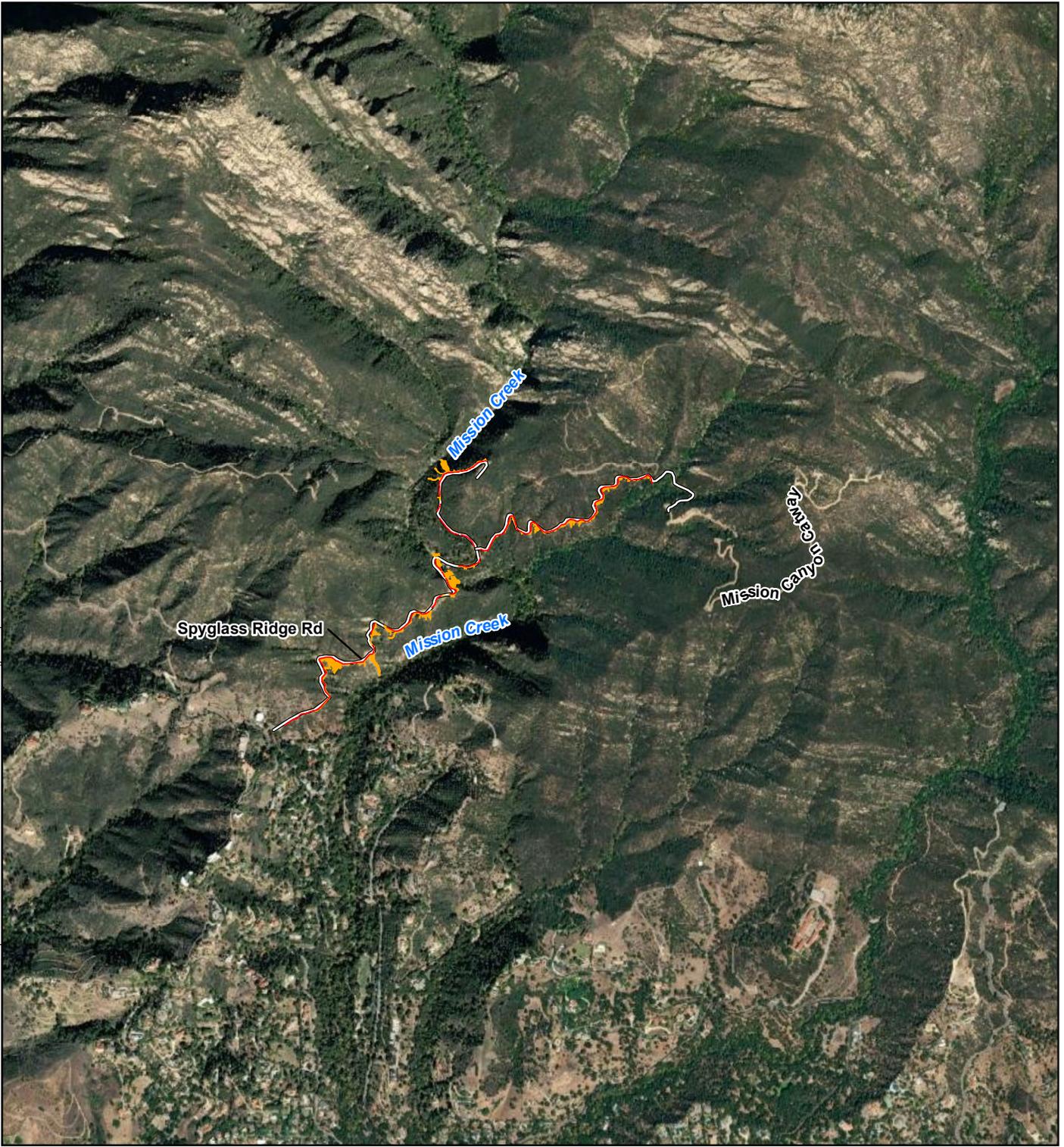


Source: ArcGIS Online, 2020



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Legend

-  Project Site
-  Sidecast Areas
-  Earthen Berms

MISSION CANYON STREAM HABITAT RESTORATION PROJECT



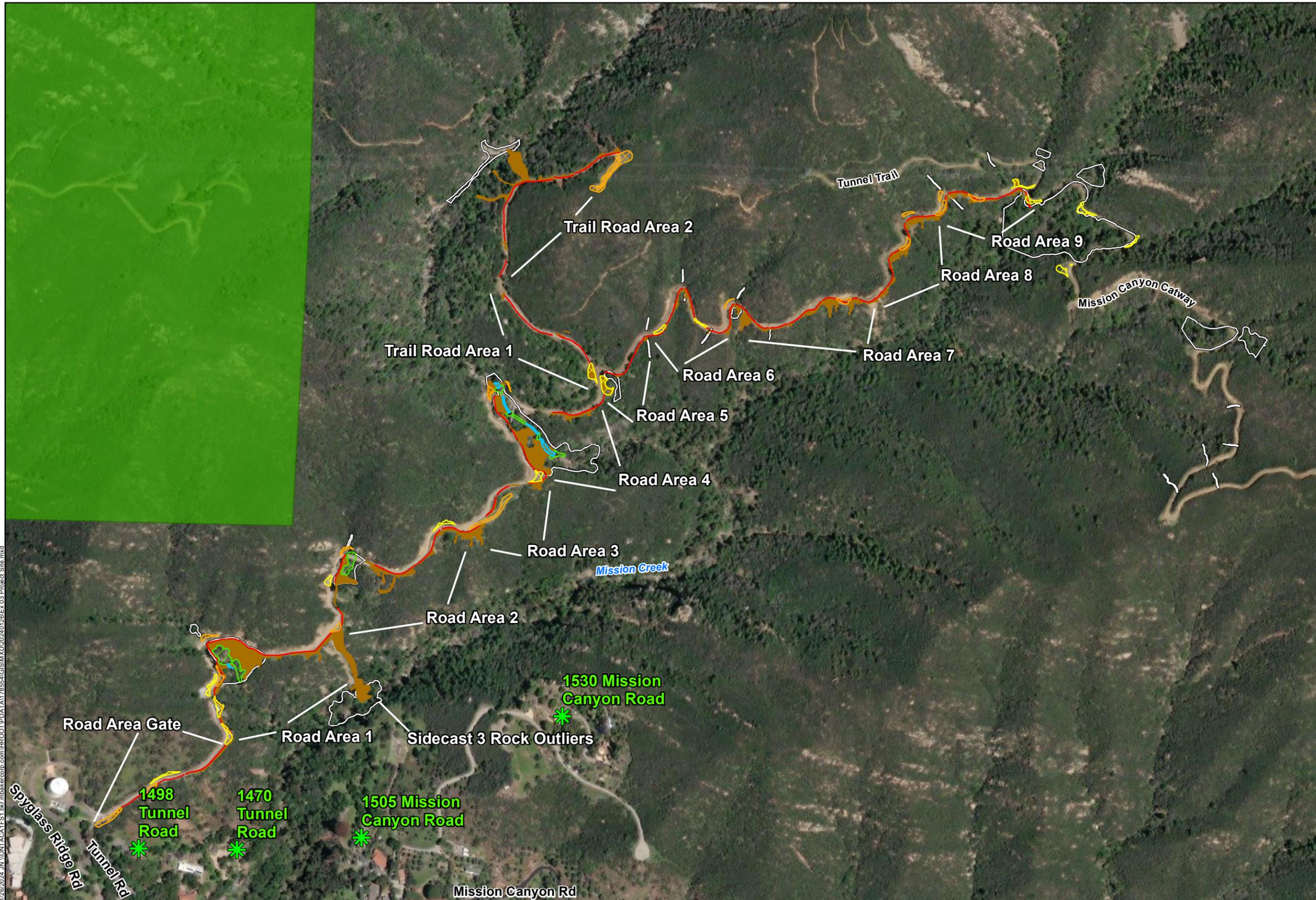
Source: ArcGIS Online (2022)

Project Vicinity

Exhibit 2



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Legend

-  Sensitive Receptors
-  Project Site
-  National Forest System Lands
-  Parking/Staging Area
-  Storage/Staging Area
-  Contingency Buffer
-  Earthen Berms

Restoration Activity

-  Restoration Area
-  Potential In-Stream Habitat Features

1/29/2024 JN NONTACA1.FS1.tkr.mbakercorp.com\HROOT\IPDA\TAI\765541\GIS\MXD\20240126\Ex_03 Project Site.mxd



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2.6 ENVIRONMENTAL SETTING

The Project site is the upper mountainous portion of Mission Canyon. The slopes and drainage are steep, and the width of the creek is relatively narrow. Vegetation occurs where the terrain allows and is composed of a shrub/herbaceous understory and an upper canopy dominated by California bay (*Umbellularia californica*) and sycamore, with scattered California sycamores (*Platanus racemosa*) and black cottonwoods (*Populus trichocarpa*). Much of the canyon along the Project area is steep, with portions composed of vertical exposed rockface escarpments. Where sidecast was deposited along some slopes, it is mostly loosely compacted and contains fractured rock material. The exposed rock face of the canyon is highly weathered, fractured, and unstable due to steep slopes and natural erosive processes that provide the creek with its boulder, cobble, and gravel structure. The steepness of the drainage and the unstable condition of slope material, along with the continual erosional and hydrological forces, create an environment of steep, unstable mountainous terrain (EcoKai 2024).

Mission Creek in the Project area is an intermittent waterway that has been impacted by current land use practices and drought and generally consists of a riffle-pool habitat sequence with occasional boulder cascades and waterfalls. Riffle-pool sequences are commonly found in mountain streams and provide particularly valuable habitat for fish and other wildlife (Clean Water Act Section [CWA] 404(b)(1) Guidelines) (40 CFR 230.45). The rapid movement of water over a coarse substrate in riffles results in a rough flow, turbulent surface, and high dissolved oxygen levels in the water. The rocky creek bed in riffles provides protection from predators, sources of food deposition, and shelter. Riffles also provide bank (lateral) and/or bed (vertical) stability. The stability of beds and banks provided by a riffle habitat is important to reduce the potential for channel degradation following sidecast material removal. Once sidecast material is removed from areas where the deposition may have displaced native creek material, any impacted portions of the creek bed lacking cobbles and boulders could become vulnerable to erosional forces during creek flows and may benefit from the reestablishment of native creek material.

Pools are deeper areas of the creek associated with riffles and are an important component of Mission Creek, particularly in the upper reaches where creek flow is ephemeral. Pools are generally created by the vertical force of water falling over bedrock, boulders, or woody debris and forming a deeper indentation by scouring the creek bed, often to bedrock. Pools are characterized by a slower stream velocity, deeper water depths, smoother water surface, and a finer substrate. The water-holding capacity of pools is often enhanced by the accumulation of large cobbles, boulders, woody material, and other streambed material along the downstream edges of the pools. With deeper water and slower flow velocity than other creek habitats, pools play an important role along Mission Creek as they retain organic matter, provide shelter and protection from predators, provide areas of cooler water conditions, and retain water in ephemeral creeks after the flow has ceased. Pools retain water longer than other stream habitats and are an important source of water for native species in this reach of the stream.

The Project area is located within the Mission Creek Frontal Santa Barbara Channel watershed (Hydrologic Unit Code 180600130203), defined by Mission Creek and its tributaries. Mission Creek flows south along Tunnel Trail, parallel to Spyglass Ridge Road, and eventually to the Pacific Ocean at Stearns Wharf. Within the Project site, Mission Creek is classified as both Riverine habitat and Freshwater Forested/Shrub Wetland by the NWI.

Determination of natural vegetation communities was assessed throughout 2020 using field-based surveys and mapping for determining dominant species, percent cover, and community boundaries; communities were refined using ArcGIS post-survey (SWCA 2023a). Vegetation community names correspond to the Manual of California Vegetation online (CNPS 2020), with the sensitivities compared to the current list of sensitive natural communities (CDFW 2019). Communities were mapped to the alliance; however, state sensitive communities were mapped to the association when their overarching alliance was not state sensitive. Vegetation in the study area is composed of a matrix of nine different plant communities, five of which are deemed sensitive (see Figures 3a–e, Vegetation and Sensitive Species Within the Study Area in the HRMP [Appendix A]).



The non-sensitive communities found within the Project site include:

- *Ceanothus megacarpus* Shrubland Alliance (Big pod ceanothus chaparral)
- Holly leaf cherry – toyon – greenbark ceanothus chaparral with *Ceanothus spinosus* – *Ceanothus megacarpus* Association
- Holly leaf cherry – toyon – greenbark – *Ceanothus Spinosus* Association
- *Quercus agrifolia* Forest and Woodland Alliance (Coast live oak woodland and forest)

The sensitive communities found within the Project site include:

- Big pod ceanothus chaparral with *Ceanothus megacarpus* – *Salvia mellifera* Association
- *Ceanothus (oliganthus, tomentosus)* Shrubland Alliance (Hairy leaf – woolly leaf ceanothus chaparral Alliance) with *Ceanothus oliganthus* Association
- Coast live oak woodland and forest with *Quercus agrifolia* – *Umbellularia californica* Association
- *Quercus dumosa* – *Quercus pacifica* Shrubland Alliance (Coastal sage and Island scrub oak chaparral)
- *Umbellularia californica* Forest and Woodland Alliance (California bay woodland and forest)

Mission Creek Sites

The main drainage in the Proposed Project site, Mission Creek, flows for 16 miles from its headwaters directly to the Pacific Ocean and is an intermittent stream that is mapped as Freshwater Forested/Shrub Wetland and Riverine in the USFWS NWI. Mission Creek and its tributaries are considered waters of the United States and waters of the State. The banks of the creek are approximately 20 feet in height, and vegetation associated with the riparian corridor along the banks included mature trees species such as coast live oak (*Quercus agrifolia*), willow (*Salix* sp.), and California sycamore. Shrub habitat outside the limits of Regulatory Areas was dominated by laurel sumac (*Malosma laurina*), bush mallow (*Malacothamnus fasciculatus*), and ceanothus (*Ceanothus* spp.). In portions of the drainages that were not disturbed by excess debris, the drainages were generally unvegetated, with soil textures such as large cobbles and boulders observed in the bed of the channel and rocky banks. Refer to Exhibits 4a through 4e. Project areas have been delineated into various sites, as described below.

Creek Site 1

Creek Site 1 occurs entirely upstream of the Tunnel Trail access road bridge over Mission Creek and contains an estimated 88.6 cubic yards of sidecast material (Table 2-4). Sidecast material occurs along the slopes on both sides of the creek, covering most of the slopes and creek banks from the bridge footings to approximately 15 feet (left bank) and approximately 70 feet (right bank) upstream. Some sidecast material has spilled over the banks and settled into the creek bed, where it is mixed with existing creek cobbles and boulders on both sides of the creek. The creek in this location consists of a series of channel pools separated by higher elevation areas of the creek bed containing exposed bedrock and/or large boulders. A bedrock sheet cascade occurs along the upper portion of Creek Site 1 and is followed by two channel pools.

Creek Site 2

Creek Site 2 begins immediately downstream of the Tunnel Trail access road bridge, with sidecast material covering most of the western slope of the canyon (right bank) from the bridge footing to approximately 60 feet downstream. Sidecast volume in this creek site is estimated at 257.2 cubic yards (Table 2-4). When the stream is flowing under the bridge, the water plunges approximately 13 feet over a waterfall immediately downstream of the bridge, creating a scour pool at the upstream portion of Creek Site 2.

The creek along Creek Site 2 contains native creek gravels, a mixture of pre-impact rock with sidecast rock, and bedrock rockface along the entire left bank through the impact site. The natural creek morphology along the right bank



through Creek Site 2 is mostly unknown due to the depth of sidecast material and the lack of pre-impact data or photographs.

Creek Site 3

The creek between Creek Sites 2 and 3 flows relatively straight in a southeasterly direction and curves slightly toward the south through Creek Site 3. The creek bed through this area is relatively flat and wider than through the other creek sites. The sidecast deposition area of Creek Site 3 extends from the top of the road downslope to the right bank of the creek and fans out laterally as it slides downhill so that the sidecast is more than twice the width at the creek as it is at the top of the slide. The sidecast volume at Creek Site 3 is estimated to be 346.6 cubic yards (Table 2-4), with material covering the entirety of the creek's right bank but, with the exception of a few outliers, does not spill into the creek bed. The creek bed through this site contains native gravels, cobbles, and boulders, with a few scattered sidecast rock outliers.

Creek Site 4

Creek Site 4 contains an estimated volume of 439.8 cubic yards of sidecast material (Table 2-4) and includes a steep slope of sidecast deposit that extends from the road to the left bank of the creek. Creek Site 4 is the farthest downstream of the four sites, and the creek in this area consists of flatwater habitat along the upstream portion and cascade habitat along the downstream portion of the site. The majority of the sidecast occurs along the western slope (right bank), with a portion of the slide having spilled over the creek bank and into the creek, with large boulders covering much of the cascade habitat.

Creek Sites 5 and 6

As shown in Table 2-4, no sidecast material was found at Creek Sites 5 and 6. Therefore, no Project activities would occur in these areas.

Creek Site 7

Creek Site 7 occurs approximately 800 feet upstream of Creek Site 1 and the Tunnel Trail access road bridge over Mission Creek. This section of the creek can be defined as steep and rocky, with complex habitat units such as pools and riffles. Sidecast in this location can be defined as a few dozen scattered boulders, with a total volume of approximately 8.4 cubic yards (Table 2-4). Although most sidecast boulders are scattered outside and above the main creek channel along canyon slopes within the upland chaparral habitat, four individual boulder outliers (less than 24 inches) were located within the creek channel. The limited nature of sidecast deposits in this area avoided complex habitat unit features within the creek, as noted above.

Road Areas 1 and 2

Road Areas 1 and 2 are both located within unnamed drainages west of Mission Creek and are ephemeral drainages that provide flows to Mission Creek during periods of rain. Vegetation associated with the riparian corridor in this area includes coast live oak and shrub species, such as laurel sumac, bush mallow, and ceanothus species. The majority of sidecast deposits occurring within Mission Creek and in the tributaries located at Road Areas 1 and 2 consist of a mixture of small and moderately sized rocks with finer soil material and scattered boulders and contain an estimated 255.4 cubic yards of sidecast material (Table 2-4).

Roadside Sidecast Areas

Roadside sidecast deposits (SC 1 through SC 19) are generally consistent and primarily support upland vegetation communities with woodland/forest habitats in north-facing slopes or natural drainage channels (see Section 2.2, Project Location). Sidecast deposits occurring along Road Areas 1 through 4 consist of thin layers of finer soil material



intermixed with rocks and scattered boulders accumulated along the base of vegetation. In these locations, the roadside berm has already been reconstructed and consists of compacted fines within the road prism. Sidecast deposits lie beyond the reconstructed berm and downslope. Sidecast deposits occurring along the roadside slopes of Road Areas 5 through 9 consist of rocks and boulders intermixed with the roadside berms and include sidecast deposits immediately downslope of the road. The total volume of roadside sidecast deposits within upland areas is estimated to be 918.8 cubic yards (Table 2-4).

Sidecast 3 Rock Outliers

On September 28, 2021, SCE’s fluvial geomorphologist and environmental remediation team conducted a survey of previously unmapped rock outliers at the terminus of SC 3, identified as Sidecast 3 Rock Outliers (see Table 2-5, Project Site Photographs – Existing Conditions). During the survey, the team identified sidecast rock outliers consisting of scattered boulders located at the base of a slope and an individual boulder settled immediately adjacent to Mission Creek, approximately 0.5 miles downstream of Creek Site 4. The total volume of these scattered boulders does not exceed 17 cubic yards of sidecast (Table 2-4). The area is located down a steep portion of the canyon, approximately 400 linear feet and 200 vertical feet downslope and east of the road, having an average slope of 77%. Sidecast 3 Rock Outliers occur at two primary locations: (1) within an upland terrace (16 cubic yards), and (2) within the floodplain terrace (less than 1.0 cubic yard), which only conveys creek flow during large storm events. No material was observed within the low-flow creek bed itself. In addition, a single coast live oak tree was damaged, presumably by the sidecast rockfall (see Tree #254 on Figure 4a of the HRMP [Appendix A]). The tree was given a health assessment of moderate damage rating by an International Society of Arboriculture Certified Arborist who identified damage in several locations and a secondary trunk, which was broken from the main trunk.

Table 2-5
Project Site Photographs – Existing Conditions

<p>Photograph 1: Road Area 1 facing toward Road Area Gate</p>	<p>Photograph 2: Road Area 1 facing west toward sidecast</p>



Photograph 3:
Road Area 1 Sidecast and McCarthy Drain



Photograph 4:
Road Area 1 facing sidecast



Photograph 5:
Road Area 2 facing sidecast



Photograph 6:
Road Area 2



Photograph 7:
Road Area 2 facing southwest toward sidecast



Photograph 8:
Creek Site 1 from bridge toward sidecast



Photograph 9:
Sidecast 3 Rock Outlier Site



Photograph 10:
Creek Site 3 toward sidecast



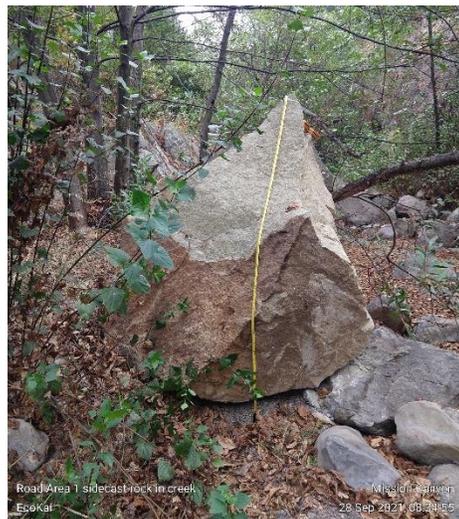
Photograph 11:
Creek Site 4 toward sidecast



Photograph 12:
Road Area 7 facing roadside berm and maintenance area



Photograph 13:
Sidecast Area 3 Rock Outlier Site



Photograph 14:
Sidecast Area 3 Rock Outlier Site



2.7 PROJECT ELEMENTS

This section describes the Project activities proposed by SCE to restore the resources impacted by the December 2019 work. A more detailed description of Project implementation planning, restoration activities, maintenance, monitoring, and reporting is included in the HRMP (Appendix A). The Project is specifically designed for the full removal of sidecast rock and sediments deposited in Mission Creek and adjacent upland locations to restore stream hydrology (e.g., pools and riffles) and habitat within the Project area to support native species use to levels that existed prior to the December 2019 work and to stabilize creek banks and slopes. The Project would also restore impacted native vegetation habitats and promote the regrowth of chaparral and woodland/forest habitats, rehabilitate sensitive species populations within the Project site, restore aquatic habitat including pools and riffles, and remediate impacted trees within Mission Creek. Pre-Project activities would include a stream hydrology survey, seed collection, weed abatement, avoidance flagging of sensitive resources, and mobilizing equipment into designated staging and stockpiling locations. The Project would also include berm reconstruction or stabilization and revegetation. Finally, one McCarthy drain in Road Area 1 would need to be temporarily removed to enable sidecast removal. Upon completion of the sidecast removal, the McCarthy drain would be reinstalled at the same location. This drain structure includes an approximately 30-foot corrugated metal flume and a 15-foot by 6-foot riprap dissipater. The in-kind replacement drain would be the same size and configuration as the existing drain. Approximately 0.026 acres within Road Area 1 would be temporarily impacted by removal and reinstallation of the structure. The temporary impact would be wholly contained within the sidecast removal disturbance area. These proposed Project activities by area are listed in Table 2-6, Proposed Project Activity by Area.

Table 2-6. Proposed Project Activity by Area

Proposed Project Activity ¹	Acres
Sidecast Removal and Habitat Restoration	2.48
Habitat Restoration of Non-Sidecast Areas	0.12
Habitat Enhancement (reseed rock slopes/ targeted weed abatement) ²	1.27
Berm Stabilization or Reconstruction and Revegetation ³	0.5
Parking/Storage Areas	0.37
Staging Areas	0.43
Contingency Areas	0.27
Existing Maintenance Roads	1.8
Total Construction Footprint	7.24

Notes:

- ¹ Proposed restoration of non-sidecast areas overlap with staging or parking/ storage areas. All values are approximate; actual acreage of Proposed Project activity may vary.
- ² A total of 1.27 acres of rock slopes will be reseeded to achieve 0.91 acres of habitat enhancement required by the County of Santa Barbara.
- ³ Revegetated berms may be subject to future and ongoing disturbance associated with, but not limited to, vegetation management and roadside maintenance activities that are not covered or analyzed in this CEQA document. Such future activities are not a part of the Proposed Project.

2.7.1 Sidecast Removal Methods

SCE’s sidecast removal methodologies for the Project were finalized through a comparative scoping analysis performed by SCE’s Project team in August 2022 (Appendix B). Through this iterative process, four methods to extract sidecast materials deposited during the December 2019 work were selected to achieve maximum extraction of sidecast material without causing harm to sensitive environmental resources, while maintaining a safe working environment and protecting public safety in the long term. Once removed, sidecast material will be transferred to an designated staging location where soil will be temporarily stockpiled, loaded into small-scale “bobtail” dump trucks, and transported along a designated route to be disposed of at the Tajiguas Landfill located 27.6 miles west of the Project site at 14470 Calle Real, Goleta, California. Some sidecast material that had been deposited in upland areas may be processed and repurposed on site to support berm reconstruction. See below for additional information on repurposed sidecast.



The primary method identified for sidecast removal is the combination of manual or hand removal, and removal using vacuum or guzzler trucks (Hand and Guzzler Removal technique). The benefits of this method include the low-level impact of using technicians to access steep slopes and environmentally sensitive areas and the high efficacy for extracting the sidecast using this methodology. The Hand and Guzzler Removal technique will be used in conjunction with machinery staged on the road to facilitate the removal of the larger rock. In addition to the Hand and Guzzler Removal technique, the Project comparative scoping analysis identified two additional low-impact removal techniques expected to result in the full removal of sidecast in locations away from the road where Guzzler Removal is not feasible. These removal techniques are Hand Removal and Helicopter Removal. A summary and map of the sidecast removal methods, and locations where those methods are employed, are listed in Table 2-7, Project Sidecast Removal by Sidecast Deposit Location, on Figures 6a–e of the HRMP (Appendix A), and are also described below. Through the implementation of these combined removal methods, SCE believes that sidecast deposit removal will be maximized; therefore, SCE anticipates the full removal of all sidecast material remaining on the Project site, potentially excepting only minor areas where constraints to full removal may exist, as identified by SCE (see Section 2.7.2, Constraints to Sidecast Removal, below).

Table 2-7. Project Sidecast Removal by Sidecast Deposit Location

Sidecast Location	Method of Sidecast Removal
Roadside Sidecast Areas 1–2, 4–16	Excavator with Hand and Guzzler
Sidecast 3, Sidecast 3 Outliers	Helicopter Removal
Creek Sites 1–4, Road Areas 1–2	Forklift with Hand and Guzzler
Creek Site 7, Roadside Sidecast 17–19	Hand Rock Removal

Sidecast removal methods are described in the sections below, beginning at the Tunnel Trail access road gate (Road Gate Area), upslope to Road Area 9, and then Trail Road Area 2 (Figures 6a–e of the HRMP [Appendix A]).

Roadside Sidecast Areas 1–2 and 4–6: Excavator with Hand and Guzzler Removal

Sidecast deposits, occurring along Road Area Gate and up to Road Area 3 (except for SC 3), consist of thin layers of finer soil material intermixed with rocks and scattered boulders accumulated along the base of vegetation. These materials will be removed manually by technicians in combination with vacuum or guzzler trucks and a small excavator. This method will be performed on approximately 0.421 acres (18,316.99 square feet) of sidecast deposits in SC 1 and SC 2, and SC 4 through SC 6 (see Figures 6a–e of the HRMP [Appendix A]) and is expected to result in the full removal of the sidecast material at these locations. All removed material would be transported to a designated staging location and, if not repurposed on site, would be hauled off site to the Tajiguas Landfill.

The construction contractor will use guzzler trucks (large vacuum trucks) staged from the existing access road/trail adjacent to work areas to remove fine materials and rock approximately 3 inches in diameter or smaller. Manual manipulation of the hose will remove materials within the reach extent of the hose.

Rocks greater than 3 inches would be carried out by hand or loaded into rock sacks and removed using the excavator. Large rocks and boulders, greater than 24 inches in diameter, may be broken up into manageable pieces using sledgehammers, pickaxes, expansive rock-breaking agent (e.g., expanding grout), or jackhammers and lifted by the excavator. The excavator may also be used to lift rocks bolted to a chain with shackles and position them onto the road for staging. All material would be transferred to an approved stockpile location where soils will be stockpiled and managed for load out into small-scale “bobtail” dump trucks, hauled off site following a designated route, and disposed of at the Tajiguas Landfill.

As mentioned above, sidecast removal efforts would be staged on the road, supporting crews and guzzler operations downslope. As a result, there is potential for the work to damage the previously reconstructed berms in these areas. If the berms become damaged during these activities, berms will be repaired following the completion of the work as



part of the implementation of the HRMP (Appendix A). Berm repair would be conducted using standard heavy equipment to rebuild and stabilize berms to specifications approved by the County.

Upon completion of sidecast removal, the contractor would finish affected slopes utilizing hand tools on slope faces and possibly by mechanized equipment at the accessible upper sections of the slope. Disturbed areas would then be hydroseeded with an approved mix, including tack and wood fiber to promote growth, and planted with container stock and cuttings, as appropriate (see Sections 6.4 to 6.7 of the HRMP [Appendix A]). A biodegradable netting product (i.e., jute) may be applied, depending on final soil conditions once slope faces have been revealed, in accordance with the Project's Stormwater Pollution Prevention Plan (SWPPP). If used, netting would be installed in a way that does not trap or entangle wildlife.

Sidecast 03 and Sidecast 03 Rock Outliers: Helicopter Removal

In one area of sidecast deposit, SC 3 and SC 3 Outliers, located within Road Area 1 and covering approximately 0.257 acres (11,176.84 square feet; see Figures 6a–b of the HRMP [Appendix A]), large boulders and smaller rock and soil material are positioned approximately 300 feet from the roadside with no footpath or road access. Due to these limitations, SCE proposes to remove the material using the Helicopter Removal method to relocate the material to a designated staging area. Various methods were evaluated to extract the material from this location. The Helicopter Removal method was selected as the least impactful to resources and is expected to remove all the sidecast material at this location.

This method includes the use of a helicopter, such as a light utility Bell 429, with a lift capacity of 1,500 to 2,000 pounds, fitted with enclosed baskets. The baskets can be covered with a safety net and lined to secure the rocks. Alternatively, the rocks can be placed into load bags and then loaded into the baskets. Rock would be broken manually using sledgehammers or, where necessary, may be drilled and injected with an expansive rock-breaking agent (e.g., expandable grout) to allow the rock to break into manageable pieces overnight. Rock would be transferred into rock sacks by ground crews and staged for aerial operation to minimize flight time. The helicopter would hover approximately 100 to 150 feet in the air while ground crews fill the basket with rock sacks. Once the basket is full, the pilot would relocate the material to a designated staging area within the Project site. A landing zone and refueling location, such as the Santa Barbara Airport, must be located within 10 to 15 minutes of flight time from the Project area.

Creek Sites 1–4 and Road Areas 1–2: Forklift with Hand and Guzzler

The majority of sidecast deposits occurring within Mission Creek, and in tributaries located at Creek Sites 1–4 and Road Areas 1 and 2, totaling approximately 0.933 acres (40,643.95 square feet), consist of a mixture of small and moderately sized rocks with finer soil material and scattered boulders. These materials would be removed using the Hand and Guzzler Removal method described above and in combination with a long-reach forklift to extract material (see Figures 6a–c of the HRMP [Appendix A]). For large materials, technicians would manually break rocks and boulders into manageable pieces using sledgehammers, pickaxes, or, where necessary, drill and inject an expansive rock-breaking agent (e.g., expandable grout) to allow them to break into smaller pieces overnight. These rocks would then be manually loaded into baskets and lifted by a 12k reach forklift with a 24-foot length and 38-foot reach. The forklift would be positioned at designated staging areas or along existing access roads. The material would then be transported to a designated staging area, where it would be transferred to trucks and hauled off site for disposal. This method is expected to result in the full removal of the sidecast material at these locations; however, potential constraints to the slopes within Creek Sites 2, 3, and 4 were noted by SCE, as described in Section 2.7.2 below.

Prior to sidecast removal in Creek Sites 1–4, K-rail barriers topped with chain-link fencing would be placed to prevent public access during sidecast removal. A guzzler truck would be staged in the roadbed with a flex hose connected to a 6-inch hard pipe that would be anchored to the K-rail and placed along the slope face. The hard pipe would be connected by a cam-lock system to a second flex vacuum hose that would be deployed into the drainage and manually manipulated by operators. The full extent of the hard pipe is typically 25 to 30 feet, and the flex hose ranges from 20



to 125 feet, for a total range of approximately 45 to 155 feet. The fixed hard pipe would also provide tie-off points for operators to secure anchors for additional fall protection. The hard pipe assembly would then be broken down and reassembled to target another reach of the drainage. This process would continue until all material is removed.

Technical Implementation Plan

Prior to sidecast removal in Creek Sites 1–4, the fluvial morphology team would develop a Technical Implementation Plan (TIP). The purpose of the TIP is to provide an execution document to guide the process of sidecast removal and the restoration and repair of habitat features within impacted areas of Creek Sites 1–4. The TIP would also present protocols to achieve the goals of the HRMP while protecting and restoring the pre-impact natural stream topography, habitat, and function.

Within Creek Sites 1–4, several locations of heavy sediment deposition have been identified. Up to 12 transect locations within these areas are proposed for longitudinal and cross-section surveys, which would be conducted as part of the TIP. These transects are intended to provide a detailed accounting of pre-Project site conditions (see Section 8.3.1 of the HRMP [Appendix A]). These transects would be further studied as part of the information gathered to support the TIP.

The fluvial morphology team would follow the process and methods in the TIP to facilitate the removal of sidecast material in a manner that would minimize additional impacts to the creek bed and banks, minimize the unintentional removal of native creek material, and comply with all environmental regulatory permit requirements. Prior to sidecast removal, the fluvial morphology team would delineate the limits of each sidecast area, using flagging, or another eco-friendly method of demarcation, such as non-toxic, water-based paint, to assist in the removal activities of work crews. The fluvial morphology team would also identify and mark all cobble and boulder outliers that occur in contingency buffers beyond the limits of the main sidecast areas. Photo points would be determined prior to the work to provide pre- and post-removal photo documentation.

As sidecast removal begins, the construction operators would perform sidecast material removal under the direction and supervision of the fluvial morphology team to ensure that only sidecast material is removed. Particular attention would be given to areas where the sidecast meets pre-impact soils, such as along the edges of the sidecast, the interface where the sidecast meets native soil, and within the creek bed and banks. When removal activities approach pre-impact (original contour) surfaces, the fluvial morphology team would closely inspect the characteristics of the material before it is removed to ensure that it is not existing pre-impact material. The fluvial morphology team shall have the authority to stop work as needed to ensure that proper protocols are being implemented.

Current slope conditions at Creek Sites 1–4 range from approximately 3:1 to almost 1:1. When loose soils are removed, these stream bank slopes have the potential for additional slope sloughing. For these reasons, the construction approach described above may be adjusted to accommodate a change in site conditions in the interest of safety and efficacy. Upon the completion of restoration activities, all temporary facilities (i.e., K-rail barriers topped with chain-link fencing, etc.) would be removed and demobilized from the site.

Within Creek Sites 1–4, there are specific habitat design targets for pools and riffles, as described further in Section 3.3.2, Stream Hydrology and Habitat Features of the HRMP (Appendix A).

Roadside Sidecast Areas 7–16: Excavator with Hand and Guzzler Removal

Sidecast deposits occurring along the roadside slopes of Road Areas 5 through 9 consist of boulders and rocks intermixed with the roadside berms and deposits immediately downslope of the roadside. The sidecast in SC 7 through SC 16 (approximately 0.597 acres, 26,024.15 square feet) located in Road Areas 5 through 9 (see Figures 6c and 6e of the HRMP [Appendix A]) would be removed using a tracked excavator, as described above. This method is expected to be used for the full removal of the sidecast material at these locations, except as noted below.



In Road Areas 5–9, sidecast was deposited down slopes immediately adjacent to the road and some sidecast material was subsequently used to construct roadside berms. In these areas, sidecast materials would be removed, and roadside berms would be reconstructed, following the removal of sidecast in areas where the outer edges of the berms were built upon sidecast material. Using the Hand and Guzzler removal technique, small rocks and soil particles would be removed from slopes. For larger materials, the Project would use a tracked excavator staged in the road to pull sidecast from the berm and road shoulder into the roadbed. All material would be transported to a designated staging area. Sidecast materials would be sorted and processed using a rock crusher and other heavy equipment to generate suitable material to be repurposed for berm reconstruction. In Road Areas 5–9, where sidecast was not deposited down slopes and, therefore, no removal is necessary, berms would be adjusted to align with the specifications approved by the County and tamped down and stabilized.

Potential constraints to the removal of sidecast material in Road Areas 6–9 were identified by SCE and are described in Section 2.7.2 below.

Hand Rock Removal

Sidecast deposits at Creek Site 7 and SC 17–19, covering approximately 0.277 acres (12,068.73 square feet), are located on Trail Road Area 2 (see Figure 6d of the HRMP [Appendix A]) and consist of scattered rocks intermixed with existing vegetation. The sidecast rocks are dispersed within the mapped area and distinguishable from other naturally present rocks. These areas are only accessible by foot; however, the low volume and manageable size of the rocks allow for manual removal using the Jesusita Trail to access the sidecast areas. The Hand Rock Removal method was selected as the least impactful to resources and is expected to remove all sidecast material at this location.

This method employs technicians, using high incline rigging for fall protection, who would manually remove the sidecast rock and transfer it up the slope by hand. Large rocks would be broken into smaller manageable pieces using hand tools before removal. Smaller rock or rock fragments may be transferred into rock sacks for easier removal and carried out utilizing frame packs and manual means. Rock would be staged on the side of the roadway, where it would be collected using a small loader or comparable equipment and transported to a designated staging area where the material can be hauled away for disposal.

2.7.2 Constraints to Sidecast Removal

In August 2022, SCE conducted a supplemental engineering assessment to review existing road conditions and distinct areas where the outer edges of the berms were built upon sidecast material that was placed at the edge of the roadway in 2019. The assessment was conducted to evaluate the potential impacts that could result from the full removal of sidecast materials. The assessment was based on information from the comparative scoping analysis and focused on Road Areas 5–9. A vehicle tracking analysis was performed using a model to determine the constraints (critical/pinch points) of the existing access road on the turning radius of SCE utility maintenance vehicles. For this analysis, an SCE Transmission Bucket Truck was used in the vehicle tracking model. The sidecast removal areas identified on Figures 5a–e of the HRMP (Appendix A) were overlaid onto the vehicle tracking model results to identify any constraints. Access road elevational cross sections were sampled at larger sidecast removal areas and key critical points. The critical points were identified in areas where SCE maintenance vehicles require multiple point turns to maneuver safely and areas where the full removal of the sidecast material has the potential to narrow the road beyond the minimum width necessary to provide safe access for maintenance vehicles. SCE conducted a site visit to field-verify measurements based on the vehicle tracking model results and cross sections using sidecast removal depths collected during the comparative scoping analysis.

The areas of potential constraints related to access road width are along slopes adjacent to five road bends within Road Areas 6 through 9 within sidecast areas SC 10, SC 11, SC 12, SC 14, and SC 15 (see Constraint Areas shown on Figures 6c and 6e of the HRMP [Appendix A]). If SCE conducts full removal of sidecast material in these areas, it



could have the potential to narrow the road width to below the tolerance levels necessary to provide safe access for utility or emergency vehicles.

Roadway berms for vehicle safety were erected during the December 2019 work. The majority of berms were built directly upon the pre-existing road surface, while, in a minority of areas, berms were built upon sidecast material that was placed at the edge of the roadway in 2019. To remove the sidecast material beneath and supporting the outer edge of the berms in these locations, the berms and sidecast would need to be removed, and the berms would need to be reconstructed within the pre-existing road prism, thereby narrowing the current width of the roadway in these locations. Therefore, in these five potential areas of constraint, the focus would be on the maximum removal of all sidecast material from the December 2019 work while not compromising safe access to SCE facilities. The decisions to fully remove or leave discrete areas of sidecast material in place to maintain safe road width would be determined in the field by the Resource Specialists as subsurface conditions are revealed during sidecast excavation. While these constraint circumstances pertain to a small scope of the overall removal work, SCE would implement the construction process to monitor road width and maximize removal, where safe and feasible.

SCE has also identified four areas with potential constraints related to slope stability within Creek Sites 2, 3, and 4 (see Constraint Areas shown on Figure 6c of the HRMP [Appendix A]). These four areas occur along the upper slopes of the sidecast areas and outside of the streambanks of the creek. The steep slopes in these locations enhance the possibility that the complete removal of sidecast material could lead to localized surface instability and sloughing of the existing soils beneath, either during the removal process or during future rain events. Therefore, in these four potential areas of constraint, the focus would be on the maximum removal of sidecast material from the December 2019 work while not creating an unstable slope. While constraint circumstances precluding full sidecast removal are not anticipated at these locations, SCE recognizes the possibility, and the fluvial morphology team would monitor the slopes during the construction process and maximize removal, where safe and feasible (see Section 2.7.1).

SCE's Project goal is the full removal of all sidecast material on the Project site at the time of construction. The Project's comparative scoping analysis and supplemental engineering surveys revealed potential constraints that could preclude the removal of some material in discrete areas to avoid undesirable conditions. However, it is anticipated that even with these constraints, there still would be nearly 100% removal. Post-construction documentation of any sidecast material left in place would be recorded and provided to regulatory agencies, as warranted. This documentation would also include justification for why leaving sidecast material in place was necessary to maintain stable slopes, maintain safe road width, or maintain a safe working environment. Any sidecast material that is unrecoverable during Project implementation and left in place due to infeasibility of removal shall be compensated for as described in Section 2.7.3, Mitigation for Unrecoverable Sidecast and Temporal Loss, below.

2.7.3 Mitigation for Unrecoverable Sidecast and Temporal Loss

Due to major rainstorm events that impacted the Project site in early 2023, the total volumes of sidecast material remaining on the Project site at the time of Project construction would likely be less than the estimated volumes recorded in Table 2-1. Representative photos of the effects of the major rainstorm events to the Project site are included as Attachment C of the HRMP (Appendix A). Sidecast material that has moved outside the Project area due to 2023 rain events is no longer recoverable and would not be collected or removed as part of the Project.

The baseline condition used for the analysis of impacts under CEQA is the existing condition of the Project site at the time of Project initiation, which in this case is the impacted condition where the sidecast material is present within the Project site. However, an assessment of Project impacts relative to this baseline does not account for the temporal loss of stream function and natural habitat or the periodic transport of sidecast material downstream of the Project site in the intervening time between now and December 2019, when the unauthorized activities caused the material to be deposited into the Project site from the access road.



To account for a temporal loss of stream function and natural habitat and the periodic transport of sidecast material downstream, and to address any material that cannot be removed and left in place due to infeasibility of removal, the response to remediate the impacts of the December 2019 work also includes the payment of funds by SCE. SCE has committed to provide a minimum of \$700,000.00 into an endowment to be used toward a future separate fish passage or other stream restoration project in the County. Authorization of any such future project would comply with CEQA at the time that a specific project is developed and is not part of the Proposed Project being analyzed in this IS/MND.

2.7.4 Project Implementation Activities

The following sections outline the Project components. The Project components can be categorized generally into three Project phases:

Phase 1: Restoration Planning and Site Preparation Activities (see HRMP Section 4, Installation Planning, and Section 5, Site Preparation, for details)

- Restoration Planning Activities include, but are not limited to:
 - Project planning, environmental review, and permitting (pre-work)
- Site Preparation Activities include, but are not limited to:
 - Environmental surveys (pre-work and throughout the Project)
 - Procurement of seed and plant materials (pre-work and throughout the Project)
 - Salvage and collection of sensitive plants and seeds (pre-work and throughout the Project)
 - Weed abatement (some pre-Project)
 - Installation of flagging and/or temporary fencing to protect native habitats (pre-work and throughout the Project)
 - Environmental awareness training/tailboard briefing (pre-work and throughout the Project)
 - Site preparation (e.g., delineation of work areas, materials/equipment mobilization, refuse removal) (pre-work and throughout the Project)

Most of the Restoration Planning and Site Preparation Activities would be completed prior to initiation of work activities; however, procurement of seed and plant materials, salvage and collection of sensitive plants and seeds, weed abatement, environmental surveys, and site preparation would continue to occur as required until the Project's success criteria are met (see Section 8 of the HRMP for a detailed description of the Project's success criteria). Restoration Planning and Site Preparation Activities would begin in Phase 1 and continue as needed until the Project is complete.

Phase 2: Habitat Restoration Installation (see HRMP Section 3, Project Description, and Section 6, Habitat Restoration Installation, for details)

Habitat Restoration Installation comprises the Construction Activities and Restoration Installation Activities.

- Construction Activities include, but are not limited to:
 - Removal of sidecast from regulatory and upland areas, as described in Section 2.7.1
 - Tree remediation through the removal of sidecast material
 - Restoration of stream hydrology and function
 - Slope stabilization



Construction Activities would take approximately 6 months to complete (either continuous or broken into two or more construction periods totaling approximately 6 months) and would require temporary closure of the lower Tunnel Trail.

- Restoration Installation Activities include, but are not limited to:
 - Hydroseeding
 - Planting
 - Cutting collection
 - Cutting installation
 - Post-planting watering
 - Species-specific rehabilitation
 - Weed abatement

Restoration Installation Activities are anticipated to take approximately 4 to 6 weeks to complete and would not require temporary closure of the lower Tunnel Trail. Restoration Installation Activities may take place concurrently with or after Construction Activities, and in one or more time periods, to ensure the Restoration Installation Activities occur during the appropriate times of year (e.g., planting seasons) to facilitate Project success.

Phase 3: Maintenance and Monitoring Activities (see HRMP Section 7, Maintenance Program, and Section 8, Monitoring and Reporting Program, for more details)

- Maintenance and Monitoring Activities include, but are not limited to:
 - Periodic monitoring of the Project site to document that the Project is on target to meet success criteria
 - Weed abatement activities
 - Remedial measures conducted when needed to ensure the Project's success criteria are met

Maintenance and Monitoring Activities would take place following Habitat Restoration Installation over a minimum of 5 years and until success criteria are met.

The phases above are general categorizations. More details on each of the Project components can be found in the HRMP (Appendix A). The sequencing of the Project components is described in HRMP Table 13, Restoration Sequence for HRMP.

Sidecast Removal

To achieve the goal of full removal of all sidecast material, SCE would utilize the methods described in Section 2.7.1. Prior to removal, the sidecast material would be differentiated from non-sidecast material through careful inspection of individual geologic features to distinguish it from the native creek material that needs to remain intact and by comparing bed and bank continuity with upstream and downstream characteristics. This process further expands on the geologic makeup of the sidecast material, including the natural erosive features of the in situ sandstone.

Following sidecast removal, any material unable to be removed would be subject to post-construction monitoring and adaptive management procedures as presented in Sections 8.2.5 and 8.3.4 of the HRMP (Appendix A). The volume of material estimated within the four areas of constraint along Creek Sites 1–4 constitutes approximately 10% of the total sidecast volume in Regulatory Areas. Any materials left in place would be evaluated in the TIP and compensated for as described in Section 2.7.3.

To allow for foot trails for crews to access sidecast piles and conduct removal operations safely within Road Areas 1 and 2 and Creek Sites 1–4, a small contingency disturbance buffer totaling 0.27 acres has been added to the disturbance footprint within RWQCB, CDFW, and USACE Regulatory Areas, of which 0.10 acres falls within waters



of the U.S. The contingency disturbance areas are identified for each sidecast removal area in Table 2-8, Project Areas within RWQCB, CDFW, and USACE Regulatory Areas, and on Figures 5a–e of the HRMP (Appendix A). Disturbances within the contingency buffer would be minimized, and sensitive resources would be flagged for avoidance. Following Project activities, disturbance within the contingency buffer would be mapped and restored in accordance with the HRMP (Appendix A).

Table 2-8. Project Areas within RWQCB, CDFW, and USACE Regulatory Areas

Project Site	RWQCB/CDFW (Acres)	USACE (Acres)
Road Area 1 Project Area	0.39	0.00
Road Area 1 Contingency	0.14	0.01
Sidecast 3 Rock Outliers Contingency	0.08	0.00
Road Area 2 Project Area	0.09	0.00
Road Area 2 Contingency	0.06	0.00
Mission Creek Project Area (Creek Sites 1–4)	0.44	0.04
Mission Creek Contingency (Creek Sites 1–4)	0.06	0.03
Mission Creek Site 7	0.00	0.00
Road Areas 5–9	0.01	0.00
Total Project Area	1.01	0.05
Total Contingency	0.27	0.04
Grand Total	1.28	0.09

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; USACE = U.S. Army Corps of Engineers. Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

Stream Hydrology and Habitat Feature Restoration

SCE recognizes resident population of Southern California Steelhead is a conservation priority of CDFW and was considered in planning upstream Project activities. One of the goals of the Project is to restore stream hydrology (e.g., pools and riffles) and habitat. To achieve this goal, the Project would remove sediment and debris from within the creek bed and impediments caused by sidecast and restore natural hydrology and in-stream habitat for fish passage within the Project site reach of the stream. Restoration of natural stream hydrology would also restore habitat for sensitive species such as two-striped gartersnake (*Thamnophis hammondi*), Coast Range newt (*Taricha torosa*), and other amphibians and reptiles. Therefore, SCE would restore stream habitat within the Project site to support native fish use to levels that existed prior to the December 2019 work. Restoration of fish passage within the Project site would support potential creek-wide fish passage if off-site barriers are removed in the future.

Fish habitats, including riffles, runs, and pools within reference streams of the Mission Canyon watershed (Mission Creek and Rattlesnake Creek), were assessed by CDFW Fisheries biologists in November 2022 (CDFW 2022a, 2022b). CDFW considers these streams to be comparable to the Project area in their support of fish habitat unit densities and dimensions with a particular focus on pool habitat (reference reach data). Pool units provide refugia and rearing habitat necessary for fish survival during dry summer months when streamflow diminishes and surface streamflow ceases within sections of the creek. Pools also tend to collect food sources for fish, and downstream portions of pools (tail-outs) typically support fish spawning as they collect gravel substrates (CDFW 2022a). Restoration efforts within the stream channel, extending from the upstream extent of Creek Site 1 to the downstream extent of Creek Site 4, would be informed by CDFW’s reference reach data and guided by actual site conditions revealed as the sidecast is removed during Project construction.

In addition, a TIP would be developed prior to Project installation to guide decisions made in the field regarding the restoration of in-stream habitat and removal of stream impediments created by sidecast. The information provided in the TIP, including longitudinal survey data and cross sections taken at various intervals and through habitat units (Figure 8b of the HRMP [Appendix A]), would be used to guide restoration activities. Specifically, cross sections through habitat units and topographical data from immediately upstream and downstream of the area to be restored would be used to design and implement restoration actions. If restoration of habitat features (e.g., riffles, runs, or



pools) is deemed necessary, habitat unit-specific cross-section plans for the feature repair would be prepared and submitted to CDFW and RWQCB for approval as part of the adaptive management process further described in Section 8.3.4 of the HRMP (Appendix A). Included in HRMP Attachment E, Conceptual Creek Profiles and Cross Sections, are example cross-section schematics for reference.

For the final stages of rock and sediment removal, the fluvial morphology team would be on site to determine when sediment and rock removal activities have reached the natural stream channel bottom and to identify the need for the use of non-sidecast material to restore in-stream habitat features. In addition, CDFW and RWQCB would have the opportunity to inspect these areas when sidecast removal is in the final stages, for concurrence.

Stabilize Stream Banks and Slopes

If it is determined that the creek banks have collapsed and/or been scoured by the sidecast deposits, it may be necessary to provide additional bank stabilization by hand-placing cobbles and boulders to secure the soil in place and prevent future occurrences of erosion. Bank stabilization features would be designed and submitted to CDFW and RWQCB for approval, consistent with the adaptive management process, and incorporated into the Monitoring and Reporting Program described in Section 8 of the HRMP (Appendix A).

Native Tree Restoration/Mitigation

The Project proposes to address native tree restoration/mitigation by (1) completing remedial treatments to 30 impacted trees within Mission Creek and (2) planting trees within Mission Creek and Road Areas 1 and 2 in upland habitat areas. Remedial treatments to impacted trees are necessary to prevent further damage and stimulate recovery. These remedial treatments include the removal of rocks/soil from the base of the tree, pruning, and cutting or trimming roots (Figures 5a–e of the HRMP [Appendix A]). These activities are described in detail in Sections 6.1 and 6.2 of the HRMP (Appendix A). Native tree remediation within the upland areas was completed in 2020, as a component of the Road Repair Project.

In addition to completing remedial treatments, the Project would mitigate impacted trees by establishing a minimum of 90 trees. This planting quantity would achieve a mitigation ratio of 5:1 for impacts to trees whose impacts are considered “major” and a ratio of 1:1 for trees whose impacts are considered “moderate” as defined in Section 2.4 of the HRMP (Appendix A). Within Regulatory Areas, the Project would plant 49 of the 90 trees to offset previous impacts to trees within Regulatory Areas (see Table 6b of the HRMP [Appendix A]). As a continuation of native tree restoration/mitigation in upland areas outside of the regulatory authority of CDFW, the Project would plant the remaining 41 trees within transitional woodland areas. Planting would be completed as a component of the native vegetation restoration described below. The number of trees planted as saplings may be adjusted based on the availability of materials; however, quantities would be retained. Overplanting may be implemented to ensure mitigation quantities are achieved. Planted trees would be subject to the success criteria described in Section 8 of the HRMP (Appendix A). No trees would be removed as part of the Project.

Native Vegetation Restoration and Enhancement

Temporary³ impacts to native vegetation would be restored in both woodland/forest and upland chaparral habitats along Mission Creek, as well as native habitat enhancement along Tunnel Trail Road. Coast live oak woodland and California bay forest habitats are the dominant habitats within Mission Creek and Road Areas 1 and 2, while upland habitats are dominated by ceanothus chaparral and associated native plant communities. These areas would be restored through the application of a native seed mix and the planting of shrubs, trees, and cuttings, as described in Section 6 and Figures 7a–e, Restoration Areas, of the HRMP (Appendix A). Restoration of woodland and forest habitats would focus on controlling erosion and restoration of forest canopy structure. Overall, non-native species cover within the woodland and forest habitats is low; however, efforts to control non-native species would be a

³ Any impact on vegetation or habitat that does not result in permanent vegetation or habitat removal, such as areas of impact that are substantially restored to pre-impact conditions by hydroseeding or other measures.



component of the maintenance program in these habitats. Creek Site 7 also supports woodland habitat; however, due to the steep and unstable slopes, efforts would focus on the application of seed mix and erosion control. Approximately 1.06 acres of woodland and forest habitats would be restored as part of the Project following sidecast removal, and an additional 0.07 acres of non-sidecast areas would be restored (Table 2-9, Proposed Project Revegetation and Enhancement by Vegetation Community).

Table 2-9. Proposed Project Revegetation and Enhancement by Vegetation Community

Vegetation Community	Restoration of Sidecast Removal (Acres)	Restoration of non-sidecast (Acres) ²	Enhancement Reseeding Areas ³
Big pod ceanothus (<i>Ceanothus megacarpus</i>) chaparral Alliance	0.83	0.02	0.31
Big pod ceanothus chaparral Alliance, <i>Ceanothus megacarpus</i> – <i>Salvia mellifera</i> Association ¹	0.08	<0.00	0.02
California bay forest and woodland Alliance ¹	0.08	0	0
Coast live oak woodland Alliance, <i>Quercus agrifolia</i> – <i>Umbellularia californica</i> Association ¹	0.63	0	0
Coast live oak woodland and forest Alliance	0.35	0.07	0.08
Hairy leaf – woolly leaf ceanothus chaparral Alliance, <i>Ceanothus oliganthus</i> Association ¹	0.02	<0.01	0
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> Association	0.02	0	0
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> – <i>Ceanothus megacarpus</i> Association	0.47	0	0.12
Developed/disturbed	0	0.03	0.74
<i>Subtotal for Woodland and Forest Habitats</i>	<i>1.06</i>	<i>0.07</i>	<i>0.08</i>
<i>Subtotal for Upland Habitats (excludes developed/disturbed)</i>	<i>1.42</i>	<i>0.02</i>	<i>0.45</i>
Grand Total	2.48	0.12	1.27

Source: SWCA 2023a. These values are approximate, actual acreage by vegetation community may vary.

Notes: Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

¹ Denotes a state sensitive natural community.

² These areas are currently unvegetated. Small unvegetated areas were grouped with the adjacent vegetation community in the vegetation mapping survey.

³ A total of 1.27 acres will be reseeded to achieve 0.91 acres of habitat enhancement along Tunnel Trail Road as required by the County.

Upland chaparral habitats within the Project area are largely dominated by various species of ceanothus, with the presence of occasional oak trees as the canyon transitions to woodland habitats. Upland habitats occur along the Tunnel Trail access road and would be restored through the application of a native seed mix, container plantings, and the select use of acorns in transitional woodland areas. Native vegetation restoration of the other upland chaparral habitats would focus on erosion control and non-native species control during the maintenance period, specifically targeting mustards and other non-native perennial species. Species diversity and shrub canopy are expected to naturally recover with the effective control of non-native species and erosion to minimize soil disturbance; however, this would be evaluated and addressed as part of Adaptive Management (Sections 8.2.4 and 8.3.4 of the HRMP [Appendix A]) if recovery is not observed. Approximately 1.42 acres of upland habitats would be restored as part of the Project following sidecast removal, and an additional 0.02 acres of upland habitats and 0.03 acres developed/disturbed within non-sidecast areas would be restored (Table 2-9).

Woodland and upland revegetation activities are designed to meet the Project goal of restoring impacts to native vegetation (Figures 3a–e of the HRMP [Appendix A]). Sensitive plants and native trees would be monitored for recovery as a component of the monitoring program for the respective habitats, as described in Section 8.1.5 of the HRMP (Appendix A). Restored areas would be evaluated annually and compared to unimpacted native habitats in adjacent areas. Installation, materials, maintenance, monitoring, and reporting are described in the subsequent sections.



SCE would also restore an additional 0.12 acres of non-sidecast areas, which consist of staging areas that are currently unvegetated. Although these staging areas do not currently support native vegetation, they were grouped with the adjacent vegetation community identified during the vegetation mapping survey (SWCA 2023a). Restoration of non-sidecast areas includes 0.07 acres of woodland and forest habitats and 0.02 acres of upland habitats. The balance of 0.03 acres of non-sidecast restoration occurs within developed/disturbed areas (Table 2-9). In total, between the restoration of sidecast areas (2.48 acres) and the restoration of non-sidecast areas (0.12 acres), 2.60 acres of native habitat would be restored as part of this Project (Table 2-9). Restoration areas by vegetation community within Regulatory Areas and non-Regulatory Areas are reflected in Table 2-10, Proposed Project Restoration and Enhancement within Regulatory Areas and Non-Regulatory Areas by Vegetation Community.

Table 2-10. Proposed Project Restoration and Enhancement within Regulatory Areas and Non-Regulatory Areas by Vegetation Community

Vegetation Community	Restoration in Regulatory Areas (Acres)	Restoration in Non-Regulatory Areas (Acres)	Enhancement Reseeding Areas in Non-Regulatory Areas (Acres) ²
Big pod ceanothus (<i>Ceanothus megacarpus</i>) chaparral Alliance	0.19	0.66	0.31
Big pod ceanothus chaparral Alliance, <i>Ceanothus megacarpus</i> – <i>Salvia mellifera</i> Association ¹	0	0.08	0.02
California bay forest and woodland Alliance ¹	0.08	0	0
Coast live oak woodland Alliance, <i>Quercus agrifolia</i> – <i>Umbellularia californica</i> Association ¹	0.44	0.19	0
Coast live oak woodland and forest Alliance	0.15	0.27	0.08
Hairy leaf – woolly leaf ceanothus chaparral Alliance, <i>Ceanothus oliganthus</i> Association ¹	0	0.02	0
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> Association	0.01	0.01	0
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> – <i>Ceanothus megacarpus</i> Association	0.14	0.33	0.12
Developed / disturbed	0	0.03	0.74
<i>Subtotal for Woodland and Forest Habitats</i>	<i>0.67</i>	<i>0.46</i>	<i>0.08</i>
<i>Subtotal for Upland Habitats (excludes developed/disturbed)</i>	<i>0.34</i>	<i>1.1</i>	<i>0.45</i>
Grand Total	1.01	1.59	1.27

Source: SWCA 2023a. These values are approximate, actual acreage by vegetation community may vary.

Notes: Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

¹ Denotes a state sensitive natural community.

² All enhancement areas are outside CDFW regulated areas.

Sensitive Species Rehabilitation

The Project would restore sensitive plants presumed to be directly impacted as a result of the December 2019 work. These sensitive species include Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), Plummer’s baccharis (*Baccharis plummerae* ssp. *Plummerae*), and Hubby’s phacelia (*Phacelia hubbyi*) (see Figures 3a–e of the HRMP [Appendix A]). Seeds and cuttings from unimpacted sensitive plants would be collected as described in Section 4.8 of the HRMP (Appendix A) and seeded/planted in plots within suitable habitat integrated into the Project site (Section 6.9 of the HRMP). Plots would be monitored and maintained and subject to the success criteria, as described in Section 8 of the HRMP.

One individual of ocellated Humboldt lily (*Lilium humboldtii* ssp. *Ocellatum*) was identified outside of the Project site. There is no evidence of direct impacts to individuals, nor has habitat for the species within the Project site been confirmed. However, annual presence/absence surveys would be conducted as described in Section 8.1.5 of the HRMP (Appendix A).



Tunnel Trail Road Habitat Enhancement

In total, the December 2019 work impacted 3.51 acres of native vegetation. The Project would restore 2.6 acres of native vegetation, consisting of 2.48 acres of restoration within sidecast areas and 0.12 acres of restoration within current staging areas. In addition, the Project would enhance 0.91 acres of habitat by reseeding road cuts on the interior side of Tunnel Trail Road and conducting two consecutive years of targeted weed abatement focused on controlling existing weed populations.

Road cut areas would be revegetated by hydroseed application methods consistent with the HRMP (Appendix A), using a seed mix approved by the County. Road cut areas for seed application have been selected based on the likelihood of sustaining vegetation. SCE would conduct qualitative assessments of enhancement areas until 50% of the 0.91 acres of seeded areas support 20% native vegetation cover. It is expected that some areas would remain as exposed natural rock surfaces within the enhancement areas and still offer beneficial habitat connectivity. If, after three consecutive years of monitoring, criteria are not met, SCE would implement adaptive management measures consistent with the HRMP (Appendix A), including measures for poor germination, such that if no germination is observed within an area that exceeds 100 square feet in a single location, reseeding would occur. These rock face surfaces are naturally prone to rockslides and erosional processes. Therefore, if soils or rocks within seeded areas slide due to natural causes during the 5-year monitoring period, a one-time reseeding of the slide area or an area of comparable size would be completed. SCE would document the growth of seeded areas and report annual assessment results in annual monitoring reports.

Weed abatement efforts would target priority invasive species found within the Project area and listed in the Preliminary Invasive Species Survey Report prepared by the Santa Barbara Botanic Garden as part of the Mission Canyon Biodiversity Project (SBBG 2021). SCE would perform targeted weed abatement of mapped populations of Geraldton carnation weed (*Euphorbia terracina*), French broom (*Genista monspessulana*), fountain grass (*Cenchrus setaceus*), castor bean (*Ricinus communis*), and fennel (*Foeniculum vulgare*) along the SCE access road within the Project area, and achieve full removal of established populations within mapped areas, and maintain populations within mapped areas from becoming reestablished (i.e., able to produce seed or propagules) during the treatment 5-year monitoring period. Weed populations would be mapped, and the density of populations would be documented in annual monitoring reports. SCE would also work with the Santa Barbara Botanic Garden to inform any long-term control efforts performed by the garden. These efforts would supplement the three consecutive years of site maintenance weeding SCE has already performed at the Project site. SCE started site maintenance weeding in 2020 as a comprehensive effort to reduce invasive species and promote the reestablishment of native habitats disturbed by the December 2019 work.

Revegetation and weed abatement efforts are designed to promote the successful enhancement of native habitats to benefit the ecology of Mission Canyon. Collectively, the habitat restoration of 2.6 acres, the 0.91 acres of habitat enhancement, two consecutive years of targeted weed abatement, and the three consecutive years of site maintenance weeding already performed to date would result in a 1:1 impact-to-mitigation ratio and full compensation for 3.51 acres of impacts to native vegetation (Table 2-11, December 2019 Work Native Habitat Impacts and Restoration).

Table 2-11. December 2019 Work Native Habitat Impacts and Restoration

Proposed Restoration Acres		December 2019 Work Impact Acres	
Restoration of sidecast	2.48	Sidecast areas	2.48
Restoration of non-sidecast	0.12	Permanent Berms	0.5
Habitat Enhancement (reseed rock slopes and targeted weed abatement) ¹	0.91	Rock Wall	0.53
Total Restoration and Enhancement	3.51	Total Habitat Impacts	3.51

Note:

¹ A total of 1.27 acres would be reseeded to achieve 0.91 acres of habitat enhancement required by the County.



Additional temporary impacts could occur during sidecast removal efforts within contingency buffers of Road Areas 1 and 2 and Creek Sites 1–4. These temporary impacts would not exceed 0.27 acres, as listed in Tables 2-6 and 2-8. Upon Project completion, all contingency buffer impacts would be restored concurrently with other restoration efforts through seeding and/or planting as described in the HRMP (Appendix A).

Staging and Storage Areas

Approximately 0.99 acres of developed/disturbed areas have been identified for use as staging, parking, and material storage areas throughout the Project area (Figures 5a–e of the HRMP [Appendix A]). These areas are largely limited to compacted roadside and shoulders. However, if native vegetation was removed to support the Road Repair Project, completed by SCE in November 2020, or is removed to support this Project, these areas would be restored in accordance with the HRMP (Appendix A) and would be subject to ongoing monitoring and maintenance (Figures 7a–e of the HRMP [Appendix A]). Five of these staging areas, previously used for SCE’s Road Repair Project completed in 2020, as well as an additional area located at the south end of the intersection of Tunnel Trail Road and Mission Canyon Catway within Road Area 5 between SC 7 and SC 8 previously disturbed by an unknown party (non-SCE related), would be restored to native habitats following Project construction.

Maintenance and Monitoring

A maintenance program is necessary to identify and resolve maintenance issues in a timely manner to promote the successful establishment of the planted and seeded areas. This section describes various maintenance activities that may be completed as part of the Maintenance Program (discussed in detail in Section 7 of the HRMP [Appendix A]).

The maintenance activities implemented as part of the Project would include weed control, tree/shrub replacement, supplemental seeding, and any remedial measures deemed necessary for the success of the mitigation program. Maintenance activities would be performed by the maintenance contractor or Project proponent and directed by the Restoration ecologist. An anticipated maintenance and maintenance monitoring schedule is presented in Table 2-12, Maintenance and Maintenance Monitoring Schedule.

Table 2-12. Maintenance and Maintenance Monitoring Schedule¹

Task	Years 1	Years 2–5
Weed Maintenance	As needed	Min. 2 visits annually
Maintenance Monitoring	Quarterly (March, June, Sept., Dec.)	Concurrent with weeding
Supplemental Watering	As needed (Years 1 and 2)	N/A
Shrub and Tree Replacement	Spring or Fall (Years 1 and 2)	N/A
Protection from Herbivory	As needed	N/A
Trash Removal	Twice Annually	
Erosion Control ²	Monthly	As needed
Opportunistic Supplemental Seeding	Spring or Fall	Spring or Fall

Notes: N/A = not applicable.

¹ This schedule is only a guideline; monitoring will be performed as necessary, as determined by the Restoration ecologist.

² Monthly monitoring during Year 1 would only apply to the active rainy season (October through April). Monitoring may occur regardless of frequency following a significant rain event of 1 inch or more as measured within a 24-hour period.

Monitoring of the Project would be conducted throughout the restoration process to ensure Project goals are met. Both stream and upland habitats would be monitored, and while many of the techniques and processes used for monitoring are consistent between different habitats, the HRMP (Appendix A) also includes stream-specific monitoring actions to provide data relative to the stability and physical health of Mission Creek. Generally, the Project’s monitoring and reporting program is categorized as follows: (1) Project-wide monitoring activities, (2) upland habitat monitoring, and (3) stream habitat monitoring. Project-wide monitoring includes activities that would encompass the entirety of the Project work area, while the upland and stream monitoring activities would build upon the Project-wide activities



to focus on attributes unique to those areas. These categories are further distinguished between success monitoring and qualitative/functional monitoring. Data collected for success monitoring assessments would be used to determine whether the Project's success criteria and standards are met. Qualitative/functional monitoring assessments are for informational purposes and would not be used to measure the success of the Project.

The various monitoring components, with their timing and frequency of occurrence, are listed in Table 2-13, Mission Creek Monitoring Program.

Table 2-13. Mission Creek Monitoring Program¹

Category	Survey Description/ HRMP Section Reference	Frequency	Timeframe	Total Number of events ²
Project-wide Qualitative Monitoring	Installation Monitoring/ Section 8.1.1	During installation only	Daily	TBD
	Photographic Monitoring/ Section 8.1.2	Pre, Post, LTM (Annually)	Spring	7
	Maintenance Monitoring/ Section 8.1.3	Refer to Table 18 of the HRMP (Appendix A)	As Needed	12
	Lidar Imagery/ Section 8.1.4	LTM (Years 1 and 5)	Anytime	2
Project-wide Success Monitoring	Sensitive Plant Surveys/ Sections 8.1.5 and 8.3.2.5	Post, LTM (Annually)	Spring	7
	Mitigation Tree Surveys/ Sections 8.1.6 and 8.3.2.5	Post, LTM (Year 1 Quarterly, Years 2–5 Twice Annually)	Spring	13
Upland and Stream Habitat Success Monitoring	Vegetative Cover Surveys/ Sections 8.2.1 and 8.3.2.1	Post, LTM (Annually)	Spring	6
Stream Functional Monitoring	CRAM/ Section 8.3.1.1	Pre, Post, LTM (Year 5)	Spring	3
	Stream Hydrology Surveys/ Section 8.3.1.2	Pre, Post, LTM (Years 3 and 5) ³	Summer	4
	Fish Habitat Surveys/ Section 8.3.1.3	Pre, Post, LTM (Years 3 and 5) ³	Summer	4
Stream Success Monitoring	Wildlife Use Surveys/ Section 8.3.2.2	Post, LTM (Annually)	Spring	6
	Integrity of Stream Bed and Fish Habitat/ Section 8.3.2.3	Pre, Post, LTM (Years 3 and 5) ³	Summer	3
	Fish Passage Surveys/ Section 8.3.2.4	Pre, Post, LTM (Years 3 and 5) ³	Summer	4

Notes: HRMP = Habitat Restoration and Monitoring Plan; TBD = to be determined; Pre = Pre-Project data; Post = Post-Project installation; LTM = long-term maintenance Period (minimum of 5 years).

¹ This schedule may be adjusted by the Restoration ecologist where necessary to accommodate safety conditions of the Project site, or seasonal fluctuations and changes in optimal data collection windows.

² Total number estimates five years, however monitoring will be extended until success criteria is met for the resource evaluated.

³ Surveys will be completed in year three and year five; however, measurements will be collected annually if there is evidence of physical changes to the creek bed more than what is occurring immediately upstream and downstream of the Project. More frequent sampling may also be completed following unusual site conditions, such as extreme weather events, or as a means of assessing the effects of adaptive management strategies.

The specific details of the various types of monitoring that would occur as part of the Project are included in Section 8 of the HRMP (Appendix A).

2.7.5 Applicant Proposed Measures

The Project includes a variety of Applicant Proposed Measures (APMs) that SCE has committed to implement and would follow during the Project. Many of the APMs are phase specific as indicated below. As described in Section 2.7.4, Project Implementation Activities, above, Phase 1 is the timeframe for Restoration Planning Activities and Site



Preparation Activities; Phase 2 includes the Habitat Restoration Installation to construct and install the restoration; and Phase 3 consists of the Maintenance and Monitoring Activities. Roles and responsibilities of personnel or specialists referenced in the APMs are included in Section 3.5 of the HRMP (Appendix A).

General Environmental Requirements

APM-ENV-1 Tailboard Briefing: A tailboard briefing will be conducted every day prior to the start of work to communicate safety and environmental requirements for the planned work activities and stop-work protocols. (Timing: Phases 1, 2, and 3).

APM-ENV-2 Approved Work Areas: All ground disturbance, vehicles, and equipment must remain in approved work areas, including approved access routes and work areas defined in the Project scope. Approved work areas include the following: sediment and rock disposal removal areas; stream, bank, and slope stabilization areas; upland sidecast removal areas; native tree restoration and mitigation areas; native vegetation restoration areas; berm stabilization areas; construction areas; staging and storage areas; and contingency buffer areas. (Timing: Phases 1, 2, and 3).

APM-ENV-3 Delineation of Work Areas: To minimize temporary impacts to native habitats adjacent to Project areas, flagging and/or temporary fencing will be installed during Site Preparation Activities and prior to Habitat Restoration Installation. Global Positioning System (GPS) coordinates of the areas shall also be taken. The limits of disturbance, including the upstream, downstream, and lateral extents on either side of any stream adjacent to the Project impact footprint, will be clearly defined. Monitoring personnel (biological and wetlands) will review the limits of disturbance during Site Preparation Activities and prior to materials/equipment mobilization and Habitat Restoration Installation. Approved limits of staging and stockpiling areas will be clearly defined. Sensitive resources will be flagged for impact minimization and avoidance. (Timing: Phases 1, 2, and 3).

APM-ENV-4 Worker Environmental Awareness Program (WEAP): During Site Preparation Activities and prior to materials/equipment mobilization and Habitat Restoration Installation, a Worker Environmental Awareness Program (WEAP) will be developed. All workers on the Project site must receive WEAP training prior to beginning work on the Project. The WEAP training will identify the Qualified Biologists who have stop-work authority and will describe how the action would be implemented in a situation where work must be halted. (Timing: Phases 1, 2, and 3). In addition, all construction personnel will receive the following:

- Instruction on the individual responsibilities under the CWA, the Project Stormwater Pollution Prevention Plan, site-specific best management practices, and the location of Safety Data Sheets for the Project.
- Instructions to notify the supervisor and regional spill response coordinator if a hazardous materials spill or leak from equipment occurs, or upon the discovery of soil or groundwater contamination.
- Instructions and guidance on sensitive species and their habitat, specific measures to protect the species and their habitat during the implementation of the Project, and what to do if the species is observed.
- Instruction on ensuring all food scraps, wrappers, food containers, cans, bottles, and other trash from the Project area will be deposited in closed trash containers. Trash containers will be removed from the Project area as required and will not be permitted to overflow.

Upon completion of the WEAP training, all workers shall sign a form stating that they attended the training and understand all protection measures. These forms shall be filed at the worksite offices and be available to the California Department of Fish and Wildlife or other regulatory agencies upon request.

APM-ENV-5 Material Management: Any refuse material that needs to be hauled off site will be taken to a Southern California Edison-approved disposal facility. (Timing: Phases 1 and 2).

APM-ENV-6 Secondary Containment: Vehicles/equipment/materials shall only be staged in areas approved by the California Department of Fish and Wildlife where the materials will not enter Regulatory Areas. Best management



practices (e.g., oil drip pans, plastic sheeting) are required for any equipment or vehicles staged overnight. (Timing: Phases 1, 2, and 3).

APM-ENV-7 Spill Release/Prevention: Vehicles/equipment must be inspected for leaks (e.g., fuel, oil, hydraulic fluids, etc.) and repaired prior to work. Equipment fueling will be contained to the designated staging areas to contain spills, to facilitate cleanup, and for proper disposal. Spill kits/absorbent cleanup materials shall be available on site and, if used, disposed of properly. Spill response procedures will be included in the Project Stormwater Pollution Prevention Plan. (Timing: Phase 1, 2, and 3).

APM-ENV-8 Environmentally Sensitive Areas (ESAs): The Project shall adhere to avoidance and/or monitoring requirements within established environmentally sensitive areas (ESAs), as prescribed by agency permits and authorizations applicable to the Project. ESAs include Regulatory Areas, critical root zones, and areas containing sensitive plant species. (Timing: Phases 1, 2, and 3).

APM-ENV-9 Material and Equipment Storage: Project materials and equipment will only be stored on site within staging and storage areas identified in the Project scope. (Timing: Phases 1, 2, and 3).

APM-ENV-10 Clean Work Areas: Project-generated trash will be contained in vehicles or secured receptacles and removed from the work site daily. (Timing: Phases 2 and 3).

APM-ENV-11 Weather Limitations: Southern California Edison (SCE) shall monitor the National Weather Service (NWS) 72-hour forecast for the Project area and shall consider precipitation forecasts and potential increases in runoff and stream flow when planning Project activities. Project activities shall not occur if runoff from construction areas or exposed slopes is possible. Project activities shall cease, and the Project site work materials shall be removed or secured to avoid runoff prior to any substantial rain. Substantial rain is when the NWS has predicted a 50% or more chance of at least 0.5 inches of rain in 24 hours. SCE shall implement erosion control measures throughout all phases of operation where sediment runoff from exposed slopes threatens to enter a river, stream, or lake. Weather forecasts shall be documented and available to the California Department of Fish and Wildlife and Regional Water Quality Control Board upon request (Timing: Phases 1, 2, and 3).

APM-ENV-12 Post-Storm Event Inspection: After any storm event, the qualified Stormwater Pollution Prevention Plan practitioner shall inspect all sites scheduled to begin or continue construction within the next 72 hours. Corrective action for erosion and sedimentation shall be taken as needed. National Weather Service 72-hour weather forecasts shall be reviewed prior to the start of any phase of the Project that may result in sediment runoff to the stream, and plans adjusted to meet this requirement. (Timing: Phases 1, 2 and 3).

APM-ENV-13 Night Work Restriction: Project activities shall be limited to the period of daylight hours to limit disturbances on wildlife activity. (Timing: Phases 1, 2, and 3).

Erosion and Sediment Control Measures

APM-EC-1 Erosion and Sediment Control: The Proposed Project will implement erosion and sedimentation controls, both during Project activities and during the establishment of the native vegetation, to reduce potential hydrological impacts regarding erosion. Temporary stabilization measures are methods and materials that are implemented in the short term to stabilize soil and sediment flow prior to Project actions (e.g., filter fabric, silt fencing, straw wattles). Long-term stabilization measures are installed to promote the stabilization of stream banks and slopes and may include approved soil binders, hydromulch, or rolled erosion control products (e.g., coir matting). Erosion control measures will be accompanied by sediment controls, typically burlap-wrapped fiber rolls or biodegradable gravel bags. All best management practices will be biodegradable, weed-free, and plastic-free, and made of material that prevents wildlife from becoming trapped. Fiber rolls or erosion control mesh shall be made of loose-weave mesh that is not fused at the intersections of the weave, such as jute, coconut (coir) fiber, or other fibers without welded weaves. Non-welded weaves reduce entanglement risks to wildlife by allowing animals to push through the weave, which expands when



spread. These temporary features include the application of stabilizing soil binders to disturbed areas, which will locally stabilize soils to impede point source erosion and sheet flow.

Temporary stabilization measures typically require intermittent maintenance to ensure proper functionality by removing accumulated sediments from behind the stabilization device. A Stormwater Pollution Prevention Plan will be prepared and implemented to address the short-term stabilization of soils and water flows within the Proposed Project area. (Timing: Phases 1, 2, and 3).

APM-EC-2 Sediment and Runoff Control: Removed sidecast shall not be placed in areas where it might likely be washed into the stream or inundated by high flows prior to storm events. Removed sidecast shall not be placed where it is likely to have a negative impact on emergent native vegetation or native trees. Preparation shall be made so that runoff from steep, erodible surfaces will be diverted into stable areas with little erosion potential. Frequent water checks shall be placed on dirt roads, cat tracks, or other work trails to control erosion. (Timing: Phase 2).

APM-EC-3 Contaminated Site Water: Water containing mud, silt, or other pollutants from equipment washing or other activities, shall not be allowed to enter a flowing stream, dry ephemeral stream, or storm drains. Such water shall be settled, filtered, or otherwise treated prior to discharge back into the water body. (Timing: Phases 1, 2, and 3).

APM-EC-4 Inspection of Project Equipment: The Qualified Biologist shall inspect all vehicles, tools, waders and boots, and other Project-related equipment and remove all visible soil/mud, plant materials, and animal remnants prior to entering and exiting the Project site. (Timing: Phases 1, 2, and 3).

Biological Resources Protection Measures

APM-BIO-1 Qualified Biologist: A Qualified Biologist, who is approved by the California Department of Fish and Wildlife (CDFW), shall be on site during all vegetation- and ground-disturbing activities to ensure all avoidance and minimization measures are implemented. The Qualified Biologist shall be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the Project site. The Qualified Biologist shall be familiar with the appropriate species survey methodology and U.S. Fish and Wildlife Service- and/or CDFW-accepted species-specific survey protocols, available here: <https://wildlife.ca.gov/conservation/survey-protocols>. The Qualified Biologist shall be authorized to stop any Project activities, if necessary, to protect fish and wildlife resources. (Timing: Phases 1, 2, and 3).

APM-BIO-2 Resource Specialists: All Resource Specialists referred to in HELIX Environmental Planning, Inc.'s 2023 Mission Creek Habitat Restoration and Monitoring Plan and this Initial Study/Mitigated Negative Declaration shall be approved by the California Department of Fish and Wildlife prior to the initiation of Project activities. These Resource Specialists shall be authorized to stop any Project activities, if necessary, to protect fish and wildlife resources. (Timing: Phases 1, 2, and 3).

APM-BIO-3 Daily Pre-Work Clearance Survey: Prior to work occurring for the day, a California Department of Fish and Wildlife (CDFW)-approved Qualified Biologist shall conduct a survey of the work area and an appropriate buffer (based on the habitat and the nature of the proposed work) prior to the commencement of any work or Project-related activities. The purpose of the survey is to identify special-status species and other sensitive biological resources that may be impacted by the proposed work. If a sensitive resource is observed or determined to be likely to occur in the work area based on the results of the survey, the Qualified Biologist will develop resource- and site-specific avoidance measures to avoid adverse effects and shall submit these avoidance measures to CDFW for review and approval. (Timing: Phases 1 and 2).

APM-BIO-4 Injured/Trapped Wildlife: Prior to work occurring for the day, a California Department of Fish and Wildlife (CDFW)-approved Qualified Biologist shall inspect the Project site for any injured or dead wildlife. In addition, a CDFW-approved Qualified Biologist shall also inspect construction material and equipment for any trapped wildlife.



All work areas will be secured and holes covered to prevent injury or wildlife entrapment. If any incidentally trapped wildlife is discovered, it shall be allowed to escape and leave the work area voluntarily (Timing: Phases 1 and 2).

APM-BIO-5 Avoid Drainages: All debris (i.e., spoils), vehicles and equipment, and construction materials will be kept from entering drainage features unless the drainage feature is actively being worked on or must be traversed to gain access to an active work area. (Timing: Phases 1, 2, and 3).

APM-BIO-6 Nesting Bird Monitoring: Southern California Edison (SCE) is responsible for avoiding impacts to nesting birds any time birds are nesting on site. SCE shall ensure that impacts to nesting birds are avoided through the implementation of pre-work surveys, ongoing monitoring, and, if necessary, the establishment of minimization measures such as nesting bird buffers. No Project-related vegetation- or ground-disturbing activity shall be conducted during nesting bird season unless a Qualified Biologist completes nesting bird surveys prior to the start of Project-related activities. Nesting bird season is typically February 1 through September 15 for most bird species and January 1 through September 15 for raptors. During nesting bird season, pre-work nesting bird surveys shall be conducted by a Qualified Biologist within 3 days prior to the initiation of Project activities, as well as daily before work activities begin. If the Project site is inactive for 1 week, nesting bird surveys shall be repeated. Results of pre-work surveys shall be provided to the California Department of Fish and Wildlife (CDFW) at least one business day prior to the commencement of Project activities. SCE may also propose an alternative plan for the avoidance of nesting birds for CDFW concurrence based on Project-specific, site-specific, and species-specific information. SCE shall implement the following (Timing: Phases 1, 2, and 3):

- The Qualified Biologist shall have experience with the following: identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology (e.g., the Handbook of Field Methods for Monitoring Landbirds. U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station [Ralph et al. 1993]) and U.S. Fish and Wildlife Service- and/or CDFW-accepted species-specific survey protocols, available here: <https://wildlife.ca.gov/conservation/survey-protocols>; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success (e.g., Nest-Monitoring Plots: Methods for Locating Nests and Monitoring Success [Martin and Geupel 1993]); determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.
- Pre-work surveys shall be conducted by the Qualified Biologist at the appropriate time of day/night during appropriate weather conditions. Surveys shall encompass all suitable areas, including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration shall take into consideration the size of the Project area, density and complexity of the habitat, number of survey participants, and survey techniques employed, and shall be sufficient to ensure the data collected are complete and accurate. Pre-work surveys shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior (e.g., copulation, carrying of food or nest materials, nest building, removal of fecal sacks, flushing suddenly from atypically close range, agitation, aggressive interactions, feigning injury or distraction displays, or other behaviors). If a nest is suspected, but not confirmed, the Qualified Biologist shall establish a disturbance-free buffer until additional surveys can be completed or until the location can be inferred based on observations. The Qualified Biologist shall not risk failure of the nest to determine the exact location or status and will make every effort to limit the nest to potential predation as a result of the survey/monitoring efforts (e.g., limit number of surveyors, limit time spent at/near the nest, scan the site for potential nest predators before approaching, immediately depart nest area if indicators of stress or agitation are displayed). If a nest is observed but thought to be inactive, the Qualified Biologist shall monitor the nest for 1 hour (4 hours for raptors during the non-breeding season) prior to approaching the nest to determine its status. The Qualified Biologist shall use their best professional judgment regarding the monitoring period and whether approaching the nest is appropriate.
- When an active nest is confirmed, the Qualified Biologist shall implement a default 300-foot minimum avoidance buffer for all common passerine birds and a 500-foot minimum avoidance buffer for all special-status passerine and raptor species. CDFW may consider variances from these buffers when there is a



compelling biological or ecological reason to do so, such as when the Work Area would be concealed from a nest site by topography. The breeding habitat/nest site shall be fenced and/or flagged in all directions. The buffer shall be delineated to ensure that its location is known by all persons working within the vicinity but shall not be marked in such a manner that it attracts predators. Once the buffer is established, the Qualified Biologist shall document baseline behavior, stage of reproduction, and existing site conditions, including vertical and horizontal distances from proposed work areas, visual or acoustic barriers, and existing level of disturbance. The Qualified Biologist shall monitor the nest at the onset of Project activities, and at the onset of any changes in Project activities (e.g., increase in number or type of equipment, change in equipment usage, etc.) to determine the efficacy of the buffer. If the Qualified Biologist determines that Project activities may be causing an adverse reaction, the Qualified Biologist shall adjust the buffer accordingly. The nesting bird area shall not be disturbed until the nest becomes inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, and the young will no longer be impacted by the Project.

- The Qualified Biologist shall be on site daily to monitor all existing nests and the efficacy of established buffers and to document any new nesting occurrences. The Qualified Biologist shall document the status of all existing nests, including the stage of reproduction and the expected fledge date. If a nest is suspected to have been abandoned or failed, the Qualified Biologist shall monitor the nest for a minimum of 1 hour (4 hours for raptors), uninterrupted, during favorable field conditions. If no activity is observed during that time, the Qualified Biologist may approach the nest to assess the status. If nesting birds are detected within Project site(s) during Project implementation and construction, SCE shall notify CDFW immediately in writing.
- SCE, under the direction of the Qualified Biologist, may also take steps to discourage nesting on the Project site, including moving equipment and materials daily, covering material with tarps or fabric, and securing all open pipes and construction materials. The Qualified Biologist shall ensure that none of the deterrent materials pose an entanglement risk to birds or other species. The Qualified Biologist shall include a detailed account of any steps taken to discourage nesting within the Project site in the summary reports.
- Observations of breeding/nesting threatened or endangered bird species during surveys shall be reported immediately to CDFW. The Qualified Biologist shall be responsible for providing summary reports regarding the nesting species identified on site, discovery of any new nests, the status/outcome of any previously identified nest, buffer distances established for each nest, and any adjustments made to established buffers. If Project activities result in the abandonment of, or damage to a nest, SCE shall notify CDFW within 24 hours of detection.

APM-BIO-7 Special-Status Herpetofauna Species: Pre-work surveys for special-status herpetofauna species such as Coast Range newt (*Taricha torosa*), two-striped gartersnake (*Thamnophis hammondi*), coast horned lizard (*Phrynosoma blainvillii*), and coastal whiptail (*Aspidoscelis tigris stejnegeri*) shall be conducted by a Qualified Biologist 14 days and 24 hours before the start of vegetation- or ground-disturbing activities. Separate and species-specific surveys shall be conducted at the appropriate time and with the appropriate methodology to determine if any special-status herpetofauna species are present within the Project area. Surveys shall incorporate appropriate methods to detect these species, including individuals that could be concealed in burrows, beneath leaf litter, or in loose soil prior to any Project-related activities in areas that have or may have the potential to support these species. Should any special-status herpetofauna be found during pre-work surveys in an identified work area, the Qualified Biologist shall delay all Project ground-disturbing or vegetation-disturbing activities until the species has left the work area voluntarily. Southern California Edison shall notify the California Department of Fish and Wildlife (CDFW) of the discovery of any special-status herpetofauna immediately, and work shall not commence or resume (whichever applies) until CDFW provides written authorization. The results of these surveys shall be provided to CDFW, along with copies of all field notes, prior to the start of Habitat Restoration Installation. (Timing: Phase 2).



APM-BIO-8 Tree Protection: A tree protection plan will be prepared by a Certified Arborist and implemented throughout this Project (HELIX Environmental Planning, Inc.'s 2020 Mission Canyon Road Repair Project Habitat Restoration Plan). (Timing: Phases 1 and 2). Specifically, tree protection measures include:

- A minimum 4-foot-tall, brightly colored, synthetic fence shall be installed around the critical root zone (defined by the County of Santa Barbara as the dripline plus 6 feet in its 2020 Initial Feedback Letter City of Santa Barbara Grading & Restoration Project) to delineate the boundary of the environmentally sensitive area. Fencing shall remain in place until all Construction Activities and Restoration Installation Activities have ceased.
- No digging, trenching, compaction, or other soil disturbance shall be allowed in the fenced area.
- The storage of construction equipment or hazardous materials such as gasoline, oil, or other toxic chemicals shall not be allowed in or adjacent to the fenced area.
- All stockpiled soil will be placed outside of any critical root zone unless specifically authorized by the California Department of Fish and Wildlife. Specific authorization will include locations of critical root zone encroachment, the volume of material, and the timing for stockpile storage.
- Grade changes shall be avoided near fenced areas.
- Designated roads and parking areas shall be established. All construction personnel shall be restricted to driving and parking in designated areas. Prolonged discharge (idling) of exhaust from construction vehicles and equipment shall not be allowed near the critical root zone.
- All work shall be performed under the direction of a Certified Arborist.
- A monitoring biologist will regularly inspect fencing and document any encroachments to native tree critical root zone and corresponding corrective measures for incorporation in the post-construction compliance report. Work around trees will be overseen by a Certified Arborist to ensure trees are adequately protected and no additional impacts occur.

APM-BIO-9 Restoration of Disturbance to Native Vegetation or Sensitive Plants: Following Project activities, any disturbance to native vegetation communities or sensitive plants as a result of Proposed Project activities will be mapped and restored in accordance with HELIX Environmental Planning, Inc.'s 2023 Mission Creek Habitat Restoration and Monitoring Plan. (Timing: Phases 2 and 3).

APM-BIO-10 Environmentally Sensitive Area Flagging and Monitoring: Prior to materials/equipment mobilization and Habitat Restoration Installation, the hydrologic monitor will flag regulated areas that will need to be avoided or monitored as part of the installation. Throughout work activities, the hydrologic monitor will ensure the protection of the adjacent regulatory resources. (Timing: Phases 1 and 2).

APM-BIO-11 Collection of Rare Plant Propagules: During the appropriate season, seed, bulbs, or cuttings of sensitive plant species within the work area that have the potential to be impacted or cannot be avoided may be collected for restoration purposes in accordance with Section 4.8 of HELIX Environmental Planning, Inc.'s 2023 Mission Creek Habitat Restoration and Monitoring Plan. In this instance, Southern California Edison will notify the California Department of Fish and Wildlife prior to impacting rare plants to allow adequate time to salvage the plants. Species targeted for cutting collection include Plummer's baccharis (*Baccharis plummerae* ssp. *Plummerae*), while seed of Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*) may be collected. Collection practices will follow industry standards for extraction, potting, storage, and care prior to transplanting. (Timing: Phases 1, 2, and 3).

APM-BIO-12 Change in Seed Lists or Plant Lists: Changes to seed or plant lists will be submitted to Southern California Edison (SCE) and SCE's Restoration ecologist for review and approval prior to application. (Timing: Phases 1, 2, and 3).

APM-BIO-13 Species-Specific Rehabilitation: Three sensitive plant species—Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*), Plummer's baccharis (*Baccharis plummerae* ssp. *Plummerae*), and Hubby's phacelia (*Phacelia hubbyi*)—are known to occur within the Project area and will be incorporated into the revegetation program



in Sections 6–9 of HELIX Environmental Planning, Inc.'s 2023 Mission Creek Habitat Restoration and Monitoring Plan as part of the Project work. (Timing: Phases 2 and 3).

APM-BIO-14 Adaptive Management Herbicide Use: Any use of herbicide will be prescriptive, targeted to control particularly noxious weeds such as carnation spurge (*Euphorbia terracina*), fountain grass (*Pennisetum setaceum*), and French broom (*Genista monspessulana*). Targeted herbicide application to mustard (*Brassica* spp., or *Hirschfeldia* spp.) in sidecast areas away from public access may also be considered an adaptive management tool. Herbicide application would not be applied during wind conditions with gusts above 5 miles per hour or within 24 hours of a rain event. All applications would be completed in compliance with the U.S. Environmental Protection Agency, and state and local regulations, by licensed applicators. The County and City of Santa Barbara will be consulted prior to herbicide use, and pesticide use reports will be submitted to the California Department of Fish and Wildlife and the California Department of Pesticide Regulation database. (Timing: Phase 3).

Invasive Weed Species Control

APM-INV-1 Clean Vehicles and Equipment: All vehicles and any ground- or vegetation-disturbing equipment/tools must be cleaned and free of mud, soil, and plant material prior to entering the Project site. Cleaning can be done through car washes, compressed air, pressure washers, brushes, or similar equipment. All vehicles will be inspected prior to coming on site. A record of wash/inspection time, date, location of where the equipment was cleaned, and the distance to the work site, will be maintained. (Timing: Phases 1, 2, and 3).

APM-INV-2 Weed-Free Materials: All best management practice materials will be weed-free, plastic-free, and fully biodegradable. All specifications in the Project Stormwater Pollution Prevention Plan will be implemented on site. (Timing: Phases 1, 2, and 3).

Cultural Resources

APM-CUL-1 Qualified Archaeologist. Prior to initiating any Project-related ground-disturbing activities, Southern California Edison shall retain a Qualified Archaeologist. A Qualified Archaeologist is defined as one who meets the Secretary of the Interior's (SOI) Standards for professional archaeology and those defined for a Principal Investigator by the Society for California Archaeology (SCA). The qualifications shall be presented as part of a resume for at least one primary point of contact who will act in capacity as the Qualified Archaeologist but also other key staff who may serve in this role. The resume shall demonstrate their SOI and SCA qualifications and shall be subject to approval by the County of Santa Barbara. The Qualified Archaeologist shall provide the services of an on-site representative known as an Archaeological Monitor.

Ground-disturbing activities are defined as excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing trees, clearing, driving posts or pilings, augering, backfilling, blasting, stripping topsoil, or a similar activity at the Project site. (Timing: Phases 1 and 2)

APM-CUL-2 Cultural and Tribal Cultural Resources Monitoring and Unanticipated Discovery Plan. Prior to initiating any Project-related ground-disturbing activities, a Cultural and Tribal Cultural Resources Monitoring and Unanticipated Discovery Plan (Monitoring Plan) shall be prepared by the Qualified Archaeologist and submitted to Southern California Edison, the California Department of Fish and Wildlife, and the County of Santa Barbara. The Monitoring Plan shall be prepared in conformance with Public Resources Code (PRC) Section 5024.1, Title 14 California Code of Regulations, Section 15064.5 of the California Environmental Quality Act Guidelines, and PRC Sections 21083.2 and 21084.1. The Monitoring Plan shall outline the roles and responsibilities of the Tribal Monitors and Archaeological Monitors, as well as monitoring and resource discovery and treatment methods. It shall identify the resources that will require protection and the work activities that will require monitoring. It shall also define the construction worker training program. (Timing: Phase 1).



APM-CUL-3 Worker Training. The Qualified Archaeologist or a designee working under their direction (e.g., the Archaeological Monitor) shall provide training to on-site Project personnel who are responsible for overseeing ground-disturbing activities (i.e., a foreman or site supervisor) and any machine operators. The initial training shall be conducted prior to the start of ground-disturbing activities at the Project site. The training shall brief the crew(s) on the regulatory compliance requirements and measures that must be adhered to during ground-disturbing activities for the protection of archaeological resources. As an element of the worker training, the Qualified Archaeologist or their designee shall advise the construction crews on proper procedures to follow if an unanticipated archaeological resource, including human remains, is discovered during Project implementation, including the authority of a Tribal Monitor and an Archaeological Monitor to temporarily halt or redirect work away from such a discovery. Workers shall be shown examples of the types of archaeological resources that would require notification of the archaeologist, if encountered. The workers shall be provided with contact information for the Qualified Archaeologist and their designee(s) as part of a brief hand-out summarizing the critical components of the training. Once the ground-disturbing activities have commenced, the need for additional or supplemental worker trainings shall be determined by the Qualified Archaeologist based upon consultation with Project personnel. Within 5 days of completing each training, a list of those in attendance shall be provided by the Qualified Archaeologist to a point of contact designated by Southern California Edison. (Timing: Phases 1 and 2).

APM-CUL-4 Archaeological Resources/Human Remains Discovered. Throughout the duration of all ground-disturbing activities, Tribal Monitors and an archaeologist shall be present at all times to observe and catalog any cultural resources that could be impacted by the Project, unless otherwise advised by the Tribal Monitor. If archaeological resources (Native American or historical artifacts), fossils, or human remains are encountered, work will be stopped. Tribal Monitors, archaeologist(s), and Southern California Edison's (SCE) cultural resource specialist have the authority to stop work at any time to protect archaeological resources, fossils, or human remains. The tribal monitors, archaeologist(s), and SCE's cultural resource specialist must give their unified approval for work to recommence after a stop work event (Timing: Phases 1 and 2).

APM-CUL-5 Archaeological Monitoring. At least one Archaeological Monitor working under the direction of the Qualified Archaeologist shall be present to implement the Cultural and Tribal Cultural Resources Monitoring and Unanticipated Discovery Plan (Monitoring Plan). During tree planting within site SBA-2722H, the Archaeological Monitor should directly observe tree planting within the portion of the Area of Potential Impact within the site boundary and provide direction on the locations of tree installation to avoid any historical refuse that may be present on the surface. The Archaeological Monitor shall also be present for the establishment of the laydown yard to ensure that its boundaries avoid known archaeological resources. The use of Archaeological Monitors to ensure the avoidance of significant impacts to historical resources in conjunction with other activities and to ensure an appropriate response to unanticipated discoveries shall be done in accordance with the Monitoring Plan. (Timing: Phases 1 and 2).

Tribal Cultural Resources

APM-TCR-1 Local Tribal Representative. Prior to initiating any Project-related ground-disturbing activities within the Project Area of Potential Impact, Southern California Edison shall retain a representative(s) of a Native American tribe(s) that has/have been actively engaged in consultation on this Project during the environmental review process as a Tribal Representative. The Tribal Representative(s) shall provide the services of an on-site representative known as a Tribal Monitor.

Ground-disturbing activities are defined as excavating, digging, trenching, plowing, drilling, tunneling, quarrying, grading, leveling, removing trees, clearing, driving posts or pilings, augering, backfilling, blasting, stripping topsoil, or a similar activity at the Project site. (Timing: Phase 1).

APM-TCR-2 Tribal Monitoring. At least one Tribal Monitor under the direction of the Tribal Representative shall be present to implement the Cultural and Tribal Cultural Resources Monitoring and Unanticipated Discovery Plan. The Tribal Monitor shall have the authority to temporarily halt or redirect Construction Activities and/or Restoration



Installation Activities when potential Tribal Cultural Resources as defined in Public Resources Code Section 21074(a) are encountered, as determined by the Tribal Representative. The Tribal Monitor shall complete a written log documenting their observations during Construction Activities and Restoration Installation Activities, which shall be submitted to the Qualified Archaeologist on a monthly basis and included in the Monitoring Report. (Timing: Phase 2)

Paleontological Resources

APM-GEO-1: Paleontological Resources Monitoring and Mitigation Plan. A qualified Project Paleontologist shall be retained to prepare and implement a Paleontological Resources Monitoring and Mitigation Plan (PRMMP). The PRMMP plan shall address specifics of monitoring and mitigation, including but not limited to pre-construction meeting attendance requirements, monitoring methods and procedures, monitoring staff qualifications, worker training, unanticipated discovery protocols, notification procedures, fossil salvage or sampling requirements, final reporting, and accessioning of any discovered paleontological resources into a recognized repository such as a museum should fossils be found. The PRMMP shall comply with the recommendations of the Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. The Project Paleontologist shall also prepare a report of the findings of the PRMMP after Habitat Restoration Installation is completed. (Timing: Phases 1 and 2).

APM-GEO-2: Worker Environmental Awareness Program (WEAP) Training. The Project Paleontologist shall develop a Worker Environmental Awareness Program (WEAP) to be incorporated into the general WEAP training for the construction crew on the legal requirements for preserving fossil resources and procedures to follow in the event of a fossil discovery. This training program shall be given to the crew before ground-disturbing work commences and shall be given to new workers upon onboarding. (Timing: Phases 1 and 2).

APM-GEO-3: Paleontological Monitoring. Certain ground-disturbing activities used for sidecast removal will require initial full-time paleontological monitoring. Monitoring should be conducted by a Paleontological Monitor who meets the standards of the Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources under the supervision of the Project Paleontologist. The Project Paleontologist may periodically inspect Construction Activities to adjust the level of monitoring in response to subsurface conditions. Monitoring can be reduced to part-time frequency or ceased entirely if determined adequate by the Project Paleontologist. The Paleontological Monitor shall have authority to temporarily divert activity away from exposed fossils to evaluate the significance of the find and, should the fossils be determined significant, professionally and efficiently recover the fossil specimens and collect associated data. Paleontological Monitors shall record pertinent geologic data and collect appropriate sediment samples from any fossil localities.

For both the Hand and Guzzler Removal method and the Hand Rock Removal method, initial full-time paleontological monitoring shall occur during manual (hand) removal of sidecast clasts greater than 3 inches in diameter, as well as during manual breakage of large rocks and boulders greater than 24 inches in diameter by sledgehammers, pickaxes, expansive rock-breaking agents, or jackhammers prior to removal by excavators. In instances where high incline fall protection for technicians removing the sidecast is required for the safe removal of the sidecast material (such as in the Hand Rock Removal method), the Paleontological Monitor shall inspect the sidecast clasts for significant fossils from along the road or from an accessible safe location. In locations where Helicopter Removal is necessary to remove sidecast material, paleontological monitoring is not required; however, at the discretion of the Project Paleontologist, the Paleontological Monitor may inspect stockpiles of soil removed by the Hand and Guzzler Removal method, the Hand Rock Removal method, or the Helicopter Removal method prior to being hauled away for disposal. Sidecast clasts less than or equal to 3 inches in diameter and/or sidecast material subject to guzzler vacuum truck removal do not require paleontological monitoring. (Timing: Phases 1 and 2).

APM-GEO-4: Fossil Discovery and Salvage. In the event of a fossil discovery, whether by the Paleontological Monitor or a member of the construction crew, all work shall cease in a 15-meter (50-foot) radius of the find while the Project Paleontologist assesses the significance of the fossil and documents its discovery. Should the fossil be determined



significant, it shall be salvaged following the procedures and guidelines of the Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources and in consultation with the Natural History Museum of Los Angeles County. Recovered fossils shall be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility. The most likely repository is the Natural History Museum of Los Angeles County. (Timing: Phases 1 and 2).

APM-GEO-5: Paleontological Monitoring Documentation. Upon conclusion of ground-disturbing activities, the qualified Project Paleontologist overseeing paleontological monitoring shall prepare a final Paleontological Resources Monitoring Report (PRMR) that documents the paleontological monitoring efforts for the Project and describes any paleontological resource discoveries observed and/or recorded during the life of the Project. If paleontological resources are curated, the PRMR and any associated data pertinent to the curated specimen(s) shall be submitted to the designated repository. A copy of the final PRMR shall be filed with the County of Santa Barbara. (Timing: Phase 2).

Hydrology and Water Quality

APM-HYD-1 Stormwater Pollution Prevention Plan: A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the Project to address all Project-related activities, equipment, and materials that have the potential to affect water quality during Project implementation. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include best management practices (BMPs) such as sediment control, erosion control, construction materials, and waste management, to control the pollutants, as well as other non-stormwater BMPs. All construction site BMPs will be designed to control and minimize the effects of construction and construction related activities, material, and pollutants on the watershed. A Qualified SWPPP Practitioner (QSP) and/or delegated monitor will inspect the site per California Construction General Permit requirements. As the Project progresses, the SWPPP will be modified and amended to reflect modifications to stormwater control measures as construction conditions change. Stormwater controls for this Project include BMPs that will be installed to reduce or eliminate pollutants from entering Mission Creek and associated sensitive habitats. All BMPs will be weed free, plastic free, and fully biodegradable, and will be made of material that prevents wildlife from becoming trapped. Mulch will have no invasive seeds, plant material, or plastic. Hydroseeding shall be done with native seeds only, including grasses. The SWPPP must be kept on site and amended to reflect the current site conditions until final stabilization and termination requirements are met. If field circumstances do not allow the SWPPP to remain on site, then the QSP will retain the hardcopy of the SWPPP, which will be made available upon request to state or municipal inspectors. (Timing: Phases 1, 2, and 3).

Recreation

APM-REC-1 Trail Access Plan: Southern California Edison (SCE) shall prepare a Trail Access Plan that maximizes trail access during Project implementation to the maximum extent feasible and safe for Project personnel and the public. The plan will specify which Project-related activities are anticipated to require full or partial trail closure. The plan will also describe strategies, methods, and tools SCE may utilize to safely maximize public access, including access controls and communication of scheduled closures to the public. The Trail Access Plan shall be submitted to Santa Barbara County for review and approval prior to Land Use Permit issuance. The Trail Access Plan may be combined as part of another Project plan (such as the Parking and Trail Closure Plan) requiring Santa Barbara County review and approval. Santa Barbara County permit compliance staff will verify the implementation of the approved Trail Access Plan through site inspections as needed during Project implementation. (Timing: Phases 1, 2, and 3).

Air Quality and Fugitive Dust Control

APM-AQ-1 Air Quality and Fugitive Dust Control: During Habitat Restoration Installation, standard best management practices shall be implemented to minimize dust consistent with the dust control requirements of Santa Barbara County's Grading Ordinance (Section 14-23) and Santa Barbara County Air Pollution Control District Rule 345. These



measures require maintenance of mobile and other construction equipment, watering exposed surfaces to prevent dust from leaving the site, creating a crust after each day's activities cease, covering stockpiles when required (e.g., non-active, prior to onset of precipitation, etc.), watering all haul roads daily, and limiting speeds on unpaved roads to 15 miles per hour. All temporary areas of ground disturbance shall be treated (e.g., with water or dust suppressant) to prevent visible emissions of dust. (Timing: Phase 2).

Noise

APM-NOI-1 Construction Hours: Project-related activities that generate noise will be limited to weekdays and Saturdays between 8:00 a.m. and 5:00 p.m., unless other hours are approved by Santa Barbara County. Night work will not be performed. Project-related activities that do not generate noise or impact surrounding residents will be limited to weekdays and Saturdays between 7:00 a.m. and 6:00 p.m., unless other hours are approved by Santa Barbara County. Project helicopter use will be limited to weekdays between 8:00 a.m. and 5:00 p.m. (Timing: Phases 1, 2, and 3).

Fire Prevention

APM-HAZ-1: Fire Prevention and Emergency Response Plan: Thirty (30) days prior to the start of any Project-related activities (e.g., prior to the use of vehicles or mechanical equipment on site), Southern California Edison (SCE), in coordination with its contractors, shall prepare a Fire Prevention and Emergency Response Plan for review and approval by Santa Barbara County Fire Department (SBCFD) that includes, but would not be limited to, the following information along with provisions to be implemented during Project implementation (Timing: Phase 1):

- Responsibilities of the SCE, its contractor(s) (including fire watch services contractor), and SBCFD with respect to fire prevention and inspection of work areas
- On-site personnel in charge of overseeing Fire Prevention and Emergency Response Plan implementation
- Information on where Construction Activities, staging/storage, Habitat Restoration Activities, and monitoring activities will occur
- Traffic control requirements and approvals from Santa Barbara County
- Emergency communication, response, and reporting procedures
- Procedures for minimizing potential ignition, including, but not limited to, vegetation clearing, parking requirements/restrictions, idling restrictions, smoking restrictions, proper use of gas-powered equipment, use of spark arresters, and hot work restrictions
- Construction staff and equipment that can be used for fighting fire
- Worker training for fire prevention, initial attack firefighting, and fire reporting
- Identification of fire suppression equipment to be maintained in work areas and staging areas
- Emergency measures for construction curtailment
- Provisions for fire/emergency services access if roadway blockage occurs during construction
- Designated cleared, maintained worker parking and construction staging areas; no parking or Project activities in non-designated areas
- Prohibition of smoking and open fires at the Project site during the Project, with a copy of the notification to all contractors regarding prohibiting smoking and burning to be provided to SBCFD
- Assurances that all internal-combustion construction equipment are equipped with appropriate spark arresters and that fire extinguishers are immediately available and maintained in readiness for use at all times
- Presence of a fire watch with appropriate firefighting equipment available at the Project site at all times when welding or other spark-generating activities are taking place; prohibition of spark-producing activities (such as welding and metal cutting) when sustained winds exceed limits set forth by SBCFD
- Appropriate hot work permits/approvals (for activities such as welding and metal cutting) to be obtained from SBCFD



- Curtailment of all Project activities in the event of a fire or when fuel and weather conditions get into the “very high” and “extreme” ranges (Red Flag Warning), as determined by the National Weather Service
- Red Flag Warning restrictions for maintenance work
- Other information as required by the California Department of Forestry and Fire Protection (CAL FIRE) and SBCFD, as applicable

Traffic Management

APM-TR-1: Traffic Management Plan. Southern California Edison shall implement an approved Traffic Management Plan (TMP) for use by all contractors and Project personnel that must include, but not be limited to, the following:

- Use of approved haul routes
- Caution signs and/or flagmen to regulate traffic where necessary and to maintain a safe transportation corridor during mobilization, construction, and demobilization
- Provide construction notice and schedule to emergency providers and the residential community located south of the Project site and along the proposed haul route a minimum of 15 days in advance of Project activities
- Specify and enforce 15 miles per hour as the maximum vehicle speed limit to minimize risk of wildlife collisions and fugitive dust
- Provide signage and barriers used for temporary closure of recreational trails during construction

The TMP shall be submitted to Santa Barbara County for review and approval at least 30 days prior to the start of Project construction. (Timing: Phases 1 and 2).

2.7.6 Mitigation Measures

The Project includes a variety of Mitigation Measures (MMs) that CDFW would require SCE to adhere to while implementing the Proposed Project to avoid or minimize potential environmental impacts to less than significant. These MMs would be enforced through a Lake and Streambed Alteration (LSA) Agreement. Many of the MMs are phase-specific as indicated below. As described in Section 2.7.4 above, Phase 1 is the timeframe for Restoration Planning Activities and Site Preparation Activities; Phase 2 includes the Habitat Restoration Installation to construct and install the restoration; and Phase 3 consists of the Maintenance and Monitoring Activities. Roles and responsibilities of personnel or specialists referenced in the MMs are included in Section 3.5 of the HRMP (Appendix A).

Measures Applicable to Areas Subject to Fish and Game Code 1602

MM-FGC-1 Stream Monitoring: A Qualified Biologist shall conduct monitoring of Mission Creek upstream and downstream of the Project site when water is present in the Project area during Project activities. The Qualified Biologist shall monitor instream flow conditions (i.e., no flows, insufficient flow to sustain aquatic life, isolation of pools) and water quality (i.e., water temperature, pH, dissolved oxygen, and turbidity levels). These selected locations shall be monitored daily during Habitat Restoration Installation in the stream and tributaries when water is present. The Qualified Biologist shall immediately report any signs of aquatic wildlife distress to the California Department of Fish and Wildlife (CDFW). The results of the daily stream monitoring shall be submitted to CDFW and the Regional Water Quality Control Board for review weekly. (Timing: Phase 2).

MM-FGC-2 Turbidity: If work occurs within the stream or tributaries when water is present, turbidity levels in the stream resulting from Project-related activities shall not exceed 10% of natural turbidity levels, as measured 200 feet upstream from the Project site. Conditions shall be monitored and measured daily and submitted to the California Department of Fish and Wildlife (CDFW) and the Regional Water Quality Control Board (RWQCB) for review. Upon CDFW and/or RWQCB determination that turbidity/siltation levels, resulting from Project-related activities, constitute a threat to



aquatic life or additional impacts downstream of the Project site, activities associated with the turbidity/siltation shall be halted until effective CDFW-approved and RWQCB-approved control devices are installed, or CDFW-approved and RWQCB-approved abatement procedures are initiated. (Timing: Phase 2).

MM-FGC-3 Hydrologic Monitor: A qualified hydrologic monitor (hydrologic monitor from the fluvial morphology team identified in Section 3.5.3 of the Mission Creek Habitat Restoration and Monitoring Plan), approved by the California Department of Fish and Wildlife and the Regional Water Quality Control Board, will monitor work activity within streams. The hydrologic monitor will have the capacity to help identify sidecast material versus native material and will work with the contractor to determine materials that may remain in place and not impact the overall hydrology of the system. (Timing: Phase 2).

MM-FGC-4 Southwestern Pond Turtle Pre-Construction Surveys: Prior to Habitat Restoration Installation, surveys for southwestern pond turtle (*Actinemys pallida*; SWPT) shall be conducted by a Qualified Biologist 14 days before and 24 hours before the start of vegetation-clearing and ground-disturbing activities where suitable habitat exists (e.g., along riparian areas, freshwater emergent wetlands, and adjacent upland areas), as well as an appropriate distance upstream and downstream of these areas, to determine presence or absence of SWPT following the U.S. Geological Survey's 2006 Western Pond Turtle (*Emys marmorata*) Visual Survey Protocol for the Southcoast Region. No trapping will be performed. Documentation of these surveys and findings shall be submitted to the California Department of Fish and Wildlife (CDFW) for review prior to the commencement of Habitat Restoration Installation and within 30 days following the completion of the surveys. If there is a pause of more than 5 days in Project activities, SWPT surveys shall be repeated and the findings shall be submitted to CDFW for review prior to recommencement of work. (Timing: Phases 1 and 2).

If SWPT or their nests are observed during surveys, a Qualified Biologist shall be on site to monitor Project-related activities in suitable SWPT habitat. SWPT found within the Project area will be allowed to leave of its own volition, or it will be captured by a Qualified Biologist and relocated out of harm's way to the nearest suitable habitat immediately upstream or downstream from the Project site. Should SWPT become federally listed, Southern California Edison and/or the U.S. Army Corps of Engineers will contact the U.S. Fish and Wildlife Service (USFWS) to ensure impacts to SWPT are fully avoidable or whether permitting is required. If SWPT becomes listed, handling/relocation will not be conducted without authorization from USFWS.

If SWPT nests are identified in the work area during surveys, a 450-foot, no-disturbance buffer shall be established between the nest and any areas of potential disturbance. Buffers shall be clearly marked with temporary fencing. Construction Activities and Restoration Installation Activities will not be allowed to commence in the exclusion area until hatchlings have emerged from the nest, or the nest is deemed inactive by a Qualified Biologist.

MM-FGC-5 Aquatic Species Protection: SCE shall monitor the National Weather Service 72-hour forecast for the Project area and shall consider precipitation forecasts and potential increases in stream flow when planning Project activities within or adjacent to streams. No Project-related activities, including access, shall be conducted within or adjacent to streams with flowing or ponded water except for Qualified Stormwater Pollution Prevention Plan Practitioner or water quality inspections. Project activities shall cease, and all work materials shall be removed from within or adjacent to streams prior to any substantial rain. Substantial rain is when the National Weather Service has predicted a 50% or more chance of at least 0.3 inches of rain in 24 hours. Weather forecasts shall be documented and available to the California Department of Fish and Wildlife upon request. (Timing: Phases 1, 2, and 3).

Biological Resources

MM-BIO-1 Biological Monitoring Plan. Prior to Project implementation, a Biological Monitoring Plan will be developed that (1) outlines the roles and responsibilities of the Qualified Biologists, (2) identifies communication protocols should the Qualified Biologists need to stop work, (3) outlines how the Qualified Biologists will communicate and coordinate with crews daily, (4) outlines a Worker Environmental Awareness Program that identifies specific work activities likely



to impact to resources (e.g., soil vacuuming) that will be administered by the Qualified Biologists prior to initiation of work and material/equipment mobilization, and (5) describes safety protocols that the Qualified Biologists will adhere to while working in the Project area. The Biological Monitoring Plan must be approved by the California Department of Fish and Wildlife prior to Project initiation and hardcopies will be kept with a Qualified Biologist and an on-site construction foreman during Project activities. (Timing: Phases 1, 2, and 3).

MM-BIO-2 Best Management Practices for Working in Aquatic Habitats. To prevent the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), all personnel working in aquatic habitats will follow the guidelines and decontaminated methods listed in the California Department of Fish and Wildlife's (CDFW) 2022 Aquatic Invasive Species Decontamination Protocol. The following best management practices will be implemented:

- When working in areas subject to the regulatory authority of CDFW, begin upstream and work downstream to avoid transporting invasive species to upstream areas.
- Only work in one waterbody per day and decontaminate equipment at the end of the day (all aquatic resources within the Project site are considered a single waterbody for the purposes of this measure).
- If working in multiple waterbodies, use separate equipment for each site and decontaminate it at the end of the day. Bag used equipment and keep separate from unused equipment to prevent cross-contamination.
- If working in multiple waterbodies in a single day and cannot use separate equipment, decontaminate it at the site prior to traveling to the next site.
- Wear rubber soled footwear for ease of decontamination.
- Clean all equipment before decontaminating. Debris reduces the efficacy of all decontamination methods by sheltering organisms from exposure and/or neutralizing chemicals.

Hydrology and Water Quality

MM-HYD-1: Technical Implementation Plan: Prior to initiating Construction Activities or Restoration Installation Activities within a stream or tributaries at the Project site, Southern California Edison will prepare a Technical Implementation Plan (TIP) for California Department of Fish and Wildlife and Regional Water Quality Control Board review and approval. The purpose of the TIP is to provide an implementation document to guide the process of monitored sidecast removal and the restoration and repair of stream features identified within impacted areas of Mission Creek. The TIP will present protocols to differentiate sidecast material from existing creek materials, identification of pre-impact creek bed and banks and evaluation of stream integrity and determination for in-stream restoration. These protocols will be implemented to achieve the restoration goals in HELIX Environmental Planning, Inc.'s 2023 Mission Creek Habitat Restoration and Monitoring Plan (HRMP) while protecting and restoring the existing natural stream topography, habitat, and function. Protocols and restoration guidance will be based, in part, on established stream restoration science as well as information gathered during stream surveys. In addition, the site-specific information will include a description of the creek within the Project area and a characterization of the geomorphology of both the sidecast impacted and non-impacted reaches of the creek. The TIP will also develop habitat unit-specific sidecast characterizations, a longitudinal profile, and cross-section transects that will illustrate current creek bed and bankfull elevations relative to thalweg extending upstream and downstream of the Project, beginning approximately 10 times the bankfull channel width upstream of Creek Site #1, and ending approximately three bankfull channel widths below Control Site #2 (HRMP Figure 8c). The longitudinal creek profile will establish geomorphological elevations at identified habitat units and other prominent geomorphic features through the Project Area, which may be important to the restoration process. (Timing: Phase 1 or Phase 2).



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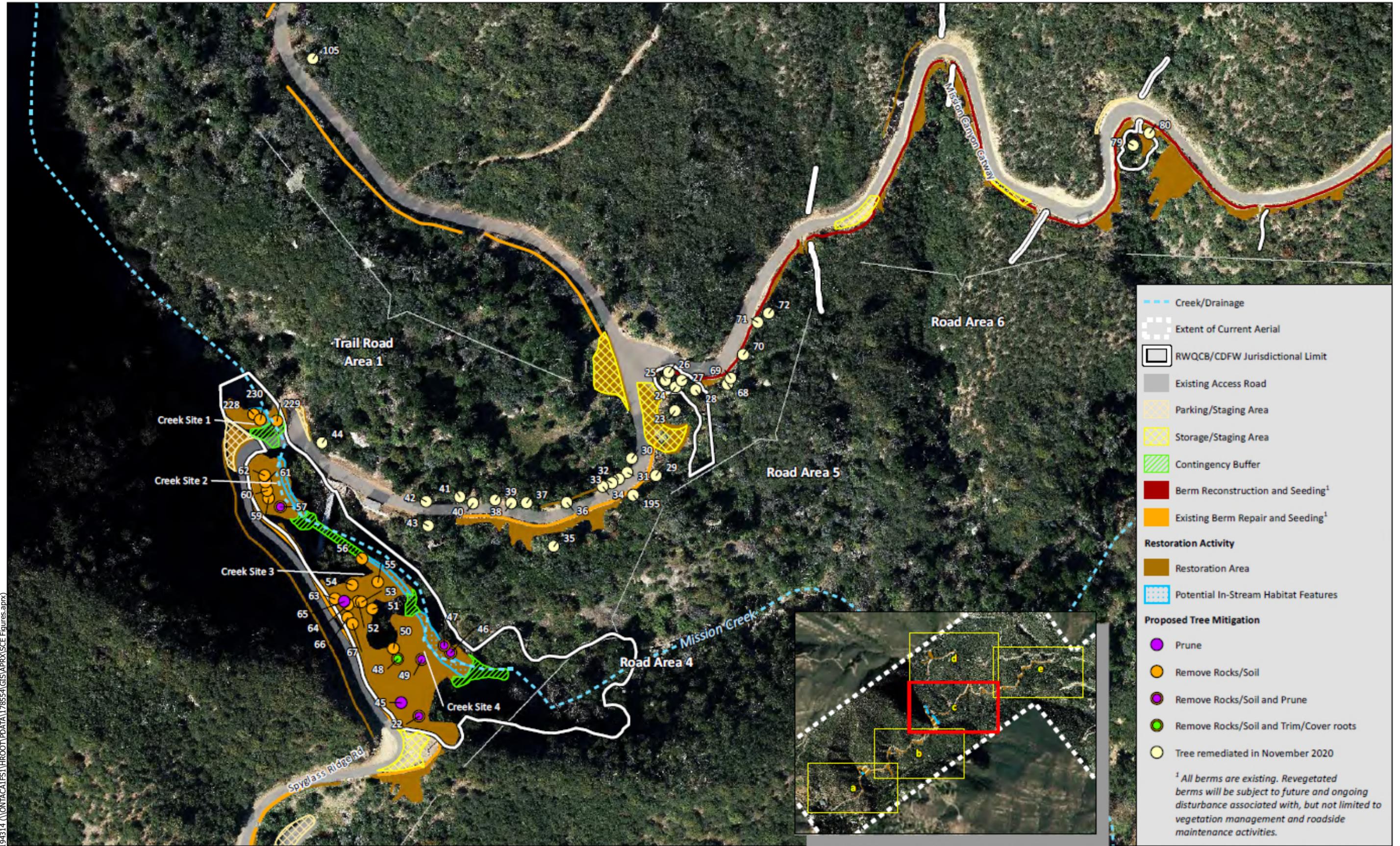
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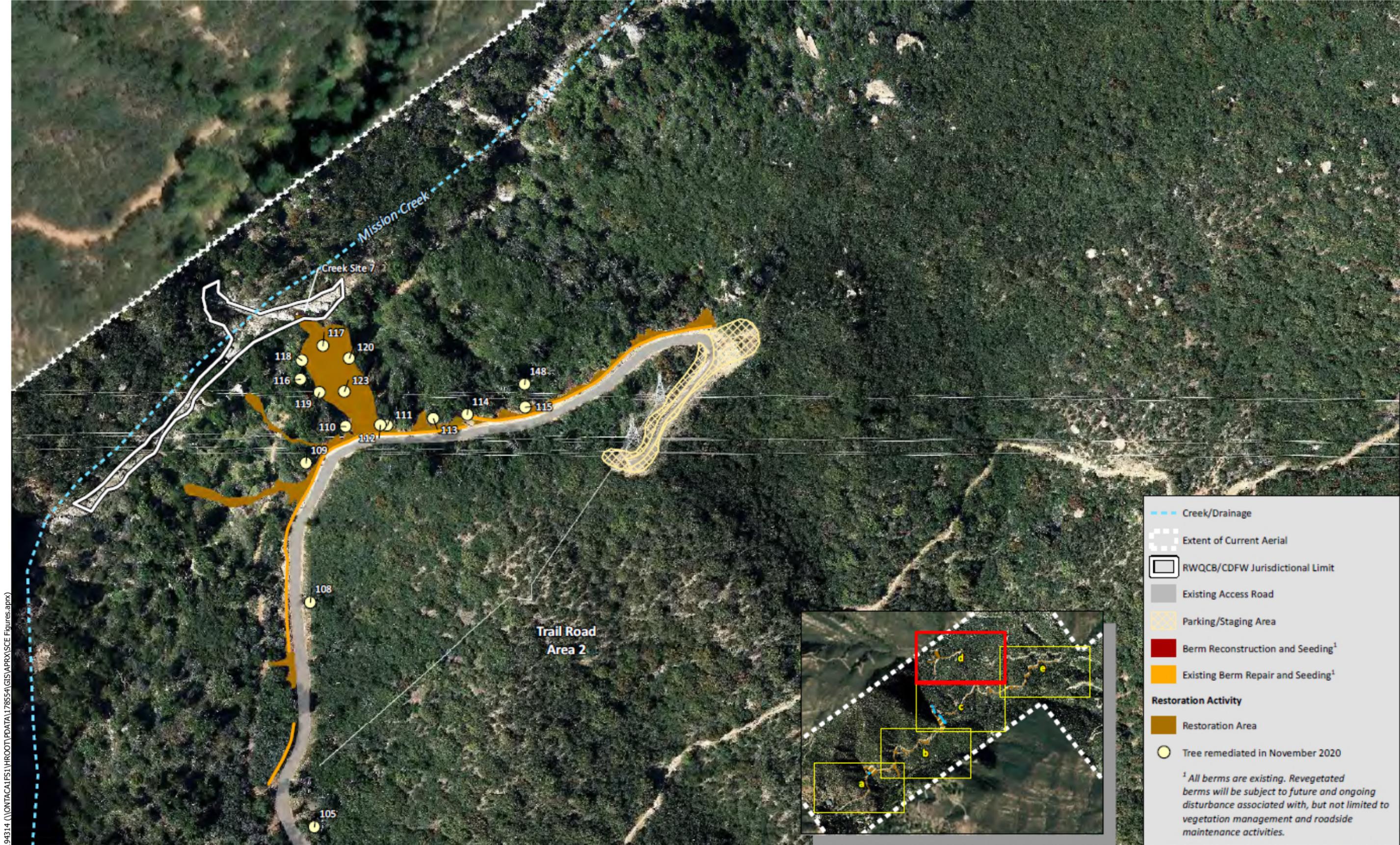
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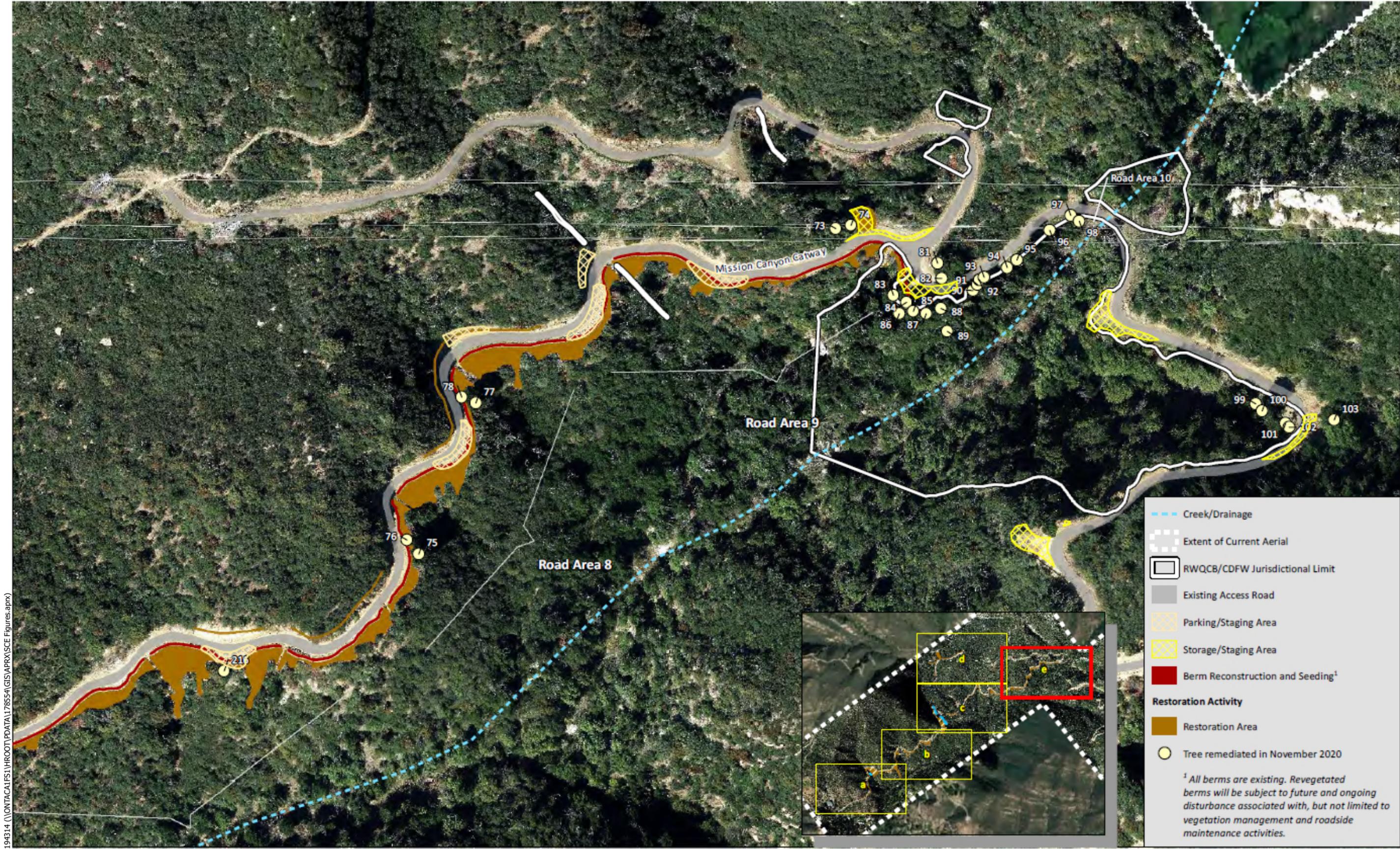
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- Creek/Drainage
- Extent of Current Aerial
- RWQCB/CDFW Jurisdictional Limit
- Existing Access Road
- Parking/Staging Area
- Storage/Staging Area
- Berm Reconstruction and Seeding¹

Restoration Activity

- Restoration Area
- Tree remediated in November 2020

¹ All berms are existing. Revegetated berms will be subject to future and ongoing disturbance associated with, but not limited to vegetation management and roadside maintenance activities.



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2.7.7 Project Construction

Construction Workers and Equipment

It is estimated that 26 workers per day would be required for Construction Activities; however, up to a maximum of 44 workers per day may be required during peak work periods when stream restoration and berm removal and replacement work is occurring simultaneously. Monitors would be present on site to record impacts and assist with impact minimization and avoidance and implementation of BMPs. When working in stream habitat, a Qualified Biologist would be present to identify common and sensitive species to avoid or minimize impacts. The Qualified Biologist would be required to have experience working with the species in question and would be required to be pre-approved for work by CDFW to ensure that the monitor can sufficiently meet or exceed the qualifications necessary for this role.

The construction equipment anticipated to be used on site includes, but is not limited to, the types listed in Table 2-14, Anticipated Construction Equipment, below.

Table 2-14
Anticipated Construction Equipment

Construction Phase	Equipment Type	Equipment Quantities
Sidecast Removal	Jackhammer	Varies
	Skid Steer	2
	Crew trucks	4
	Gear trucks	2
	HydroSeeder	1
	Skip loader	1
	Backhoe	1
	Rubber tired loader	1
	Dump Truck	1
	Water truck	1
	Brush Clipper	1
	Water Buffalo	2
	Mini Excavator	1
	40k Rubber Tracked Excavator	1
	Guzzler vacuum truck	2
	Reach Forklift	1
	Hand tools	Varies
	Helicopter (Bell 205)	1
	Berm Removal and Replacement	Water Truck
Skid steer		1
Mini Excavator		2
Crew trucks		3
Berm Repair	Water Truck	1
	Skid steer	1
	Mini Excavator	1
	Crew trucks	3
Rock Crushing	Water Truck	1
	Rock Crusher	1
	Excavator	1
	Loader	1
	Crew Trucks	2



Material Management and Disposal

The total estimated volume of sidecast material within Regulatory Areas is approximately 1,413.0 cubic yards, contained within Creek Sites 1 through 4, unnamed tributaries in Road Areas 1 and 2, and Sidecast 3 Rock Outliers. The total estimated volume of sidecast material within upland areas (excluding what was previously used for berm construction [approximately 600 cubic yards]) is approximately 918.8 cubic yards. SCE anticipates that nearly 100% of this material remaining at the Project site at the time of Project implementation would be removed with possible constraints, as noted in Section 2.7.2.

Once sidecast materials are removed, they would be transferred to a stockpile location that would be managed for loading onto bobtail dump trucks (which can hold 12 cubic yards of material) for transportation and disposal to Tajiguas Landfill, located approximately 27.6 miles west of the Proposed Project area in the City of Goleta. Disposing of the materials would require approximately six trucks and 165 total vehicle miles per day, for a total of approximately 45 haul days. The haul route would include Spyglass Ridge Road/Tunnel Road to Foothill Boulevard/CA-192 for 3.3 miles, then North Ontare Road and State Street for 1.3 miles to reach Pacific Coast Highway. From Pacific Coast Highway, the haul route extends 22.3 miles to the Tajiguas Landfill, located east of the highway.

2.8 PROJECT SCHEDULE

SCE anticipates the total duration of the Construction Activities of the Proposed Project would be approximately 6 months (either continuous or broken into two or more construction phases totaling approximately 6 months). Restoration Installation Activities are anticipated to take approximately 4 to 6 weeks to complete and may take place concurrently with or after Construction Activities, and in one or more time periods to facilitate Project success. This will be followed by Maintenance and Monitoring Activities, which would take place over a minimum of 5 years and until success criteria are met. It is anticipated that work may begin in spring 2024 following Project permitting. Depending on the start date of specific Project activities, appropriate biological surveys would be performed with avoidance measures established for species that are detected. Avian surveys would be performed (January 1 through September 15), as necessary. If specific Project activities are completed in fall/winter, hydroseeding may be performed at that time and prior to the rainfall season. If Project activities are completed in a season not suitable for planting and seeding (i.e., summer), these actions would be postponed until an appropriate season for seeding, as determined by the Restoration ecologist. As Project work would occur within the creek and associated banks, all removal and associated revegetation and stabilization activities would occur under dry conditions or during first rains before surface flows to avoid siltation from rain-induced runoff. Work may be paused and resumed in the following year if needed to avoid working during surface flows in Mission Creek. The activities and sequencing associated with the Proposed Project area as follows:

1. Environmental surveys
2. Sensitive plant/seed salvage/collection
3. Procure revegetation materials (concurrent with #4)
4. Rock, boulder, sediment removal/stream restoration
5. Tree damage remediation (concurrent with #4)
6. BMP installation/stream/bank stabilization
7. Planting and seeding (fall/winter)
8. Monitoring (spring/fall)
9. Installation photo documentation and reporting
10. Remedial measures (as needed)

2.9 AGREEMENTS, PERMITS, AND APPROVALS

The following describes agreements, permits, and approvals required from federal, state, and local agencies to complete the Proposed Project. It is acknowledged that the required agreements, permits, and approvals may change as the Proposed Project entitlement process proceeds.



City of Santa Barbara

- Temporary Entry Permit

County of Santa Barbara (CEQA Responsible Agency)

- Land Use Permit
- Grading Permit
- Hauling Permit
- Waste Disposal Permit

California Department of Fish and Wildlife (CEQA Lead Agency)

- Completion of CEQA review
- Section 1602 Streambed Alteration Agreement
- Sections 1002, 1002.5, and 1003 Scientific Collecting Permit

U.S. Army Corps of Engineers

- Section 404 Clean Water Act Permit

Regional Water Quality Control Board (CEQA Responsible Agency)

- Section 401 Water Quality Certification/Waste Discharge Requirements
- Construction General Permit



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3.0 INITIAL STUDY CHECKLIST

3.1 BACKGROUND

1. Project Title: Mission Canyon Stream Habitat Restoration Project
2. Lead Agency Name and Address: California Department of Fish and Wildlife South Coast Region 5 3030 Old Ranch Parkway, Suite 400 Seal Beach, California 90740
3. Contact Person and Phone Number: California Department of Fish and Wildlife Frederic (Fritz) Rieman, CDFW Senior Environmental Scientist (Specialist), 858.467.4210
4. Project Location: The Proposed Project is located within the Mission Canyon area of unincorporated Santa Barbara County (County). Specifically, the Proposed Project is located within the streambed and associated banks at Mission Creek in areas referred to as Creek Sites 1 through 4, Creek Site 7, Sidecast 3 Rock Outliers, and in unnamed tributaries within Mission Canyon in areas referred to as Road Area 1, Road Area 2, and Road Areas 5–9, respectively. In addition to the streambed portions, the Proposed Project is located along approximately 1.12 miles of the Tunnel Trail access road in road sections referred to as Road Areas Gate through 9 and approximately 0.70 miles of the Mission Canyon Catway along road sections referred to as Trail Road Areas 1 and 2; refer to Exhibits 1 through 3.
5. Project Sponsor’s Name and Address: Southern California Edison 2244 Walnut Grove Avenue Rosemead, California 91770
6. General Plan Designation: The Project site is located on lands owned by the City of Santa Barbara (APN 153-270-009) and a private party (APN 153-270-028) within unincorporated Santa Barbara County. The Santa Barbara County Comprehensive Plan Designation for the Project site is Other Open Lands and Mountainous Area (MA-100)
7. Zoning: The Santa Barbara County zoning designation for the Project site is Agriculture-II-40 (AG-II-40) and Agriculture-II-100 (AG-II-100)
8. Description of the Project: Refer to Chapter 2, Project Description
9. Surrounding Land Uses and Setting: Surrounding land uses comprise undeveloped open space associated with the Santa Ynez Mountains, which is used for outdoor recreation, including hiking and mountain biking. Residential uses designated Residential Ranchette and zoned Residential Ranchette—5 acres (RR-5) are located approximately 700 feet south, within the Mission Canyon Community Plan Area of unincorporated Santa Barbara County.
10. Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement). Refer to Section 2.9, Agreements, Permits, and Approvals.
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? In compliance with Assembly Bill (AB) 52 and guidelines established by the Native American Heritage Commission, CDFW distributed letters to Native American Tribes informing them of the Project. CDFW notified the following tribes by email on June 30, 2021: <ul style="list-style-type: none"> • Barbareño Band of Chumash Indians—Ms. Eleonor Fishburn, Chairperson • Barbareño–Ventureño Band of Mission Indians—Mr. Patrick Tumamait



- Santa Ynez Band of Chumash Indians
Refer to Section 4.18, Tribal Cultural Resources, for additional analysis of Project impacts on Tribal Cultural Resources.

DETERMINATION: An Initial Study (IS) was prepared to assess the Project’s potential effects on the environment and the significance of those effects. Based on the analysis conducted in the IS, it has been determined that implementing the Project would have less-than-significant adverse effects on the environment with mitigation incorporated.

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is “Less Than Significant Impact with Mitigation Incorporated,” as indicated by the following checklist.

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

3.3 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts that could result from the Project. Impacts are evaluated by statement of the questions relevant to each section from the Initial Study Checklist, followed by answers determined through the analysis undertaken as part of the Initial Study. Impacts considered in the analysis include potential short-term (construction-related) impacts as well as long-term, operational, or day-to-day impacts. For each question, there are four possible conclusions as described below:

- No Impact. The development would not have any measurable environmental impact on the environment.
- Less Than Significant Impact. The development would have the potential for impacting the environment, although this impact would be below established thresholds that are considered to be significant.
- Less Than Significant Impact With Mitigation Incorporated. The development would have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development’s physical or operational characteristics can reduce these impacts to levels that are less than significant.
- Potentially Significant Impact. The development would have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less-than-significant levels.



Where potential impacts are anticipated to be significant, mitigation measures would be required, so that impacts may be avoided or reduced to insignificant levels.

3.4 ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


Erinn Wilson-Olgin (Feb 2, 2024 18:00 PST)

Signature

Feb 2 2024

Date



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4.0 ENVIRONMENTAL ANALYSIS

The following is a discussion of potential environmental impacts as identified in the Initial Study/Environmental Checklist. Explanations are provided for each item.

4.1 AESTHETICS

<i>Except as provided in Public Resources Code Section 21099, would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c. In nonurbanized 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?			✓	
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✓	

4.1.1 Environmental Setting

Scenic Vistas and Scenic Resources

A scenic vista is generally defined as a view of undisturbed natural lands exhibiting a unique or unusual feature that comprises an important or dominant portion of the viewshed. Scenic vistas may also be a distant view that provides visual relief from less attractive views of nearby features. State and federally managed lands, as well as local open space or recreational areas, may be scenic vistas if they represent a valued aesthetic view.

The Project site primarily traverses the Mission Canyon area of the Santa Ynez Mountains located in unincorporated Santa Barbara County. The Santa Barbara County Comprehensive Plan Open Space Element identifies and ranks areas of scenic value within the County and the scenic travel corridors that give residents and visitors the greatest exposure to the County’s visual attributes. The Project site is not specifically identified in the Comprehensive Plan as an area of scenic value. However, the Comprehensive Plan states that the mountains, coastline, and open space backdrop to the County’s urban areas are an “extremely important aspect of scenic quality” for the County.

The Project site is located within a non-urbanized area and surrounded on all sides by open space associated with the Santa Ynez Mountains. Within the Project limits, views include the steep canyon walls, existing access road, and vegetation associated with the Mission Creek riparian corridor. Existing public views of the Project site include those available to vehicles traveling along Spyglass Ridge Road and the Mission Canyon Catway. In addition, the Project area includes part of a popular public trail (lower Tunnel Trail/Inspiration Point trailhead) for hiking and mountain biking. In some areas, views of the sidecast areas may be visible to the public within Mission Canyon (see Table 4-1). Other Project areas, such as the Sidecast Area 3 Rock Outliers (see Table 2-5, Project Site Photographs – Existing Conditions), are not readily visible from the access road and trails.



Scenic Highways

Based upon a review of the Santa Barbara County Comprehensive Plan Scenic Highways Element, the nearest officially designated or eligible State scenic highway is State Route (SR) 154, located approximately 3 miles west of the Project site. The Project site is not visible from SR-154 due to intervening topography, structures, and vegetation.

4.1.2 Impact Analysis

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

Less Than Significant Impact. Implementation of the Proposed Project would not impact the scenic value of the Santa Ynez Mountains as experienced from Santa Barbara County's communities. The Project site is not visible from the scenic travel corridors identified in the County Comprehensive Plan due to intervening topography, structures, and vegetation. Construction vehicles, equipment, and truck traffic would temporarily change the immediately surrounding views of natural areas in Mission Canyon, which is used by the public for recreational hiking and mountain biking. Impacts would be temporary in nature with Construction Activities taking up to approximately 6 months total to complete (either continuous or broken into two or more construction periods) and Restoration Installation Activities taking up to approximately 4 to 6 weeks total to complete (either concurrently with or after Construction Activities). Together, impacts resulting from Habitat Restoration Installation may take up to 7.5 months to complete and would occur along a linear segment of existing access road, Mission Creek, two unnamed tributaries, and adjacent upland areas (Exhibits 4a through 4e), so that Project activities are not localized to one specific area for a prolonged period of time. Although not anticipated, if native vegetation is disturbed to support the Proposed Project, all areas within the Project site will be restored in accordance with the HRMP and will be subject to ongoing monitoring and maintenance for 5 years and until success criteria are achieved and the minimum monitoring period is met. Upon completion of sidecast removal, a biodegradable netting product (i.e., jute) may be applied to slopes, depending on final soil conditions once slope faces have been revealed. The netting will be applied in accordance with the Project's SWPPP and is expected to blend into the natural setting during the time it is in place. Furthermore, the designated stockpile and staging areas have been selected to coincide with existing road shoulders and pullouts or disturbed areas. Five of these staging areas previously used for SCE's Road Repair Project completed in 2020, as well as an additional area located at the south end of the intersection of Tunnel Trail Road and Mission Canyon Catway within Road Area 5 between SC 7 and 8 previously disturbed by an unknown party (non-SCE related), will also be restored to native habitats following Project construction.

Some planting activities may be timed to take advantage of seasonal rains; however, temporary watering or irrigation may be required in some areas for an estimated 3 to 5 years while the trees, shrubs, and plants become established. Restoration watering may include hand watering with a hose, temporary aboveground irrigation system, or deep pipe watering. Each of these methods would require water from a water tank or water truck that is filled at an existing water hydrant at the Road Area Gate and temporarily parked at the restoration site. Water tanks, if used, would be placed within staging areas and set back from existing vegetation to screen them from most viewpoints along the trail. Aboveground irrigation and deep pipe watering would require the placement of polyvinyl chloride (PVC) pipe laterals across the restoration area or installed vertically into the ground adjacent to container plants. The pipes would be located low to the ground and are expected to be screened from view by eventual vegetation growth. Additionally, Maintenance and Monitoring Activities would be conducted within the Project area for a period of approximately 5 years following completion of Habitat Restoration Installation. These activities would involve periodic visits to remove trash, assess vegetation growth, and replace or reseed areas, as needed. All methods of watering, monitoring, and maintenance proposed by the Project would require the presence of restoration staff in the area and would temporarily alter views from adjacent trails through the presence of restoration and maintenance personnel, water trucks, and irrigation materials. Following completion of the Project when the success criteria set forth in the HRMP (Appendix A) are achieved, all watering, as well as Maintenance and Monitoring Activities, would cease and irrigation materials would be removed.

In the long term, the Proposed Project is intended to restore the natural character and improve the scenic value of the Project site. Although the Project site is not visible from the scenic travel corridors identified in the County



Comprehensive Plan, localized views of the Mission Creek riparian corridor would be restored through the proposed removal of sediment and debris from Mission Creek, two unnamed tributaries, and adjacent upland areas, as well as the proposed native vegetation restoration and remedial activities for native trees (see Table 4-1, Pre- and Post-Restoration Site Conditions). Thus, the Project's potential for short-term adverse impacts to scenic vistas would be less than significant, while the Project would result in an overall improvement to scenic vistas.

Mitigation Measures: No mitigation measures are required.

b) *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. As discussed above, the Project site is not located adjacent to a State scenic highway. The nearest officially designated or eligible State scenic highway is SR-154, located approximately 3 miles west of the Project site. The Project site is not visible from SR-154 due to intervening topography, structures, and vegetation. Furthermore, the Project activities are not anticipated to damage trees, rock outcroppings or historic buildings. No impact would occur.

Mitigation Measures: No mitigation measures are required.

c) *Would the project, in nonurbanized 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 activities are intended to restore the visual quality of the Project area. These activities would temporarily change the views of natural open space within the Project site. During the Habitat Restoration Installation phase, construction equipment, stockpiled rock and sediment, and truck traffic would temporarily degrade the existing visual character and quality of the Project site and its surroundings. Construction Activities would take up to approximately 6 months total to complete (either continuous or broken into two or more construction periods) and Restoration Installation Activities would take up to approximately 4 to 6 weeks total to complete (either concurrently with or after Construction Activities). Project construction would occur linearly along a segment of Mission Creek, two unnamed tributaries, and adjacent upland areas, including roadside berms, such that impacts are not localized to one specific area for a prolonged period of time. As discussed in response 4.1.2(a), although not anticipated, if native vegetation is disturbed to support the Proposed Project, all areas within the Project site would be restored in accordance with the HRMP (Appendix A) and would be subject to ongoing monitoring and maintenance for 5 years and until success criteria are achieved and the minimum monitoring period is met (see HRMP, Figures 7a–e, Restoration Treatments). Furthermore, the designated stockpile and staging areas have been selected to coincide with existing road shoulders and pullouts or disturbed areas. Five of these staging areas previously used for SCE's Road Repair Project completed in 2020, as well as an additional area previously disturbed by an unknown party (non-SCE related), would be restored to native habitats following Project construction. Following completion of Habitat Restoration Installation, periodic visits would be conducted during the 5-year maintenance and monitoring phase that are not anticipated to require the closure of local trails or significantly disrupt public views of the Mission Creek riparian corridor. Equipment use would generally be limited to hand tools, light trucks, and water trucks or tanks (for irrigation, if needed). Implementation of the Proposed Project would result in an improvement to the aesthetic value and views of the Project site through removal of sediment and rock deposited in Mission Creek and upland areas and restoration of the Project site with native vegetation, native tree planting, and remedial activities for native trees. Included below are photographs showing the existing Project site conditions paired with visual simulations showing anticipated conditions at the Project site following implementation of the proposed sediment removal and restoration activities.



Table 4-1
Pre- and Post-Restoration Site Conditions



Photograph 1:
Road Area 1 facing west toward sidecast on slope



Photograph 2 (simulation):
Road Area 1 following completion of sidecast removal and native habitat restoration



Photograph 3:
Mission Creek, Creek Site 1 facing upstream



Photograph 4 (simulation):
Mission Creek following completion of creek restoration activities



Photograph 5:
Mission Creek, Creek Site 2 facing downstream



Photograph 6 (simulation):
Mission Creek following removal of sidecast and completion of habitat restoration activities



Photograph 7:
Staging/Storage Area



Photograph 8 (simulation):
Staging/Storage Area following completion of restoration activities



As discussed in Chapter 2, Project Description, the Project would involve the removal of sediment and debris from Mission Creek, two unnamed tributaries, and adjacent upland areas, as well as native vegetation restoration and remedial activities for native trees intended to restore the visual character of the Project area. The Proposed Project would restore localized public views of Mission Creek and open space areas associated with the Santa Ynez Mountains. Project implementation does not include the permanent construction of any aboveground structures, roads, or utilities that would further alter the visual character or quality of public views within the surrounding area. However, temporary restoration watering would require the use of water tanks and water trucks within the Project area and may involve the installation of aboveground PVC piping to support irrigation watering. As discussed in response 4.1.2(a), water tanks would be set back from view and pipes would be located low to the ground. Additionally, maintenance and monitoring of the Proposed Project would require periodic visits by restoration personnel and use of trucks within the Project area. Following completion of the 5-year maintenance and monitoring period when the success criteria set forth in the HRMP are achieved, all watering, as well as Maintenance and Monitoring Activities, would cease and all equipment and irrigation materials would be removed from the Project site. Therefore, the potential for short-term adverse impacts to visual character and quality of the Project site and its surrounding areas associated within the Proposed Project would be less than significant, while the Project would result in an overall improvement to the visual character and quality of the Project site and its surroundings.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact. Potential impacts to daytime or nighttime views associated with lighting are typically limited to light emanating from building interiors that pass through windows and light from exterior sources (i.e., street lighting, parking lot lighting, building illumination, security lighting, and landscape lighting). Light introduction can be a nuisance to adjacent uses, diminish the view of the clear night sky, and change the visual quality of open space areas. Currently, light and glare in the Project vicinity are primarily produced by vehicle headlights and limited residential uses to the south of the Project site. There is no existing street lighting along the segment of the access road within the Project site.

The Proposed Project does not include the installation of new permanent lighting or construction of metal or glass structures that could produce glare. Nighttime Project activities are not proposed aside from personnel that are anticipated to be on site during nighttime and weekend hours for security purposes. Temporary lighting from flashlights, vehicles, or other low intensity sources may be used at night for security purposes at the construction staging areas. Due to the limited intensity of such lighting, along with the intervening topography and vegetation, no light and glare from the Project site would be visible to the local community. All temporary lighting sources will be removed upon completion of Project activities, and there would be no long-term changes to lighting or glare. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.



4.2 AGRICULTURE AND FORESTRY RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 122220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✓
d. Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?				✓

4.2.1 Environmental Setting

Agricultural and Forestry Lands

According to the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program, the Proposed Project site is located entirely within areas designated as Other Land (DOC 2022a), defined as land that is not included in the Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, or Urban and Built-Up Land.

Since the Proposed Project site is located in unincorporated Santa Barbara County, the Santa Barbara County Comprehensive Plan Land Use Element and the GIS-based online Santa Barbara County Land Use and Zoning Map were used in conjunction with the Farmland Mapping and Monitoring Program to assess potential Project impacts to agricultural and forest resources (County of Santa Barbara 2022):

- Land Use: The map identifies two land use designations for the Proposed Project site of “Other Open Lands” (defined as lands subject to environmental constraints, lands with no agricultural potential, or lands with outstanding resource value), and “Mountainous Area” (MA-100) (defined in the Comprehensive Plan Land Use Element as land having an average slope in excess of 40% and isolated table land surrounded by slopes exceeding 40%, intended to be kept free of intensive development and reserved for such uses as watershed, scenic enjoyment, wildlife habitat, grazing, orchards, and vineyards).
- Zoning: The map identifies two zoning designations for the Proposed Project site of “Agricultural-II-40 (AG-II-40)” and “Agricultural-II-100” (AG-II-100) (defined in the Comprehensive Plan Land Use Element as areas



that are appropriate for agricultural land uses on prime and non-prime agricultural lands located within the Rural Area as shown on Comprehensive Plan land use maps).

- With regard to forestry lands, the Proposed Project site is located near, but outside of, National Forest System lands of the Los Padres National Forest. See Exhibit 5, U.S. Forest Survey Boundary.

Williamson Act Contracts

A portion of the Proposed Project site is located on land under Williamson Act contract (APN 153-270-028) (County of Santa Barbara 2017, 2020a).

4.2.2 Impact Analysis

- a) ***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 Proposed Project would not involve any change or conversion of any land use. As discussed above, the Proposed Project site is located entirely within areas designated as Other Land (DOC 2022a), defined as land that is not included in the Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, or Urban and Built-Up Land. Therefore, implementation of the Proposed Project would result in no impact related to the conversion of mapped farmland to non-agricultural uses.

Mitigation Measures: No mitigation measures are required.

- b) ***Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?***

No Impact. The Proposed Project site is located on 7.24 acres of property zoned as AG-II-40 and AG-II-100 (County of Santa Barbara 2022b), and is designated in the Comprehensive Plan Land Use Element as both Other Open Lands and Mountainous Area (County of Santa Barbara 2016). The AG-II zone is applied to open lands that are appropriate for agricultural land uses on prime and non-prime agricultural land, with the intent to preserve these lands for long-term agricultural use. The Other Open Lands classification is reserved for lands subject to environmental constraints on development or that have outstanding resource value, while the Mountainous Area classification is meant to delineate land having an average slope in excess of 40% and isolated table land surrounded by slopes exceeding 40%. Based upon a review of the County Conservation Blueprint Atlas for Agricultural Preserves, a portion of the Proposed Project site is located on lands under Williamson Act contract (APN 153-270-028) (County of Santa Barbara 2017). Although the Proposed Project site is zoned for agriculture and located on property under an active Williamson Act contract, there are no active agricultural uses on the Proposed Project site or immediately surrounding properties. The Proposed Project would incorporate a segment of an existing access road and areas of Mission Canyon where habitat restoration and monitoring activities would be conducted. There are no activities proposed that would conflict with the existing zoning or a Williamson Act contract. No impact would occur.

Mitigation Measures: No mitigation measures are required.

- c) ***Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 122220(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 discussed in response 4.2.2(b), the Proposed Project site is located on 7.24 acres of property zoned as AG-II-100 and is designated in the Comprehensive Plan Land Use Element as both Other Open Lands and Mountainous Area, which applies to agricultural lands and lands with outstanding resource value, and land with an average slope in excess of 40%, respectively. The Proposed Project site would incorporate a segment of an existing access road and areas of Mission Canyon where habitat restoration and monitoring activities would be conducted.



These activities would contribute to the overall resource value of nearby forestland and would not change the existing uses or require the rezoning of property. Therefore, the Proposed Project would not conflict with the existing zoning for, or cause the rezoning of, forestland, timberland, or timberland zoned Timberland Production. No impact would occur.

Mitigation Measures: No mitigation measures are required.

d) *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. As discussed in response 4.2.2(c), the Proposed Project site is located near, but outside of, National Forest System lands of the Los Padres National Forest, on private lands; refer to Exhibit 5. SCE's December 2019 work resulted in impacts to existing trees, which would be replaced or remediated as a component of the Proposed Project in accordance with the HRMP (Appendix A). Project activities would be confined to the existing access road, immediately adjacent to the access road within the sidecast areas, and locations along Mission Creek and tributaries to Mission Creek where restoration is proposed. Equipment and materials would be stored at designated staging areas within the existing SCE right-of-way and adjacent disturbed dirt slopes. These staging areas coincide with existing access road shoulders and pullouts or disturbed areas to avoid any significant new impacts to native vegetation and trees. Implementation of the Proposed Project activities would not require the removal of any trees or impacts to forestland and the staging areas would be restored to pre-activity conditions following Project completion. Therefore, implementation of the Proposed Project would not result in the loss of forestland or conversion of forest land to non-forest use.

Mitigation Measures: No mitigation measures are required.

e) *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. As discussed in responses 4.2.2(a-d), the Project site is located near, but outside of, National Forest System lands of the Los Padres National Forest, on public and privately owned lands zoned for agricultural use. However, the 7.24-acre Proposed Project site would incorporate a segment of an existing access road, sidecast areas, and areas of Mission Canyon that include a portion of Mission Creek and tributaries to Mission Creek where habitat restoration, sediment removal, and monitoring activities would be conducted. These activities would restore the impacts to trees, streambeds, and native vegetation associated with the December 2019 work and contribute to the overall resource value of nearby forestland. No changes to the existing environment are proposed that could result in the conversion of farmland or forestland to non-agricultural or non-forest use. No impact would occur.

Mitigation Measures: No mitigation measures are required.



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Legend

- National Forest System Lands
- Project Site
- Sidecast Areas

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4.3 AIR QUALITY

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?				✓
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			✓	
c. Expose sensitive receptors to substantial pollutant concentrations?			✓	
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			✓	

4.3.1 Environmental Setting

The Proposed Project is located within the South Central Coast Air Basin and is governed by the Santa Barbara County Air Pollution Control District (SBCAPCD). The applicable air quality plan for the SBCAPCD is the 2022 Ozone Plan (Ozone Plan). Consistency with the Ozone Plan means that direct and indirect emissions associated with the Project are accounted for in the Ozone Plan’s emissions growth assumptions and the Project is consistent with policies adopted in the Ozone Plan. The Ozone Plan relies primarily on the land use and population projections provided by the Santa Barbara County Association of Governments (SBCAG) and California Air Resources Board (CARB) on-road emissions forecast as a basis for vehicle emission forecasting. In addition, the County requires a consistency analysis with the Air Quality Supplement of the County’s Comprehensive Plan Land Use Element.

The County is in nonattainment for the federal and state standards for ozone and the state standard for coarse particulate matter (PM₁₀). Ozone air pollution is formed when reactive organic compounds (ROC) (also referred to as reactive organic gases) and nitrogen oxides (NO_x) react in the presence of sunlight. Ozone is a regional pollutant; ozone concentrations throughout the County do not always correspond with the location of sources of the ozone precursors ROC and NO_x. The major sources of ozone precursor emissions in the County are motor vehicles, the petroleum industry, and solvent usage (paints, consumer products, and certain industrial processes). Sources of PM₁₀ include mineral quarries, grading, demolition, agricultural tilling, road dust, and vehicle exhaust. Table 4-2, Attainment Status of Criteria Air Pollutants in Santa Barbara County, lists the attainment status in the County.

**Table 4-2
Attainment Status of Criteria Air Pollutants in Santa Barbara County**

Criteria Pollutant	Averaging Time	Federal	State
O ₃	1-Hour	N/A	Nonattainment ¹
	8-Hour	Attainment/Unclassifiable	Nonattainment
NO ₂	1-Hour	Attainment	Attainment
	Annual	Attainment	Attainment
CO	1-Hour	Attainment ²	Attainment ²
	8-Hour	Attainment	Attainment
PM ₁₀	24-Hour	Attainment	Nonattainment
	Annual	Attainment	Nonattainment
PM _{2.5}	24-Hour	Attainment/Unclassifiable	N/A
	Annual	Attainment/Unclassifiable	Attainment/Unclassifiable

Sources: County of Santa Barbara 2021; SBCAPCD 2023.



Notes:

O₃ = ozone; NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter 10 microns in diameter or less; PM_{2.5} = particulate matter 2.5 microns in diameter or less; N/A = not applicable.

1. Non-attainment for entire County. Based on monitoring data as of 1993, the County has achieved the federal ozone standard and SBCAPCD will be applying to EPA for redesignation to an "attainment area."
2. "Hot spots" at congested intersections may violate standards during the peak hour.

No quantitative threshold has been established for short-term, construction-related PM₁₀ (which is 50% of total dust). However, since the County violates the state standard for PM₁₀, dust mitigation measures are required as a condition of the County Grading Ordinance.

The short-term thresholds for NO_x and ROC emissions from construction equipment have also not been established by the County. Emissions of NO_x from construction equipment in the County are estimated at 1,000 tons per year of NO_x. When compared to the total NO_x emission inventory for the County of approximately 17,000 tons per year, construction emissions comprise approximately 6% of the 1990 Countywide emission inventory for NO_x. The County considers this amount insignificant (County of Santa Barbara 2021).

Sensitive Receptors

The Project site incorporates a total of 7.24 acres identified as the Habitat Restoration Plan area where sidecast removal, restoration, and maintenance and monitoring will occur. As shown in Exhibit 3, Project Site, Project activities would occur closest to sensitive receptors in close proximity to Road Area Gate and Road Area 1. The closest sensitive receptors were considered for this analysis. The nearest sensitive receptors are located approximately 700 feet south of the proposed construction limits within Road Area 1 (residence located at 1470 Tunnel Road) and approximately 270 feet south of the proposed storage/staging area within Road Area Gate (residence located at 1498 Tunnel Road); refer to Exhibit 3.

4.3.2 Impact Analysis

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. The Proposed Project would involve restoration activities of short duration along an existing access road and locations within Mission Canyon, including a portion of Mission Creek and tributaries to Mission Creek, and would not change the Project site's existing Comprehensive Plan land use designation or zoning. Therefore, the Proposed Project would be consistent with the Comprehensive Plan; refer to Section 4.11, Land Use and Planning. Furthermore, the Project would not involve any uses that would increase population and therefore would not affect Countywide plans for population growth at the Project site. Thus, the Proposed Project would be consistent with the types, intensity, and patterns of land use envisioned for the site vicinity by the SBCAG. The population, housing, and employment forecasts provided by the SBCAG are based on the local plans and policies applicable to the County. Additionally, as the SBCAPCD has incorporated these same projections into the Ozone Plan, it can be concluded that the Proposed Project would be consistent with the projections included in the Ozone Plan. The Project would not generate additional long-term traffic trips or cause any changes to operations when compared to existing conditions; therefore, measures in the Air Quality Supplement of the County's Land Use Element do not apply to the Project. The Proposed Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The Project would result in no impact to implementation of the applicable air quality plan.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact.



Short-Term (Construction) Emissions

Construction Emissions

The Proposed Project would involve removal and off-site hauling of sediment and debris (including Helicopter Removal methods); berm reconstruction, stabilization, and repair; and slope stabilization, which could generate dust or emissions. Habitat Restoration Installation for the Proposed Project is anticipated to commence as early as spring 2024 (see Section 2.7.4). Up to 2,331.8 cubic yards of sidecast material would be exported during the activities. Exhaust emission factors for typical diesel-powered heavy equipment are based on the program defaults of the California Emissions Estimator Model (CalEEMod), Version 2020.4.0.⁴ Variables factored into estimating the total construction emissions for a project include the level of activity, length of construction period, number of pieces and types of equipment in use, site characteristics, weather conditions, number of construction personnel, and the amount of materials to be transported on or off site. The analysis of daily emissions for the Habitat Restoration Installation has been prepared using CalEEMod and is shown in Table 4-3, Maximum Short-Term Emissions. Refer to Appendix C, Air Quality CalEEMod Modeling Output, for the CalEEMod outputs and results.

Table 4-3
Maximum Short-Term Emissions (includes Required Dust Control Measures²)

Emissions Source	Pollutant (pounds/day) ^{1,2}					
	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobilization Phase						
Mobilization	2.91	26.55	28.12	0.07	1.40	1.12
<i>Mobilization Phase Maximum</i>	<i>2.91</i>	<i>26.55</i>	<i>28.12</i>	<i>0.07</i>	<i>1.40</i>	<i>1.12</i>
Construction/Restoration Phase						
Berm Removal and Replacement	0.98	7.58	11.43	0.03	0.37	0.30
Stream Restoration	5.05	52.77	48.80	0.16	27.58	4.52
Rock Crushing	1.13	8.44	12.57	0.03	0.37	0.35
Helicopter Usage ³	5.10	66.04	66.04	16.46	27.54	24.78
<i>Construction/Restoration Phase Maximum</i>	<i>12.26</i>	<i>134.83</i>	<i>138.84</i>	<i>16.68</i>	<i>55.86</i>	<i>29.95</i>
Demobilization Phase						
Demobilization	4.71	36.90	45.41	0.12	1.80	1.49
<i>Demobilization Phase Maximum</i>	<i>4.71</i>	<i>36.90</i>	<i>45.41</i>	<i>0.12</i>	<i>1.80</i>	<i>1.49</i>

Source: Refer to Appendix C, Air Quality CalEEMod Modeling Output, for detailed model input/output data.

Notes: ROC = reactive organic compounds; NO_x = nitrous oxide; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = coarse particulate matter; PM_{2.5} = fine particulate matter.

- Emissions were calculated using CalEEMod, Version 2020.4.0. Winter emissions represent worst-case.
- Modeling assumptions include compliance with dust control requirements of the County's Grading Ordinance (Section 14-23) and policies set forth by the Santa Barbara County Air Pollution Control District (SBCAPCD), which require the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces to prevent dust from leaving the site and to create a crust after each day's activities cease; cover stock piles; water all haul roads daily; and limit speeds on unpaved roads to 15 miles per hour. Watering exposed surfaces was only applied to berm stabilization phase due to modeling limitations.
- Helicopter criteria pollutant emissions are from Construction Air Quality Emissions Methodology (Panorama Environmental, Inc. 2014).

SBCAPCD has a recommended guideline for annual construction emissions, which is 25 tons per year for ROC or NO_x (SBCAPCD 2022). In 2024, Project construction is anticipated to result in approximately 0.26 tons/year of ROC,

⁴ CalEEMod Version 2022.1.1.13 is the current CalEEMod version. Project-generated construction and operational emission estimates using CalEEMod Version 2022.1.1.13 are not anticipated to be substantially different than estimated herein using CalEEMod Version 2020.4.0 and due to the minimal emissions associated with the Project (e.g., emissions well below thresholds), no changes to the impact significance conclusions are anticipated to result when comparing model version updates and changes.



5.2 tons/year of NO_x, less than 0.1 tons/year of SO₂, 1.8 tons/year of PM₁₀, and 0.4 tons/year of fine particulate matter (PM_{2.5}). As such, the Project would not exceed the SBCAPCD's annual construction emissions guideline.

Fugitive Dust Emissions

Construction Activities are a source of fugitive dust emissions that may have a substantial, temporary impact on local air quality. Fugitive dust emissions vary substantially from day to day, depending on the level of activity, specific operations, and weather conditions. Of particular health concern is the amount of PM₁₀ generated as a part of fugitive dust emissions. PM₁₀ poses a serious health hazard alone or in combination with other pollutants. PM_{2.5} is mostly produced by mechanical processes, including automobile tire wear, industrial processes such as cutting and grinding, and resuspension of particles from the ground or road surfaces by wind and human activities such as construction or agriculture. PM_{2.5} is mostly derived from combustion sources, such as automobiles, trucks, and other vehicle exhaust, as well as from stationary sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_x and sulfur oxides (SO_x) combining with ammonia. PM_{2.5} components from material in the earth's crust, such as dust, are also present, with the amount varying in different locations. Fugitive dust from Construction Activities is expected to be short term (up to approximately 6 months total). These short-term impacts, however, would not be significant for the reasons discussed below.

The County has not established quantitative thresholds for short-term, construction-related fugitive dust emissions. However, because the County violates the state standard for PM₁₀, dust control measures are required as a condition of the County Grading Ordinance. The Project would be required to comply with the dust control measures based on the County's Grading Ordinance Section 14-23 and SBCAPCD's Rule 345.

The APMs incorporated into the Project include implementation of ***APM-AQ-1 Air Quality and Fugitive Dust Control***. During construction, standard BMPs would be implemented to minimize dust consistent with the dust control requirements of the County's Grading Ordinance (Section 14-23) and SBCAPCD Rule 345. These measures require maintenance of mobile and other construction equipment, watering exposed surfaces to prevent dust from leaving the site and to create a crust after each day's activities cease, covering stockpiles, watering of all haul roads daily, and limiting speeds on unpaved roads to 15 miles per hour. All temporary areas of ground disturbance would be treated (e.g., with water or dust suppressant) to prevent visible emissions of dust.

Emissions shown in Table 4-3 include reductions from these dust control measures. The potential for impacts from fugitive dust would be less than significant.

Construction Equipment and Worker Vehicle Exhaust

Exhaust emissions (e.g., ROC, NO_x, carbon monoxide [CO], and SO₂) from Project activities include emissions associated with the transport of machinery and supplies to and from the Project site, emissions produced on site as the equipment is used, and emissions from trucks transporting materials to/from the site. The County has not established quantitative thresholds for exhaust emissions because the County's construction emissions compared to the Countywide emission inventory is insignificant (County of Santa Barbara 2021). Therefore, the potential for air quality impacts from equipment and vehicle exhaust emissions associated with the Proposed Project would be less than significant.

Naturally Occurring Asbestos

Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant (TAC) by CARB in 1986. Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the



atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. Natural weathering and erosion processes can act on asbestos-bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed. According to A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report (DOC 2000), serpentinite and ultramafic rocks are not known to occur within the Project area. Thus, there would be no impact.

Long-Term (Operational) Emissions

Following completion of Habitat Restoration Installation, periodic trips to monitor and maintain the restoration areas would be required. The Project would generate up to 658 trips per year during the maintenance and monitoring phase and would not cause any significant changes in long-term operations when compared to existing conditions because SCE currently conducts maintenance and monitoring of access roads and equipment within the Project area. As shown in Table 4-4, Maintenance and Monitoring Emissions, anticipated mobile source emissions generated by vehicle traffic associated with the Project would not exceed established SBCAPCD thresholds. Refer to Appendix C for the CalEEMod outputs and results. Thus, impacts would be less than significant.

**Table 4-4
Maintenance and Monitoring Emissions**

Emissions Source	Pollutant (pounds/day) ¹					
	ROC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobile Source Emissions	<0.01	0.39	0.10	<0.01	0.05	0.01
<i>SBCAPCD Regional Threshold</i>	25	25	N/A	N/A	80	N/A
Threshold Exceeded?	No	No	N/A	N/A	No	N/A

Source: Refer to Appendix C, Air Quality CalEEMod Modeling Output, for detailed model input/output data.

Notes: ROC = reactive organic compounds; NO_x = nitrous oxide; CO = carbon monoxide; SO₂ = sulfur dioxide; PM10 = coarse particulate matter; PM2.5 = fine particulate matter; N/A = not applicable.

¹ Emissions were calculated using CalEEMod, Version 2020.4.0. Winter emissions represent worst case.

Air Quality Health Impacts

Adverse health effects induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables (e.g., cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individual [e.g., age and gender]). In particular, ozone (O₃) precursors, volatile organic compounds, and NO_x affect air quality on a regional scale. Health effects related to O₃ are therefore the product of emissions generated by numerous sources throughout a region. Existing models have limited sensitivity to small changes in criteria pollutant concentrations, and, as such, translating Project-generated criteria pollutants to specific health effects or additional days of nonattainment would produce meaningless results. In other words, the Project’s less-than-significant increases in regional air pollution from criteria air pollutants would have nominal or negligible impacts on human health.

Mitigation Measures: No mitigation measures are required.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Sensitive receptors are defined as facilities or land uses that include members of the population, such as children, the elderly, and people with illnesses, who are particularly sensitive to the effects of air pollutants. 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 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors are located approximately 700 feet south of the proposed construction limits within Road Area 1 (residence located at 1470 Tunnel Road) and approximately 270 feet south of the proposed storage/staging area within Road Area Gate (residence located at 1498 Tunnel Road; see Exhibit 3).



The Project activities are anticipated to involve the operation of diesel-powered equipment, which would emit diesel particulate matter (DPM). In 1998, CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 30-year exposure period often is assumed. Construction Activities would involve removal of sidecast material and debris over approximately 6 months while complying with the CCR Title 13, Sections 2449(d)(3) and 2485, which require minimizing the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than 5 minutes. Compliance with these regulations would reduce the amount of DPM emissions associated with the Project.

The closest sensitive receptors are located approximately 700 feet south of the proposed construction limits within Road Area 1 (residence located at 1470 Tunnel Road) and approximately 270 feet south of the proposed storage/staging area within Road Area Gate (residence located at 1498 Tunnel Road). Health impacts on sensitive receptors associated with exposure to DPM from Project activities are anticipated to be less than significant because these activities are temporary in nature and are expected to occur well below the 30-year exposure period used in health risk assessments. Additionally, emissions would be short term and intermittent in nature and, therefore, would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, activities associated with the Proposed Project are not anticipated to result in an elevated cancer risk to nearby sensitive receptors and the impact would be less than significant.

Emissions from the Proposed Project would be primarily limited to short-term activities that would end upon completion of Habitat Restoration Installation (see Section 2.7.4). As described above, periodic Maintenance and Monitoring Activities of the restoration areas would be required following completion of Habitat Restoration Installation and would generate some vehicle traffic; however, emissions from mobile sources would be nominal. As such, the Project would create minimal operational emissions when compared to existing conditions and would not result in any operational activities with potential health risks. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

d) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less Than Significant Impact. According to CARB's Air Quality and Land Use Handbook (CARB 2005), land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Proposed Project is primarily composed of short-term habitat restoration and monitoring activities within Mission Canyon. The Proposed Project would not include any land uses identified by the CARB as being associated with odors.

Project activities may generate detectable odors from heavy-duty equipment exhaust. However, restoration-related odors would be intermittent and short term in nature and would cease upon Project completion. In addition, the Project would be required to comply with CCR Title 13, Sections 2449(d)(3) and 2485, which require minimizing the idling time of construction equipment either by shutting it off when not in use or by reducing the time of idling to no more than 5 minutes. This would reduce the detectable odors from heavy-duty equipment exhaust. Any Project odor impacts to the existing adjacent land uses and the closest nearby sensitive receptors (residences located 270 and 700 feet to the south) would be short term and not substantial as these odors would quickly dissipate due to the volatility of the emissions and the distance to nearby sensitive receptors. As such, the Project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.



4.4 BIOLOGICAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			✓	
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		✓		
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

4.4.1 Environmental Setting

A Biological Technical Report (BTR) was prepared by SWCA Environmental Consultants (SWCA) in December 2023 (Appendix D) (SWCA 2023a) that summarized the results of several Project surveys, including post-activity site assessments, vegetation community mapping, protocol rare plant and wildlife surveys, and focused special-status species surveys. The geographic areas covered by these surveys include, but are larger than, the Project site. Prior to initiating surveys within the Project site and surrounding area, SWCA biologists conducted a database and literature search, which included the CDFW California Natural Diversity Database (CNDDDB), California Native Plant Society Inventory of Rare and Endangered Plants, USFWS database of designated critical habitat, Calflora internet database, and the website “California Herps” to create a list of special-status species that have been reported as occurring within the Project area.

Multiple field surveys have been conducted within the Project site and surrounding area by various biologists during years 2019 through 2021 to map vegetation communities and assess the potential for suitable habitat for special-status species to occur. A summary of the field survey dates, personnel, and conditions is provided in Table 4-5.



**Table 4-5
Summary of Field Surveys and Biological Monitoring**

Date	Survey and Monitoring Activity	Party
December 27, 2019	Initial Site Assessment along Spyglass Road	SWCA
January 8–9, 2020	Post-Impact Reconnaissance Level Survey	SWCA
January 31, 2020	Upland Habitat Assessment at Jesusita Trail, Nesting Bird Survey	SWCA
February 2–5, 2020	Jesusita Trail Nesting Bird Survey and Biological Monitoring	SWCA
March 12–13, 2020	Nesting Bird Survey, Rare Plant Survey	SWCA
March 18, 2020	Nesting Bird Survey for Emergency Repair Work along Spyglass Road	SWCA
March 20–27, 2020	Biological Monitoring for the Emergency Repair Work along Spyglass Road	SWCA
March 30–April 1, 2020	Vegetation Community Mapping	SWCA
April 21–22, 2020	Southern California Steelhead Stream Survey	HELIX SCE
April 21–22, 2020	Protocol Rare Plant Survey	SWCA SCE
June 2020	Arborist Report for Mission Canyon Road Repair Project	HELIX
June 23–24, 2020	Protocol Rare Plant Survey	SWCA SCE
July 21, 2020	Protocol Rare Plant Survey	SWCA
August 25–26, 2020	Sidecast Sedimentation and Aquatic Habitat Surveys in Mission Creek	HELIX
August 25–26, 2020	Fisheries Survey	HELIX
September 17–November 6, 2020	Road Restoration Monitoring	SWCA
November 19–20, 2020	Road Areas 1–9 Arborist Monitoring	HELIX
November 30, 2020	Initial CS1–4 Impact Evaluation	EcoKai
January 19–May 20, 2021	Spawning Grounds Survey	CDFW
March 6, 2021	Formal Geomorphology Survey	EcoKai
March 9, 2021	Formal Evaluation of Road Area 1 and Road Area 2	EcoKai
June 8, 2021	Formal Creek Site 7 Inspection Down Drainage to Creek Site 4	EcoKai
June 11, 2021	Formal Drainage Inspection from Creek Site 7 to top of Mission Creek Watershed	EcoKai
July 19–21, 2021	Formal Geomorphology Measurements	EcoKai
August 12–13, 2021	Formal Geomorphology Measurements	EcoKai
August 24–25, 2021	Arborist/Road Restoration Monitoring	HELIX
September 28, 2021	Initial Side Cast Area 3 Rock Outliers Sidecast Survey	EcoKai AIS
September 28, 2021	Formal Bridge Geometry Measurements and Sidecast Volume Removal Assessment for Flow Model	EcoKai
October 22, 2021	Formal Side Cast Area 3 Rock Outliers Sidecast Volume Survey, Fisheries Survey, and Regulatory Area Evaluation	EcoKai
October 22, 2021	Vegetation Community Mapping, Rare Plant Survey, Wildlife Survey	Forde Biological Consultants
December 26, 2021	Formal Creek Sites 1–4 Site Inspection during/after Significant Rain Event	EcoKai

Notes: SWCA = SWCA Environmental Consultants; HELIX = HELIX Environmental Planning, Inc.; SCE = Southern California Edison; CDFW = California Department of Fish and Wildlife.



4.4.2 Impact Analysis

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

Less Than Significant Impact With Mitigation Incorporated

Special-Status Plants

The records search resulted in a list of 33 special-status plant species that could occur within 5 miles of the Project site based on previous records (refer to Potential to Occur Table D-1, Appendix D of the BTR), eight of which have the potential to occur within the Project area. Five special-status plant species with a California Rare Plant Rank (CRPR) of 1B or 2B were determined to have potential to occur within the Project area, only one of which was identified within the Project area during 2020 rare plant surveys. These five plant species include Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*; CRPR 1B.2), Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*; CRPR 2B.2), late-flowered mariposa lily (*Calochortus fimbriatus*; CRPR 1B.3), coastal sage scrub oak (*Quercus dumosa*; CRPR 1B.1), and white-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*; CRPR 1B.3). In addition, two species—white snapdragon (*Antirrhinum coulterianum*; Locally Rare; CRPR Not Listed) and sandpaper vervain (*Verbena scabra*; Locally Rare; CRPR Not Listed)—are included in the Draft Rare Plants of Santa Barbara County list and are therefore included in this discussion.

No federal- or state-listed plant species were identified within the Proposed Project study area. A summary of the potential for direct impacts to these special-status plant species is provided below:

- **White snapdragon (*Antirrhinum coulterianum*; Locally Rare; CRPR Not Listed):** White snapdragon is included in the Draft Rare Plants of Santa Barbara County list. White snapdragon was documented during botanical surveys for the Project between December 27, 2019, and April 21, 2022, but location data were not collected. As an annual herb that is often associated with disturbed upland areas, it has potential to occur in ruderal habitat along Spyglass Ridge Road. Direct impacts to white snapdragon may occur as a result of Project activities; an unknown number of individuals are present at the Project site.
- **Santa Barbara honeysuckle (*Lonicera subspicata* var. *subspicata*; CRPR 1B.2):** Direct impacts to individual Santa Barbara honeysuckle may occur as a result of the Proposed Project activities in Creek Sites 3 and 4. Approximately 115 occurrences were observed across all biological surveys and focused plant surveys conducted by SWCA in 2020; 18 occurrences are within the Project area and may be directly impacted.
- **Plummer's baccharis (*Baccharis plummerae* ssp. *Plummerae*; CRPR 4.3):** Direct impacts to individual Plummer's baccharis may occur as a result of the Proposed Project activities in Creek Sites 2–4, and in Trail Road Area 2. Forty-nine occurrences were recorded, including three large patches of the plants. Of the individuals observed, six are within the Project footprint and may be directly impacted during construction.
- **Hubby's phacelia (*Phacelia hubbyi*; CRPR 4.2):** Direct impacts to individual Hubby's phacelia may occur as a result of the Proposed Project activities. Ten occurrences were recorded during surveys, two of which are within the Project area and may be directly impacted by restoration activities.
- **Coastal sage scrub oak (Nuttall's scrub oak) (*Quercus dumosa*; CRPR 1B.1):** Approximately 20 individuals were documented, mainly near the parking area at the trailhead, with two individuals farther east along Spyglass Ridge Road. The individuals near the trailhead are adjacent to parking and staging areas, and may be impacted inadvertently by vehicles, trampling, or fugitive dust.
- **Sonoran maiden fern (*Thelypteris puberula* var. *sonorensis*; CRPR 2B.2):** No impacts are anticipated to occur to Sonoran maiden fern as a result of the Proposed Project activities. Three occurrences were documented outside the Project footprint.



- **Late-flowered mariposa lily (*Calochortus fimbriatus*; CRPR 1B.3):** No impacts are anticipated to occur to late-flowered mariposa lily as a result of the Proposed Project activities. Thirty-three occurrences were recorded, none of which are within Project area.
- **White-veined monardella (*Monardella hypoleuca* ssp. *hypoleuca*; CRPR 1B.3):** White-veined monardella has been determined to be absent from the Project area. Thus, the Project would have no direct impacts on the species.
- **Ocellated Humboldt lily (*Lilium humboldtii* ssp. *Ocellatum*; CRPR 4.2):** No impacts are anticipated to occur to ocellated Humboldt lily as a result of the Proposed Project activities. One occurrence was recorded, which is outside the Project area.
- **Sandpaper vervain (*Verbena scabra*; Locally Rare; CRPR Not Listed):** Direct impacts to sandpaper vervain may occur as a result of Project activities. It has potential to occur in mesic or marshy habitat within the Project area. A vervain was identified to genus (*Verbena*) during rare plant surveys. However, it is unknown whether or not sandpaper vervain is present at the Project site.

Under CEQA Guidelines Section 15380, Subdivisions (b) and (d), plant species are considered “rare” if they are classified as CRPR of 1 or 2 (CDFW 2018). Plant species classified as CRPR 3 or 4 may warrant consideration on the basis of declining trends, recent taxonomic information, or other factors (CDFW 2018) or unless they represent a locally significant population. Implementation of the Proposed Project may result in direct impacts to the following species: Plummer’s baccharis (*Baccharis plummerae* ssp. *plummerae*; CRPR 4.3) and Hubby’s phacelia (*Phacelia hubbyi*; CRPR 4.2). Although neither of these represent a species that would be considered a rare plant for purposes of CEQA review, the Proposed Project would treat these species no differently than the CRPR 1B and 2B plants, especially for Plummer’s baccharis. Individuals of Plummer’s baccharis are likely to be impacted along the western bank of Mission Creek, south of the bridge, because (like Santa Barbara honeysuckle) these plants are located directly adjacent to the sidecast areas. Likewise, individuals of Hubby’s phacelia are likely to be impacted because these plants are located directly adjacent to the sidecast areas. For the ocellated Humboldt lily, annual presence/absence surveys would be conducted each year, for three consecutive years, following sidecast removal activities. These annual surveys may be terminated earlier than three years if the species is observed in the location previously observed, thereby indicating that the individual had not been adversely impacted by either the December 2019 work or the Project’s sidecast removal activities. If additional individuals are observed, they would be mapped and included in the annual report.

White snapdragon: Direct impacts to white snapdragon may occur as a result of Project activities; an unknown number of individuals are present at the Project site. This species is not state or federally listed and has not been given a CRPR by CDFW, but rather it is a local species of importance per the Draft Rare Plants of Santa Barbara County (Wilken 2018). Thus, habitat restoration, translocation, planting, seeding, or compensatory mitigation is not proposed to mitigate for impacts to this species.

Sandpaper vervain: Direct impacts to sandpaper vervain may occur as a result of Project activities. A vervain was identified to genus (*Verbena*) during rare plant surveys. However, it is unknown whether or not sandpaper vervain is present at the Project site. This species is not state or federally listed and has not been given a CRPR by CDFW, but rather it is a local species of importance per the Draft Rare Plants of Santa Barbara County (Wilken 2018). Thus, habitat restoration, translocation, planting, seeding, or compensatory mitigation is not proposed to mitigate for impacts to this species.

Direct Impacts

Direct impacts to special-status plant species may occur from Project activities. Direct impacts may include the inadvertent removal or damage to individuals from construction equipment and crew presence (e.g., trampling). Removal of special-status plants may be necessary to allow full removal of sidecast, particularly if they are growing in the sidecast or prohibit access to removing the material safely. This would apply in particular to Plummer’s baccharis as it occurs within the creek sites. The potential for direct impacts to the special-status plant species observed within the Proposed Project site would be minimized through implementation of **APM-ENV-1 Tailboard Briefing, APM-ENV-**



2 Approved Work Areas, APM-ENV-3 Delineation of Work Areas, APM-ENV-4 Worker Environmental Awareness Program (WEAP), APM-ENV-8 Environmentally Sensitive Areas (ESAs), APM-BIO-1 Qualified Biologist, APM-BIO-2 Resource Specialists, APM-BIO-3 Daily Pre-Work Clearance Survey, and APM-BIO-10 Environmentally Sensitive Area Flagging and Monitoring, which require restriction of work in approved areas, delineation of work areas with flagging and/or temporary fencing, education of on-site construction workers, procedures for work within ESAs, monitoring, and clearance surveys.

Additionally, the potential for biological impacts to native vegetation and sensitive species will be minimized through adherence to **APM-BIO-9 Restoration of Disturbance to Native Vegetation or Sensitive Plants**, which requires that any areas disturbed during Project activities be mapped and restored in accordance with the HRMP (Appendix A).

As a requirement of **APM-BIO-11 Collection of Rare Plant Propagules**, when plants cannot be avoided during implementation of the Project, SCE will notify CDFW prior to impacting rare plants to allow adequate time to salvage the seed, bulbs, or cuttings of sensitive plant species, as appropriate. **APM-BIO-12 Change in Seed Lists or Plant Lists** requires changes to seed or plant lists to be submitted to SCE's Restoration ecologist for review and approval prior to application. Similarly, as described in **APM-BIO-13 Species-Specific Rehabilitation**, the three sensitive plant species known to occur within the Project area (Santa Barbara honeysuckle, Plummer's baccharis, and Hubby's phacelia) would be incorporated into revegetation activities. The collection of seed or cuttings of these species would be completed during the appropriate season for the target species as described in the HRMP and subsequently planted within suitable habitat nearby existing populations mapped within the Project area. Out-planted sensitive plant plots would be integrated within existing revegetation areas of the Project. Sensitive plant monitoring of planted/seeded Santa Barbara honeysuckle, Plummer's baccharis, and Hubby's phacelia plots would be conducted annually for 5 years and would be subject to final success criteria specified in the HRMP.

In addition, **MM-BIO-1 Biological Monitoring Plan** would be implemented to reduce the potential for direct impacts to special-status plant species to a less-than-significant level.

Indirect Impacts

Additionally, potential short-term indirect impacts to sensitive plants in the Project area could occur through excessive fugitive dust, which can settle on plants restricting light penetration and photosynthesis. **APM-AQ-1** includes implementation of fugitive dust control measures in accordance with Santa Barbara County Grading Ordinance requirements, which would reduce the level of dust generation through access road watering and covering inactive stockpiles.

Indirect impacts could also result from the unintentional introduction of chemical pollutants into the environment through vehicle use and/or use of machinery and the introduction of weeds and non-native plant species. The potential for indirect impacts to the special-status plant species observed within the Proposed Project site would be minimized through implementation of **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-5 Material Management, APM-ENV-6 Secondary Containment, APM-ENV-7 Spill Release/Prevention, APM-ENV-8, APM-ENV-9 Material and Equipment Storage, APM-ENV-10 Clean Work Areas, APM-EC-3 Contaminated Site Water, APM-EC-4 Inspection of Project Equipment, APM-BIO-14 Adaptive Management Herbicide Use, APM-INV-1 Clean Vehicles and Equipment, and APM-INV-2 Weed-Free Materials**. In addition, **MM-BIO-1** would be implemented to reduce the potential for indirect impacts to special-status plant species to a less-than-significant level.

Special-Status Wildlife

The records search resulted in a list of 28 special-status wildlife species that could occur within the Project area or surrounding vicinity based on previous records (Refer to Potential to Occur Table F-1, Appendix F of the BTR). Eight special-status wildlife species were determined to have potential to occur in the Project area and were analyzed further; Southern California steelhead (*Oncorhynchus mykiss*), California red-legged frog (*Rana draytonii*), western pond turtle (*Emys marmorata*), Coast Range newt (*Taricha torosa*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), coast horned



lizard (*Phrynosoma blainvillii*), two-striped gartersnake (*Thamnophis hammondi*), and ring-tailed cat (*Bassariscus astutus*). There is no USFWS-designated critical habitat within the Project area. A summary of the potential to occur for special-status wildlife species, based upon the results of the biological technical survey, is provided below.

- **Southern California steelhead (*Oncorhynchus mykiss*) (Distinct Population Segment 10; Federally Endangered).** In April 2022, the California Fish and Game Commission accepted for consideration a petition to list the Southern California steelhead as endangered under the California Endangered Species Act. This action commenced a 1-year status review to be completed by CDFW, during which Southern California steelhead was protected as a candidate species (CDFW 2022c). Southern California steelhead are found along the coast from San Diego County to Santa Barbara County and exhibit two distinct life patterns: resident inland Southern California steelhead and anadromous Southern California steelhead (steelhead trout) (CalFish 2018). The National Marine Fisheries Service (NMFS) designated Mission Creek the highest level of priority (Core 1) for Southern California steelhead recovery within the Southern California distinct population segment (DPS) (NMFS 2013). Southern California steelhead occur in cool, clear, well-oxygenated water with spawning occurring in gravel-bottomed substrate, which are usually riffles or pool tails (NOAA Fisheries 2022; University of California, Davis 2020). Lower Mission Creek is considered the most viable stream for Southern California steelhead restoration within the City of Santa Barbara, and although they are frequently spotted in the creek, they are unable to migrate farther upstream and spawn due to significant anthropogenic (manmade) barriers to migration (City of Santa Barbara 2021). Adult Southern California steelhead have been observed entering the Mission Creek Estuary (documented in 2001 and 2008), migrating upstream, and becoming restricted at Foothill Road (Passage Assessment Database [PAD] ID DS69).

Should Southern California steelhead migrate upstream of the artificial barriers, there are additional in-stream boulders located downstream of the Project area, which are too large to allow Southern California steelhead passage. The upper portions of the stream surveyed in April 2020 confirmed the presence of several existing natural and unnatural barriers (CDFW 2017) and can be categorized as follows (HELIX 2024):

- Old Mission Dam to the Stone Dam (PAD⁵ IDs 7922–7925; approximately 0.4 miles). Prior to this Project, anadromous Southern California steelhead were blocked from migrating upstream by the Old Mission Dam, which has prevented migration into the upper stream for more than 200 years. Upstream of the Old Mission Dam are several other human-made structures that have created a complete blockage, including the debris dam with a culvert (PAD ID 7923) and a small stone dam (PAD ID 7925). Although Stoecker (2002) identified the culverts as partially impassable, they may be completely impassable because when the water level is high enough for fish to pass through the culvert, the water velocity would be too great. These three human-made barriers prevent any migration of Southern California steelhead.
- Stone dam to bedrock waterfall (PAD IDs 7925–7927, approximately 0.3 miles). Just upstream of the stone dam is a completely impassable natural barrier: a waterfall. However, upstream of this barrier is an approximately 0.3-mile stretch with pools or potential habitat. It is within this stretch of creek that two resident Southern California steelhead were observed in July and August 2021 (CDFW 2021). It is also the best possible spawning location for any re-introduction efforts. It is possible that there is a remnant resident population of Southern California steelhead inhabiting this part of the creek that have been isolated from ocean access for 200 or more years due to the historic construction of the Old Mission Dam. No fish were observed upstream of Rattlesnake Creek during a complete snorkel and foot survey of upper Mission Creek in 2001 and 2002 (Stoecker 2002). During a survey of the creek in April 2020 by HELIX Environmental Planning, an unknown species of 3- to 5-inch-long fish was observed approximately 225 feet downstream of the location of a previous (unknown year) Southern California steelhead observation reported to CDFW.
- Bedrock waterfall to Mission Creek bridge (PAD IDs 7927–7631, approximately 0.4 miles). At least three impassable barriers (i.e., natural waterfalls) and fishless pools are located between the

⁵ The Passage Assessment Database (PAD) is an ongoing map-based inventory of known and potential barriers to anadromous fish in California. <https://nrm.dfg.ca.gov/PAD/>.



December 2019 impact areas and the previous downstream fish observations. The impassable natural barriers in this stretch would further prevent Southern California steelhead from occurring within the Project site. Even if re-introduction and spawning could occur upstream of the stone dam, these natural waterfalls present significant impediments for fish to utilize these areas upstream. Upstream of the Mission Creek bridge was identified as non-habitat by Stoecker (2002).

Although Mission Creek has suitable fish habitat and provides localized passage for resident Southern California steelhead, it will remain unoccupied by anadromous Southern California steelhead without overcoming the impassable natural and human-made barriers. If fish are present in the upper reaches of Mission Creek, they may pass through the Project area to access downstream habitat and could potentially use the Project area, but may not occupy habitat within the Project area year-round.

CDFW monitoring and surveys (summer 2022 and July/August 2021) confirmed the presence of a resident population of Southern California steelhead downstream of the Project site, above the Santa Barbara Botanic Garden Dam, as described below. Surveys suggest these fish have existed historically in this watershed and are able to persist through the expression of a resident life history. CDFW surveys concluded the following (CDFW 2022b):

At the time these assessments were conducted, several areas of suitable *O. mykiss* habitat provided by perennial spring fed streamflow were present within various portions of Mission Creek. This suitable *O. mykiss* refugia habitat is one of the various factors that led NMFS to designate Mission Creek the highest level of priority (Core 1) for *O. mykiss* recovery within the southern California DPS (NMFS, 2011). Continued documented presence of *O. mykiss* within the watershed by CDFW, NMFS, and others demonstrates that Mission Creek continues to contain suitable *O. mykiss* habitat despite prolonged drought conditions. Returning anadromous Southern California Steelhead have also been documented within Mission Creek as recently as 2016 (Capelli, 2016). In recent years, a single *O. mykiss* was observed within the portion of Mission Creek located directly below the location of the SCE incident on Tunnel Trail access road during snorkel and spawning surveys conducted in 2019 and 2020 (Evans, 2021). Additionally, two *O. mykiss* were observed on Mission Creek during snorkel surveys conducted between July 15 and August 2, 2021 (Evans, 2021). In Rattlesnake Creek, the primary tributary to Mission Creek, 16 *O. mykiss* were observed during a redd survey conducted on April 29, 2020 (Evans, 2021). Snorkel surveys conducted during the same time period in 2020 observed 18 *O. mykiss* in Rattlesnake Creek (Evans, 2021), (CDFW 2022b).

Resident population(s) of Southern California steelhead are a conservation priority of CDFW and, therefore, have been considered in planning upstream activities of the Project. As described above, if fish are present in the upper reaches of Mission Creek, they may pass through the Project area to access downstream habitat and could potentially use the Project area, but may not occupy habitat within the Project area year-round.

- **California Red-legged Frog (*Rana draytonii*) (Federally Threatened and California Species of Special Concern [SSC]).** The Project site does not support the vegetation or water requirements for California red-legged frog, which includes dense, shrubby riparian vegetation associated with deep, still, or slow-moving water. Ventura USFWS was consulted to determine whether a protocol-level survey was necessary. The USFWS conclusion confirmed that focused surveys were not required because suitable habitat is not present within the Project site.
- **Southwestern pond turtle (*Actinemys padilla*) (Under Review by the USFWS for Listing as an Endangered or Threatened Species and California SSC).** The southwestern pond turtle ranges from northern Baja California to central California and is known to occur in suitable habitat throughout Santa Barbara County. The pond turtle uses a wide variety of permanent and ephemeral aquatic habitats and may spend a significant amount of time in upland terrestrial habitats as well. Suitable upland nesting habitat (open habitat with sparse vegetation) is not present in the Project area. However, although pond turtle has not been



observed in the Project area incidentally or during previous Project surveys, suitable aquatic habitat for dispersal and overwintering is present within the drainages in the Project area. As a result, this species is considered likely to occur in Mission Creek, primarily downstream of Mission Creek Bridge. Thus, implementation of the Proposed Project may result in indirect, temporary impacts to southwestern pond turtle.

- **Coast Range newt (*Taricha torosa*) (California SSC).** Coast Range newt is a semi-aquatic amphibian endemic to California, typically found along the coast from Mendocino County to San Diego County. In Southern California, they are often found in drier habitats, including chaparral, oak woodland, and grassland. Throughout much of the year, terrestrial adults are generally inactive in subterranean refuges, typically rodent burrows, or beneath rocks and logs. Adults emerge during the wet weather and become aquatic during the breeding season, often remaining near breeding habitat several weeks. Breeding habitat for this species includes slow-moving streams, ponds, and reservoirs (Morey 2000; Nafis 2024). Habitat was found to be suitable for Coast Range newt within the Project area, which has an overlapping CNDDB occurrence from 1986. Coast Range newt has been confirmed as present within Mission Creek. At least 15 individuals, including one gravid female, seven egg masses, and an active copulation, were encountered on April 21, 2020, during a resident Southern California steelhead survey downstream of Mission Creek Bridge.

Due to the location and size of the Coast Range newt populations observed near the Project area, direct impacts to the species may occur during Restoration Installation Activities. Additional impacts may occur from the introduction or spread of the chytrid fungus (*Batrachochytrium dendrobatidis*). Coast Range newt and other amphibian species that occur in Mission Creek may be susceptible to infection. Chytrid is spread through direct contact between hosts and potentially through water containing free-swimming zoospores. Coast Range newt observed during the Southern California steelhead surveys appeared to be in good health and show no signs of infection. Legacy data from AmphibiaWeb's Disease Portal show positive detections upstream in 1981. No other information on these positive detections is available. There are currently no recent data on the presence of chytrid in Mission Creek.

- **Coastal whiptail (*Aspidoscelis tigris stejnegeri*) (California SSC).** Coastal whiptail is found in a wide range of ecosystems, including chaparral, woodland, and riparian areas. This species is diurnal, often observed actively moving and foraging through heavy brush. There is suitable habitat for coastal whiptail throughout the Project area, especially near Jesusita Trail where there is a mixture of open space and ample vegetation cover. A whiptail (*A. tigris*) individual was observed on site by an SCE Biologist on July 21, 2020 (Appendix D), but the subspecies is unknown. Project activities have a possibility of direct loss of coastal whiptail if present and unable to move away in time.
- **Coast (Blainville's) horned lizard (*Phrynosoma blainvillii*) (California SSC).** Coast horned lizard is a diurnal, flat-bodied lizard found in grasslands, coniferous forests, woodlands, and chaparral. This species is most often found in open areas, with loose soil, often near ant hills or along roadways (Nafis 2024). Like all horned lizards, the coast horned lizard has a specialist diet, mostly consisting of native ants, which is often an indicator for the presence of horned lizards. Although no anthills were observed during the field surveys, the roadways and trails are generally suitable for this species. Records for this species are as close as 2.5 miles to the southeast of the Project but are relatively old, with the most recent from 1993. Coast horned lizard is rarely encountered due to its behavior and cryptic coloration. This species is unlikely to occur along the fragmented suitable habitat located on the flatter, less vegetated areas, and the roadway and trails frequented by pedestrians. Stream restoration activities have a low possibility of direct loss of horned lizard if they are not able to move away in time due to their cryptic defensive behavior.
- **Two-striped gartersnake (*Thamnophis hammondi*) (California SSC).** Two-striped gartersnake is a highly aquatic species occurring in ponds, creeks, and cattle tanks, especially in rocky habitats. Vegetation communities associated with this species range from oak woodland, willow, sparse coniferous forest, chaparral, and coastal sage scrub. The diet of two-striped gartersnake includes aquatic organisms such as fish and their eggs, amphibians and their larvae, leeches, and earthworms (Nafis 2024). This species overwinters in small mammal burrows, crevices, or under rotting logs, and emerges in the spring to breed (Kucera 2000).



Habitat within the Project segment of Mission Creek is ideal for this species, and CNDDDB records show observations in 2013 within the creek. Two-striped gartersnake has been confirmed as present within Mission Creek. Two individuals were observed during a resident Southern California steelhead survey downstream of Mission Creek Bridge on April 21, 2020 (Appendix D). Two-striped gartersnake may be indirectly impacted by the removal of sidecast material adjacent to suitable habitat in the Project area.

- **Ring-tailed cat (*Bassariscus astutus*) (Fully Protected Species).** Ring-tailed cat is a medium-sized nocturnal carnivore found in the raccoon family (*Procyonidae*). It ranges from the southern portion of Oregon to Mexico, and as far east as Kansas and Oklahoma in a wide range of habitats, including desert, chaparral, forest, and riparian habitats, often near rocky outcrops (Goldberg 2003). Ring-tailed cat generally uses hollow trees, logs, snags, and cavities in rocky areas for cover and is typically found no farther than 0.6 miles from a permanent water source (Ahlborn 2005). Mission Creek appears to have some small permanent water features within 0.6 miles of the Project area. This species is highly elusive and rarely observed throughout its range, likely because of its nocturnal habits and solitary nature.

Data on population density and relative abundance among habitats are very limited and were last studied in California in the 1980s. The data suggest that ring-tailed cat populations are relatively low in Santa Barbara County (Orloff 1980; USACE 1987). Occurrence data for ring-tailed cat are not tracked in CNDDDB; therefore, there are no records for the species within the Project vicinity. Other publicly available online resources, such as iNaturalist (2020), show sporadic observations throughout Southern California, but none within Santa Barbara County.

In addition, the lack of observations may be due to existing disturbance in the area. Much of the Project site is adjacent to developed areas, while the farthest portions are within 1 mile of development. The roads and trails within the Project area are subject to heavy pedestrian traffic on a daily basis. Recent research on ring-tailed cat and other carnivores in the southwest indicates that there is generally a negative association with roads and edge habitat (Baker and Leberg 2018). The forest and other woodland habitat within the Project area are suitable for the species to move through the area, and portions of Mission Creek are isolated from disturbance and may provide appropriate refuge, but they are assumed unlikely to occur or be encountered within the Project site based on their elusive behavior, relatively small and scattered permanent water sources in the vicinity, and historic population data. The species is also strictly nocturnal and not encountered during the daytime hours. No significant impacts to ring-tailed cat are anticipated given the wide range and low density of the general species population, unlikelihood of its frequent occurrence, and work activities being conducted in daylight only.

Terrestrial and Aquatic Special-Status Wildlife

Direct Impacts

Direct impacts to terrestrial and aquatic special-status wildlife species could result from trampling or crushing during in-stream work, burial under soil/organic matter, erosion, and habitat disruption. The potential for direct impacts to the special-status wildlife species observed within the Proposed Project site will be avoided through implementation of **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-5, APM-ENV-8, APM-ENV-9, APM-ENV-10, APM-ENV-11 Weather Limitations, APM-ENV-12 Post-Storm Event Inspection, APM-ENV-13 Night Work Restrictions, MM-FGC-1 Stream Monitoring, MM-FGC-2 Turbidity, MM-FGC-3 Hydrologic Monitor, MM-FGC-4 Southwestern Pond Turtle Pre-Construction Surveys, MM-FGC-5 Aquatic Species Protection, APM-EC-1 Erosion and Sediment Control, APM-EC-2 Sediment and Runoff Control, APM-EC-3, APM-EC-4, APM-BIO-1, APM-BIO-2, APM-BIO-3, APM-BIO-4 Injured/Trapped Wildlife, APM-BIO-5 Avoid Drainages, APM-BIO-7 Special-Status Herpetofauna Species, and APM-BIO-10**, which require education and communication for on-site workers, restriction of work in approved areas, delineation of work areas with flagging and/or temporary fencing, protocols for the storage of material and equipment, procedures for work within ESAs, procedures for the removal of refuse, weather-related work restrictions, erosion and sedimentation inspections and controls, night work restrictions, clearance surveys, restrictions when working in the stream, storm inspections, stream monitoring, turbidity monitoring, a hydrologic



monitor, sediment control measures, pollutant control measures, inspections for injured/trapped wildlife, drainage avoidance measures, and ESA flagging and monitoring. In addition, **MM-BIO-1** and **MM-BIO-2 Best Management Practices for Working in Aquatic Habitats** will be implemented to reduce the potential for direct impacts to terrestrial and aquatic special-status wildlife species to a less-than-significant level.

Indirect Impacts

Indirect impacts to terrestrial and aquatic special-status wildlife species may include the temporary avoidance of habitat due to increased human presence and Project-related activities; accidental spills or discharge of chemicals or other pollutants, resulting in contamination of suitable habitat; and temporary impediment of movement due to sediment and debris associated with Project activities. Indirect impacts to the special-status wildlife species and their habitats within the Project area would be reduced to less than significant through implementation of **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-5, APM-ENV-6, APM-ENV-7, APM-ENV-8, APM-ENV-9, APM-ENV-10, APM-ENV-13, APM-EC-3, APM-EC-4, and APM-INV-1**. In addition, **MM-BIO-1** and **MM-BIO-2** would be implemented to reduce the potential for indirect impacts to terrestrial and aquatic special-status wildlife species to a less-than-significant level.

Further, maintenance and monitoring of the Project would continue to be conducted throughout the stream and upland remediation and reestablishment process to ensure Project goals are met. Adaptive management activities during the maintenance and monitoring phase of the Project are outlined in Sections 8.2.4 (for upland habitat) and 8.3.4 (for stream habitat) of the HRMP (Appendix A) and identify criteria and the required actions deemed necessary for repair or restoration. Post-Project adaptive management will be conducted during the monitoring period following completion of restoration installation until success criteria have been met. HRMP Table 21, Upland Habitat Adaptive Management Triggers and Actions for Upland Habitats, and Table 23, Stream Habitat Adaptive Management Triggers and Actions, provide a list of potential Project challenges which may occur during this period, the point at which adaptive management considerations would be "triggered," and the potential adaptive management action(s). The framework of this outline relies heavily on adaptive management assessment and incremental action at appropriate times during the 5-year maintenance and monitoring period.

Nesting Birds

Active bird nests with eggs or young of migratory bird species are protected under the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. Adult birds are unlikely to be directly killed or injured during Project activities because they are highly mobile and would likely leave the area during construction. However, should any protected birds nest within the Project site, nesting could be disrupted (resulting in nest abandonment or reduced reproductive success) if construction occurs during the breeding season. In addition, should protected species nest on site, nests, eggs, and young could be directly affected by crew activities, equipment, noise, or human presence. The potential loss of an active nest resulting from Project activities would be in conflict with state and federal regulations. Impacts to nesting birds are considered potentially significant without mitigation.

Direct Impacts

Direct impacts to nesting birds protected under the MBTA and/or Fish and Game Code may include the direct removal of active nests, nesting, or eggs from Project activities. The potential for these impacts to nesting birds will be avoided through implementation of **APM-BIO-6 Nesting Bird Monitoring**, which requires pre-construction nesting surveys and ongoing monitoring. Implementation of this measure will reduce the potential for direct impacts to protected nesting birds to a less-than-significant level.

Indirect Impacts

Indirect impacts during construction that involve loud noise disruptions during the nesting season have the potential to impact nesting birds protected under the MBTA and/or Fish and Game Code on and adjacent to the Project area to the degree that the nests may be abandoned, resulting in a direct loss of an active bird nest. Indirect impacts to nesting



birds would be avoided through implementation of **APM-BIO-6** and **APM-NOI-1 Construction Hours**, which require pre-construction nesting surveys and ongoing monitoring and restrictions on construction hours. Implementation of these measures would reduce the potential for indirect impacts to protected nesting birds to a less-than-significant level.

Mitigation Measures: Implementation of **MM-FGC-1**, **MM-FGC-2**, **MM-FGC-3**, **MM-FGC-4**, **MM-FGC-5**, **MM-BIO-1**, and **MM-BIO-2** would avoid and minimize impacts to any species identified as a candidate, sensitive, special status, or protected bird species.

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

Less Than Significant Impact With Mitigation Incorporated. SWCA biologists conducted vegetation mapping within a 100-foot buffer around the roadbed, which included the 7.24-acre Project site, following the procedures outlined by Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018). Vegetation communities were mapped to the alliance level; however, associations were mapped when the association was a state sensitive natural community, but the overall alliance was not. Current state sensitivities for natural communities were determined based on CDFW's California Natural Community List. A total of nine different native plant communities and land covers were mapped, of which five communities are considered sensitive by CDFW. The non-sensitive communities found within the Project area include:

- *Ceanothus megacarpus* Shrubland Alliance (Bigpod Ceanothus Chaparral)
- Holly Leaf Cherry – Toyon – Greenbark Ceanothus Chaparral with *Ceanothus spinosus*-*Ceanothus megacarpus* Association
- Holly leaf cherry – toyon – greenbark – *Ceanothus spinosus* Association
- *Quercus agrifolia* Forest and Woodland Alliance (Coast live oak woodland and forest)

The sensitive communities found within the Project area include:

- *Ceanothus megacarpus* – *Salvia mellifera* Association with Bigpod Ceanothus Chaparral
- *Ceanothus (oliganthus, tomentosus)* Shrubland Alliance (Hairy leaf – Woolly Leaf Ceanothus Chaparral) with *Ceanothus oliganthus* Association
- *Quercus agrifolia* – *Umbellularia californica* Association with Coast Live Oak Woodland and Forest
- *Umbellularia californica* Forest and Woodland Alliance (California Bay Forest and Woodland)
- *Quercus dumosa* – *Quercus pacifica* Shrubland Alliance

Coast Live Oak Woodland and Forest with *Quercus agrifolia* – *Umbellularia californica* Association, and California Bay Woodland and Forest, are considered riparian vegetation communities. Both *Quercus agrifolia*-*Umbellularia californica* Association and *Quercus agrifolia* Forest and Woodland Alliance lie within regulatory woodland/forest habitats and upland areas, depending upon their topographic position within the watershed.

Direct Impacts

Potential direct impacts to native vegetation could include removal, pruning, or trimming to trees and vegetation growing within or directly adjacent to Project work areas, or disturbance by trampling or hose dragging over the vegetation. The potential for direct impacts to the sensitive vegetation communities would be minimized through implementation of **APM-ENV-1**, **APM-ENV-2**, **APM-ENV-3**, **APM-ENV-4**, **APM-ENV-8**, **APM-BIO-1**, and **APM-BIO-2**, which require restriction of work in approved areas, delineation of work areas with flagging and/or temporary fencing, education of on-site construction workers, procedures for work within ESAs, and monitoring. In addition, **MM-BIO-1** would be implemented to reduce the potential for direct impacts to special-status plant species to a less-than-significant level.



Additionally, the potential for biological impacts to native vegetation and sensitive species would be minimized through adherence to **APM-BIO-9** whereby any areas disturbed during Project activities would be mapped and restored in accordance with the HRMP.

In addition, the Project activities include reseeding, weed abatement, native tree and container planting and watering, and a five-year monitoring program in which restored areas are subject to success criteria. Revegetation and weed abatement efforts are designed to promote the successful enhancement of native habitats to benefit the ecology of Mission Canyon. Collectively, the habitat restoration of 2.6 acres, the 0.91 acres of habitat enhancement, two consecutive years of targeted weed abatement, and the three consecutive years of site maintenance weeding already performed to date would result in a 1:1 impact-to-mitigation ratio and full compensation for 3.51 acres of impacts to native vegetation, as described in Table 2-11. Proposed Project revegetation and enhancement by vegetation type is described in Table 2-9. Herbicide use may be implemented as an adaptive management technique to ensure success criteria of habitat restoration is achieved. **APM-BIO-14** would be implemented to target herbicide use to avoid native vegetation.

Additional temporary impacts could occur during sidecast removal efforts within contingency buffers of Road Areas 1 and 2 and Creek Sites 1-4, as described in Section 3.3.1 of the HRMP (Appendix A). These temporary impacts would not exceed 0.27 acres, as listed in Table 4-6. Upon Project completion, all contingency buffer impacts would be restored concurrently with other restoration efforts through seeding and/or planting as described in the HRMP.

Vegetation communities overlapping sidecast removal areas and subsequent habitat restoration are described in Table 4-7 by regulated and non-regulated areas. Vegetation communities overlapping Project contingency buffer areas and subsequent habitat restoration are described in Table 4-6 by Regulatory Areas and non-Regulatory Areas. Additional habitat restoration areas not subject to sidecast removal are described in Table 4-8 by Regulatory and non-Regulatory Areas.

With implementation of the APMs and MMs identified above, direct impacts to riparian habitats and other sensitive natural communities would be less than significant.

Table 4-6
Vegetation Communities in Contingency Buffer Areas

Vegetation Communities	Project Activity in Regulatory Areas (Acres)	Project Activity in Non-Regulatory Areas (Acres)	Total Acres
Big pod ceanothus (<i>Ceanothus megacarpus</i>) chaparral Alliance	0.00	0.00	0.00
Big pod ceanothus chaparral Alliance, <i>Ceanothus megacarpus</i> – <i>Salvia mellifera</i> Association ¹	0.00	0.00	0.00
California bay forest and woodland Alliance ¹	0.01	0.00	0.01
Coast live oak woodland Alliance, <i>Quercus agrifolia</i> – <i>Umbellularia californica</i> Association ¹	0.08	0.00	0.08
Coast live oak woodland and forest Alliance	0.12	0.00	0.12
Hairy leaf – woolly leaf ceanothus chaparral Alliance, <i>Ceanothus oliganthus</i> Association ¹	0.00	0.00	0.00
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> Association	0.01	0.00	0.01
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> – <i>Ceanothus megacarpus</i> Association	0.04	0.00	0.04
Developed / disturbed	0.01	0.00	0.01
<i>Subtotal</i>	<i>0.27</i>	<i>0.00</i>	<i>0.27</i>

Source: SWCA 2023a. These values are approximate; actual acreage by vegetation community may vary.

Notes: Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

¹ Denotes a state sensitive natural community.



**Table 4-7
Vegetation Communities in Sidecast Removal and Habitat Restoration Areas**

Vegetation Communities	Acres within Regulatory Areas (Acres)	Acres within Non-Regulatory Areas (Acres)	Total Acres
Big pod ceanothus (<i>Ceanothus megacarpus</i>) chaparral Alliance	0.19	0.64	0.83
Big pod ceanothus chaparral Alliance, <i>Ceanothus megacarpus</i> – <i>Salvia mellifera</i> Association ¹	0.00	0.08	0.08
California bay forest and woodland Alliance ¹	0.08	0.00	0.08
Coast live oak woodland Alliance, <i>Quercus agrifolia</i> – <i>Umbellularia californica</i> Association ¹	0.44	0.19	0.63
Coast live oak woodland and forest Alliance	0.15	0.20	0.35
Hairy leaf – woolly leaf ceanothus chaparral Alliance, <i>Ceanothus oliganthus</i> Association ¹	0.00	0.02	0.02
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> Association	0.01	0.01	0.02
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> – <i>Ceanothus megacarpus</i> Association	0.14	0.33	0.47
Developed / disturbed	0.00	0.00	0.00
<i>Subtotal</i>	<i>1.01</i>	<i>1.47</i>	<i>2.48</i>

Source: SWCA 2023a. These values are approximate; actual acreage by vegetation community may vary.

Notes:

Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

¹ Denotes a state sensitive natural community.

**Table 4-8
Habitat Restoration in Non-Sidecast Removal Areas**

Vegetation Communities	Project Activity in Regulatory Areas (Acres)	Project Activity in Non-Regulatory Areas (Acres)	Total Acres
Big pod ceanothus (<i>Ceanothus megacarpus</i>) chaparral Alliance	0.00	0.02	0.02
Big pod ceanothus chaparral Alliance, <i>Ceanothus megacarpus</i> – <i>Salvia mellifera</i> Association ¹	0.00	0.00	0.00
California bay forest and woodland Alliance ¹	0.00	0.00	0.00
Coast live oak woodland Alliance, <i>Quercus agrifolia</i> – <i>Umbellularia californica</i> Association ¹	0.00	0.00	0.00
Coast live oak woodland and forest Alliance	0.00	0.07	0.07
Hairy leaf – woolly leaf ceanothus chaparral Alliance, <i>Ceanothus oliganthus</i> Association ¹	0.00	<0.01	<0.01
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> Association	0.00	0.00	0.00
Holly leaf cherry – toyon – greenbark ceanothus chaparral Alliance, <i>Ceanothus spinosus</i> – <i>Ceanothus megacarpus</i> Association	0.00	0.00	0.00
Developed / disturbed	0.00	0.03	0.03
<i>Subtotal</i>	<i>0.00</i>	<i>0.12</i>	<i>0.12</i>

Source: SWCA 2023a. These values are approximate; actual acreage by vegetation community may vary.

Notes:

Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

¹ Denotes a state sensitive natural community.



Indirect Impacts

Potential short-term indirect impacts to sensitive native vegetation communities in the Project area could result primarily from the potential generation of fugitive dust and the introduction of invasive plant species by construction equipment. Indirect impacts could also result from the unintentional introduction of chemical pollutants into the environment through vehicle use and/or use of machinery and the introduction of weeds and non-native plant species. **APM-AQ-1** incorporated into the Project, includes implementation of fugitive dust control measures in accordance with Santa Barbara County Grading Ordinance requirements, which would reduce the level of dust generation through access road watering and covering inactive stockpiles.

The potential for indirect impacts to the special-status plant species observed within the Proposed Project site would be minimized through implementation of **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-5, APM-ENV-6, APM-ENV-7, APM-ENV-8, APM-ENV-9, APM-ENV-10, APM-EC-3, APM-EC-4, APM-BIO-14, APM-INV-1, and APM-INV-2**. In addition, **MM-BIO-1** would be implemented to reduce the potential for indirect impacts to sensitive vegetation communities to a less-than-significant level.

Mitigation Measures: Implementation of **MM-BIO-1** would avoid and minimize impacts to riparian habitat or other sensitive natural communities.

- c) ***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 Impact.

A delineation of waters subject to the regulatory authority of state or federal agencies was completed for the Project site (Appendix E, Mission Canyon Stream Habitat Restoration Project Jurisdictional Delineation Report). Mission Creek is an intermittent stream with a defined bed, bank, and channel that meets the criteria of waters of the State under the California Fish and Game Code at the Road Area 1, Road Area 2, and Mission Creek Project sites. Mission Creek and its tributary at Road Area 1 exhibit an ordinary high water mark (OHWM) and connect to a navigable waterbody (Pacific Ocean), located approximately 6.7 miles south of the Project site, which meets the definition of waters of the United States under Section 404 of the CWA. No defined OHWM or channel was observed at Road Area 2; therefore, no waters of the United States were mapped at that location. Although Mission Creek is classified as both Riverine habitat (R4SBA) and Freshwater Forested/Shrub Wetland (PFOC) by the NWI, the USACE criteria to qualify as a wetland (hydric vegetation, soils, and hydrology) was not met at any of the sites; therefore, Road Area 1 and Mission Creek are considered Non-Wetland Waters of the United States.

Impacts to regulatory waters associated with removal of the deposited sidecast material and restoration of Mission Creek and its tributaries will require prior issuance of a Streambed Alteration Agreement under Section 1602 of the Fish and Game Code, a CWA Section 404 Permit, and a CWA Section 401 Water Quality Certification.

To allow for foot trails for crews to access sidecast piles and conduct removal operations safely within Road Areas 1 and 2 and Creek Sites 1-4, a small contingency disturbance buffer totaling 0.27 acres has been added to the disturbance footprint within RWQCB, CDFW, and USACE Regulatory Areas, of which 0.10 acres falls within waters of the United States. The contingency disturbance areas are identified for each sidecast removal area in Table 4-9, Project Areas within RWQCB, CDFW, and USACE Regulatory Areas. Disturbances within the contingency buffer would be minimized, and sensitive resources would be flagged for avoidance. Following Project activities, disturbance within the contingency buffer would be mapped and restored in accordance with the HRMP (Appendix A).



Table 4-9
Project Areas within RWQCB, CDFW, and USACE Regulatory Areas

Project Site	RWQCB/CDFW (Acres)	USACE (Acres)
Road Area 1 Project Area	0.39	0.00
Road Area 1 Contingency	0.14	0.01
Sidecast 3 Rock Outliers Contingency	0.08	0.00
Road Area 2 Project Area	0.09	0.00
Road Area 2 Contingency	0.06	0.00
Mission Creek Project Area (Creek Sites 1-4)	0.44	0.04
Mission Creek Contingency (Creek Sites 1-4)	0.06	0.03
Mission Creek Site 7	0.00	0.00
Road Areas 5-9	0.01	0.00
Total Project Area	1.01	0.05
Total Contingency	0.27	0.04
Grand Total	1.28	0.09

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; USACE = U.S. Army Corps of Engineers. Acres are shown as rounded to the nearest hundredth decimal place, yet totals reflect sums of the unrounded numbers.

Because the activities proposed by the Project within regulatory waters are limited to streambed restoration in accordance with the HRMP (Appendix A), no additional restoration or mitigation bank purchase would be required. Impacts to state and federally protected wetlands would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

Less Than Significant Impact With Mitigation Incorporated. The Proposed Project area lies in the southern portion of the Santa Ynez Mountains within Mission Canyon along SCE maintenance and public access trails.

Movement of Terrestrial Wildlife Species

Large mammal species such as coyote, bobcat, mountain lion, and mule deer may utilize the creeks, trails, and surrounding open space for traveling across the Project site to open space north, south, east, and west of the Project area. Although Project activities would occur along areas potentially used as wildlife movement corridors, the surrounding areas provide ample open space that wildlife may use to traverse the region. In addition, Project activities would be temporary and activities along the roads and upper slopes are not expected to substantially interfere with the movement of terrestrial wildlife species. Therefore, impacts to terrestrial wildlife would be less than significant.

Movement of Native Fish Species

Project activities conducted within the streambed/creek have the potential to directly and indirectly impact native resident fish species. As described in the HRMP (Appendix A), Mission Creek continues to contain suitable habitat for resident Southern California steelhead despite prolonged drought conditions. Surveys of Mission Creek confirmed the presence of several existing natural and unnatural fish passage barriers. Although suitable fish habitat is present and provides localized passage for resident Southern California steelhead, it will remain unoccupied by anadromous Southern California steelhead without overcoming the impassable natural and human-made barriers. If fish are present in the upper reaches of Mission Creek, they may pass through the Project area to access downstream habitat and could potentially use the Project area, but may not occupy habitat within the Project area year-round. Fish habitat was impacted as a result of the December 2019 work and there is potential for a resident Southern California steelhead population to have been impacted by the December 2019 work; however, fish surveys within the 2019 impact area



have been inconclusive. Therefore, full restoration of fish habitat on the Project site, including habitat features within the stream, is a primary goal of the Project.

Project activities have the potential to directly impact native fish species if present during work activities. Direct impacts to the movement of native resident fish species could result from trampling or crushing during in-stream work, burial under soil/organic matter, erosion, and habitat disruption. The potential for direct impacts to the fish species observed within the Proposed Project site would be avoided through implementation of **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-8, APM-ENV-13, APM-BIO-1, APM-BIO-2, APM-BIO-3,** and **APM-BIO-10**, which require restriction of work in approved areas, delineation of work areas with flagging and/or temporary fencing, education of on-site construction workers, procedures for work within ESAs, night work restrictions, monitoring, and clearance surveys. **APM-ENV-11, APM-ENV-12, MM-FGC-1, MM-FGC-2, MM-FGC-3, MM-FGC-5, APM-EC-1, APM-EC-2, APM-EC-3, APM-EC-4,** and **APM-BIO-5** would require work restrictions when working in the stream, storm inspections, stream monitoring, turbidity monitoring, a hydrologic monitor, sediment control measures, pollutant control measures, and drainage avoidance measures. **APM-ENV-5, APM-ENV-9,** and **APM-ENV-10** would require that proper protocols are followed for the storage of material and equipment, and containment and removal of waste, and would require that trash, which may attract predators, is not left on site.

In addition, **MM-BIO-1** and **MM-BIO-2** would be implemented to reduce the potential for direct impacts to the movement of native fish species to a less-than-significant level.

Indirect impacts to native fish species may include the temporary avoidance of habitat due to increased human presence and Project-related activities; accidental spills or discharge of chemicals or other pollutants, resulting in contamination of suitable habitat; and temporary impediment of movement due to sediment and debris associated with Project activities. Indirect impacts to the native fish species and their habitats within the Project area would be reduced to less than significant through implementation of **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-5, APM-ENV-6, APM-ENV-7, APM-ENV-8, APM-ENV-9, APM-ENV-10, APM-ENV-13, APM-EC-3, APM-EC-4,** and **APM-INV-1**. In addition, **MM-BIO-1** would be implemented to reduce the potential for indirect impacts to the movement of native fish species to a less-than-significant level.

Movement of Other Aquatic Species

Localized activity of other aquatic species, such as southwestern pond turtle, two-striped gartersnake, Coast Range newt, and other non-sensitive amphibians and reptiles may be temporarily impeded due to movement of sediment and debris associated with instream restoration activities. The Proposed Project would include implementation of **MM-FGC-4**, which requires pre-construction surveys for southwestern pond turtle in areas of suitable habitat and sets forth the construction buffers that would be established in the event that active pond turtle nests are discovered. In addition, **MM-BIO-1** and **MM-BIO-2** would be implemented to reduce the potential for direct impacts to the movement of other aquatic species to a less-than-significant level.

Migratory Birds

Habitat for migratory nesting birds exists throughout the Project area. Direct impacts to nesting birds protected under the MBTA and/or Fish and Game Code may include the direct removal of active nests, nesting, or eggs from Project activities. The potential for these impacts to nesting birds would be avoided through implementation of **APM-BIO-6**, which requires pre-construction nesting surveys and ongoing monitoring. In addition, **MM-BIO-1** would be implemented to reduce the potential for direct impacts to migratory bird species to a less-than-significant level.

Indirect impacts to nesting birds will be avoided through implementation of **APM-BIO-6** and **APM-NOI-1**, which require pre-construction nesting surveys and ongoing monitoring and restrictions on construction hours. In addition, **MM-BIO-1** will be implemented to reduce the potential for indirect impacts to migratory species to a less-than-significant level.



Mitigation Measures: Implementation of **MM-BIO-1** and **MM-BIO-2** would avoid and minimize impacts to movement of any native resident or migratory fish or wildlife species and native resident or migratory wildlife corridors, and the use of native wildlife nursery sites.

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

No Impact. The County Comprehensive Plan Conservation Element (County of Santa Barbara 2010) includes an Oak Tree Protection Supplement that addresses protections for several species of oak trees, including coast live oaks. These protections would apply to native oak trees in the Project area. Refer to Table 2-2 for a summary of trees impacted as a result of the December 2019 work.

The Project proposes to address native tree restoration by (1) completing remedial treatments to 30 impacted trees within Mission Creek, and (2) planting trees within Mission Creek and Road Areas 1 and 2 in upland habitat areas. Remedial treatments to impacted trees are necessary to prevent further damage and stimulate recovery. These remedial treatments include the removal of rocks/soil from the base of the tree, pruning, and cutting or trimming roots (Figures 5a–e of the HRMP). These activities are described in detail in Section 6.1 of the HRMP (Appendix A). Native tree remediation within the upland areas was completed in 2020 as a component of the Road Repair Project.

In addition to completing the additional remedial treatments described above, the Project would mitigate impacted trees by establishing a minimum of 90 trees. This planting quantity would achieve a mitigation ratio of 5:1 for impacts to trees whose impacts are considered “major” and a ratio of 1:1 for trees whose impacts are considered “moderate” as defined in Section 2.4 of the HRMP. Within CDFW Regulatory Areas, the Project would plant 49 of the 90 trees to offset previous impacts to trees within CDFW Regulatory Areas (Table 6b of the HRMP). As a continuation of native tree restoration/mitigation in upland areas outside of the regulatory authority of CDFW, the Project would plant the remaining 41 trees within transitional woodland areas. Planting will be completed as a component of the Project’s native vegetation restoration. The number of trees planted as saplings may be adjusted based on the availability of materials; however, quantities would be retained. Between the planting in Mission Creek and upland areas, a total of 90 trees would be established within the Project area. Overplanting may be implemented to ensure mitigation quantities are achieved. Planted trees would be subject to the success criteria described in Section 8 of the HRMP. No trees would be removed as part of the Project.

Although the removal of trees is not proposed by the Project, inadvertent impacts to tree roots are possible. **APM-BIO-8 Tree Protection** would require a tree protection plan be prepared by a Certified Arborist. Additionally, the following APMs are part of the Proposed Project and would provide also tree protection: **APM-ENV-1, APM-ENV-2, APM-ENV-3, APM-ENV-4, APM-ENV-5, APM-ENV-6, APM-ENV-7, APM-ENV-8, APM-ENV-9, APM-ENV-10, APM-EC-1, APM-EC-2, APM-EC-4, APM-BIO-1, APM-BIO-2, APM-BIO-3, APM-BIO-9, APM-BIO-10, and APM-AQ-1.**

Therefore, with the proposed tree restoration/mitigation and implementation of APMs, the Project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Mitigation Measures: No mitigation measures are required.

f) **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?**

No Impact. The Project area is not located within the boundary of any adopted or proposed local, regional, or state habitat conservation plan. Therefore, there would be no impact.

Mitigation Measures: No mitigation measures are required.



4.5 CULTURAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?			✓	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			✓	
c. Disturb any human remains, including those interred outside of dedicated cemeteries?			✓	

4.5.1 Environmental Setting

A Cultural Resources Technical Report was prepared by SWCA in November 2023 (Appendix F) (SWCA 2023b) that summarizes the results of cultural resources desktop analysis, field surveys, evaluation, and monitoring. In addition, a Phase 2 Testing Results for Site CA-SBA-2722H, Mission Creek Habitat Restoration Project, Santa Barbara County, California (Phase II Cultural Report) was prepared by SWCA in April 2023 (Appendix G) (SWCA 2023c) that summarizes the results of the significance evaluation of a cultural resource identified in the Cultural Resources Technical Report (the Tunnel Caretakers' Home Site [SBA-2722H]).

An Area of Potential Impact (API) was developed for the Project's cultural resources assessment and is defined as the Project area as described previously in this IS/MND, which totals 7.24 acres. The vertical depth of the API is limited to the depth of ground disturbance necessary for the in-stream restoration work and drainage repairs. The cultural resource survey work was conducted from 2020 through 2022, included 30.55 acres, and encompassed the entirety of the Project API.

Records Search Results

Results of the records search conducted as part of the cultural resources assessment indicate that 15 previous cultural resource investigations have been conducted within a 0.5-mile radius of the API. Of these studies, eight investigations include a portion of the current Project area. The records search also identified 15 previously recorded cultural resources mapped within 0.5 miles of the API. Of these 15 resources, three resources intersect with the current Project area and are described below.

Mission Tunnel Water System Features (P-42-001712)

This resource was initially recorded in 1981 as architectural features, remnants of a dam, and remnants of an early water system which may have been developed to service early homesteads in the upper Mission Canyon, with the site features listed as dam remnants, early water system remnants, stone/cement bridge. The site record was updated in 1990 and the expanded description named the resource the South Portal of Mission Tunnel and associated features and included a description of a new feature consisting of a small sandstone retaining wall possibly associated with the construction of Mission Tunnel (1913). The top of the wall was flush with the ground surface and the structure was described as clearly not a dam. Although the overall site was called a significant cultural feature, it was not formally evaluated for the California Register of Historic Resources (CRHR) or National Register of Historic Places (NRHP) at the time.

Mission Tunnel (P-42-002683)

The Mission Tunnel was constructed between 1904 and 1912 to convey water from the newly proposed Gibraltar Reservoir on the Santa Ynez River through the Santa Ynez Mountains to the City of Santa Barbara. It is a linear



resource that was first recorded in 1994 and described as measuring approximately 3.7 miles long with variable cross sections ranging from about 3 to 6 feet in width and about 4 to 7 feet in height. Approximately 56% (11,000 feet) of the tunnel has a concrete lining, which was included where the miners encountered problems during construction, such as unstable rock, inflow of water, or natural gas. The remaining 44% (8,600 feet) is unlined and unsupported. The unsupported sections display the most variability in cross-section size—widths vary up to 15 feet. At the time of the 1994 recording, Mission Tunnel was observed to be in good condition and was noted as being significant for its role in the development of water resources and the growth of the City of Santa Barbara in the early 1900s and for its association with Joseph B. Lippincott, a past head of the hydrological branch of the U.S. Geological Survey. No formal evaluation for NRHP or CRHR eligibility appears to have been completed at the time of initial recording. The resource was not assessed for the current study because the Project design would avoid the tunnel.

Tunnel Caretakers' Home Site (SBA-2722H)

The Tunnel Caretakers' Home Site (P-42-002722/CA-SBA-2722H; hereafter SBA-2722H) was once the location of the residence used by various caretakers of the Mission Tunnel (P-42-002683) and is located at the tunnel's southern opening, known as the south portal, which is referenced variously in public records between 1918 and 1951. The site was originally recorded in 1992 and two discontinuous areas were designated: Components 1 and 2. Component 1 was described as a large low-density scatter of historic glass, ceramics, and rusted metal. Component 2 was described as including the remains of the foundation of the caretakers' home, the remains of decorative garden walls, and a sparse historic refuse scatter. The site was not previously evaluated for the NRHP or CRHR.

Fieldwork

The Project archaeologists and architectural historians conducted 7 days of intensive pedestrian survey within the API in January and June of 2020, in support of previous SCE activities within the API and Project vicinity, including a total of 29.8 acres. In March 2021, a Project archaeologist intensively surveyed a partially paved area proposed to be used for staging construction materials and equipment for SCE's maintenance activities in the Project API, totaling 0.3 acres. In October 2021, a Project archaeologist conducted an intensive survey of an area within the Mission Creek ephemeral streambed between steep slopes, totaling 0.75 acres. As a result of the October 2021 fieldwork, 100% of the Project API has been subject to archaeological pedestrian survey. The findings of this survey fieldwork were presented in five technical reports and one California Department of Parks and Recreation site update form.

Two previously recorded cultural resources of historic age—the Tunnel Caretakers' Home Site (SBA-2722H) and Mission Tunnel Water System Features (P-42-001712) were identified during the surveys. The initial identification of SBA-2722H confirmed the location based on the previously recorded boundary. An update of SBA-2722H was completed based on a surface recording in March 2022, and additional fieldwork to evaluate the significance of the site was completed in April 2022.

The Mission Tunnel (P-42-002683) is mapped within the current Project area, but as it has no surface manifestations within the survey area, it was not identified during the survey within the API. One structural resource component, the Mission Creek Trail Bridge, was identified as a previously unrecorded feature associated with the Mission Tunnel Water System Features (P-42-001712).

No additional cultural resources were identified during the above-referenced fieldwork.

Tribal Consultation

Tribal consultation efforts were conducted in conjunction with the Proposed Project. Refer to Section 4.18 of this IS/MND for a full discussion.



4.5.2 Impact Analysis

- a) ***Would the project cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?***

Less Than Significant Impact. The Project's cultural resources assessment determined that three historic-era cultural resources are located within the Project area as described above: Mission Tunnel Water System Features (P-42-001712), which includes the Mission Creek Trail Bridge; Mission Tunnel (P-42-002683); and Tunnel Caretakers' Home Site (SBA-2722H). The Project's potential impacts to each resource are discussed below.

- **Mission Tunnel Water System Features (P-42-001712) including the Mission Creek Trail Bridge:** Structural features observed during the most recent pedestrian survey include dam remnants; water system remnants; a bridge with stone and cement abutments, metal girder substructure, a wood deck covered by metal plates; and a sandstone retaining wall. No artifacts are associated with this resource. The site is located on either side of Mission Creek and is intersected by the Mission Canyon Trail. The site appeared as previously described, with the addition of the previously noted but unrecorded bridge newly designated as the Mission Canyon Trail Bridge. The Mission Canyon Trail bridge appears to have been constructed circa 1910–1920. The bridge carries the Mission Canyon Trail (also known as Spyglass Ridge Road) across Mission Creek and consists of a single span supported by stone abutments. The bridge spans east and west and Mission Creek flows north to south beneath the bridge. The bridge measures approximately 30 feet between abutments and is approximately 12 feet wide.

Architectural history surveys of the Mission Creek Trail Bridge, along with other architectural structures and structural remains within the Project area, were undertaken on January 11 and 28, and March 27, 2020. The bridge is recommended not eligible for the CRHR individually or as part of a potential district (e.g., associated with the other system features) due to loss of integrity and is not a historic resource for purposes of CEQA. Nevertheless, the bridge exhibits some signs of degradation and it is recommended that steel plates temporarily covering the deck be kept in place during construction to protect the wood underneath. All other features would be avoided by Project activities, and the resource as a whole will not be directly or indirectly impacted by the Project. No impacts would occur to this resource.

- **Mission Tunnel (P-42-002683):** Portions of the Mission Tunnel are mapped within the horizontal API; however, the overlapping portions correspond to the fully subterranean segments of the tunnel and are outside of the vertical API. As a result, no updates to the resource were conducted as a part of the Project's most recent cultural assessment work. Because the tunnel is beneath the impact area for restoration activities, any potential impacts are avoided by Project design. No impacts would occur to this resource.
- **Tunnel Caretakers' Home Site (SBA-2722H):** The Tunnel Caretakers' Home Site (SBA-2722H) is the former location of the caretakers' home for the Montecito Water District Tunnel, also known as the Mission Tunnel. The site includes a large low-density scatter of historic refuse and the remains of the foundation of the home and is recorded within two discontinuous areas designated as Components 1 and 2. As discussed in the Phase II Cultural Report, the site is recommended eligible for listing in the CRHR under Criterion 4 for the historical data potential represented by a substantial buried archaeological component designated as Feature 13. Sufficient material was identified to demonstrate the potential of the buried component to contain information relevant to answering important research questions related to the daily lives of the tunnel caretakers between circa 1918 and 1964—their domestic life and work functions—including questions related to ethnic identity and the relationship to local community.

Proposed ground disturbance for seeding and staging may include excavation to a depth between 12 and 24 inches (30 and 60 centimeters) within the eastern boundary of Component 2 and 15 meters or more from the boundary defined for Feature 13; however, this portion of the site was subject to subsurface testing that did not identify any substantial buried archaeological component that has any potential to contribute to the significance of the site. As discussed in the Phase II Cultural Report, the Proposed Project design would avoid the portions of the site found to contain historically significant archaeological deposits of SBA-2722H. The



proposed activities within the site would include tree planting, which involves excavation of holes in approximately the same dimensions as was completed during the fieldwork to evaluate the significance of the site. This suggests that any archaeological materials encountered during Project implementation are likely to be similar to those encountered during archaeological testing—a small number of shallowly buried artifacts. Furthermore, the planting of the trees is likely to provide a measure of protection against erosion that could otherwise damage the site. The trees would also provide an additional barrier between the adjacent road and the significant archaeological components of the site, thereby reducing the potential for unauthorized collection of cultural material by hikers and other passersby who may otherwise have noticed the site.

The Proposed Project activities would involve ground disturbances within the Tunnel Caretakers' Home Site (SBA-2272H), which is recommended to be considered a historical resource under CEQA. However, these activities are proposed to occur within a portion of the site that does not contribute to the historical significance. One refuse deposit (Feature 13) appears to retain integrity and is located 15 meters or more from the nearest Project component as currently designed, which adequately avoids the historically significant component of the resource. Therefore, the Project would not cause a substantial adverse change in the significance of the site and no further work is required to avoid or reduce impacts. Impacts to this resource would be less than significant.

Mitigation Measures: No mitigation measures are required.

b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?*

Less Than Significant Impact. Based on the Project's cultural resource assessments, no cultural resources except for the three historic resources described above were identified in the Project Area. However, there is the potential for the inadvertent discovery of buried archaeological resources during ground-disturbing activities. APMs would be included as part of the Project to reduce potential impacts to archaeological resources to less than significant. Specifically, the Project would implement ***APM-CUL-1 Qualified Archaeologist, APM-CUL-2 Cultural and Tribal Cultural Resources Monitoring and Unanticipated Discovery Plan, APM-CUL-3 Worker Training, APM-CUL-4 Archaeological Resources/Human Remains Discovered, and APM-CUL-5 Archaeological Monitoring***, as described in Section 2.7.5, Applicant Proposed Measures, above. Impacts to cultural resources would be less than significant.

Mitigation Measures: No mitigation measures are required.

c) *Would the project disturb any human remains, including those interred outside of dedicated cemeteries?*

Less Than Significant Impact. It is not anticipated that human remains would occur within the Project site. However, the potential exists for the unanticipated discovery of human remains during the Project's ground-disturbing activities. However, the Project would include ***APM-CUL-4*** and ***APM-CUL-5***, which would require the presence of an Archaeological Monitor on site during ground-disturbing activities. The Qualified Archaeologist would advise the construction crews on proper procedures to follow if an unanticipated archaeological resource, including human remains, is discovered during construction, including the authority of a Tribal Monitor and an Archaeological Monitor to temporarily halt or redirect work away from such a discovery. In addition, in accordance with California Health and Safety Code 7050.5, the disposition of burials falls first under the general prohibition on disturbing or removing human remains. Remains suspected to be Native American are specifically treated under CEQA at CCR Section 15064.5. PRC 5097.98 outlines the process to be followed if human remains are encountered during construction. The discovery is to be kept confidential and secure to prevent any further disturbance. If human remains are identified during excavation activities, the Project Applicant would be required to halt work immediately in the vicinity of the discovery and contact the County Coroner.

As such, the Project's potential impacts relative to the discovery of human remains would be less than significant.



Mitigation Measures: No mitigation measures are required.

4.6 ENERGY

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			✓	
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				✓

4.6.1 Environmental Setting

Appendix F of the CEQA Guidelines is an advisory document that assists environmental document preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. The analysis in response 4.6.2(a) relies upon Appendix F of the CEQA Guidelines, which includes the following criteria to determine whether this threshold of significance is met:

- **Criterion 1:** The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- **Criterion 2:** The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- **Criterion 3:** The effects of the project on peak and base period demands for electricity and other forms of energy.
- **Criterion 4:** The degree to which the project complies with existing energy standards.
- **Criterion 5:** The effects of the project on energy resources.
- **Criterion 6:** The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Quantification of the Project's energy usage is presented and addresses **Criterion 1**. The discussion on restoration activity-related energy use focuses on **Criteria 2, 4, and 5**. The discussion on operational energy relates to **Criteria 2 through 6**.

4.6.2 Impact Analysis

- a) ***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. This analysis focuses on three sources of energy: electricity, natural gas, and transportation fuel for vehicle trips associated with Project operation and Habitat Restoration Installation and Maintenance and Monitoring Activities. The Proposed Project would involve short-term streambed, tree, and native vegetation restoration and monitoring activities within the Mission Canyon area. The Project would not result in long-term increased vehicle trips to and from the Project site and, therefore, would not result in operational vehicle-related energy consumption above existing conditions. The Project site is a natural open space area and would not consume electricity or natural gas during operation. The Project's primary source of energy consumption (i.e., vehicle fuel



consumption) would occur from the short-term use of construction equipment on site and mobile trips to and from the Project site by construction workers, vendors, and hauling trucks during restoration and monitoring activities.

The estimated construction fuel consumption is based on the Project's construction equipment list timing/phasing and hours of duration for construction equipment, as well as vendor, hauling, and construction worker trips as modeled with CalEEMod Version 2020.4.0. The amount of maintenance and monitoring fuel consumption was estimated using the CARB Emissions Factor 2021 (EMFAC2021) computer program, which provides projections for typical daily fuel (i.e., diesel and gasoline) usage in the County, and the Project's annual vehicle miles traveled (VMT) outputs from CalEEMod. The results of the CalEEMod modeling are included in Appendix C. The amount of fuel consumption in the County was estimated using the EMFAC 2021 computer program, which provides projections for typical daily fuel usage. The Project's estimated restoration activity energy consumption is summarized in Table 4-10, Activity Energy Consumption. As shown in Table 4-10, the Project's off-road construction, on-road construction, and maintenance and monitoring fuel consumption would increase the County's consumption by 4.1787%, 0.1593%, and 0.0017%, respectively (**Criterion 1**).

**Table 4-10
Activity Energy Consumption**

Energy Type	Project Annual Energy Consumption ^{1,2}	Santa Barbara County Annual Energy Consumption	Percentage Increase Countywide
Fuel Consumption			
Construction Off-Road Fuel Consumption ³	60,070 gallons	1,437,533 gallons	4.1787%
Construction On-Road Fuel Consumption ³	27,110 gallons	30,329 gallons	0.1593%
Maintenance and Monitoring Fuel Consumption ⁴	2,848 gallons	171,847,015 gallons	0.0017%

Source: Refer to Appendix C, Air Quality CalEEMod Modeling Output, for assumptions used in this analysis.

Notes:

1. As modeled in CalEEMod Version 2020.4.0.
2. The Project would not involve new buildings or increased vehicular trips, and therefore would not result in electricity, natural gas, or operational fuel consumption.
3. The Project increases in fuel consumption are compared with the projected Countywide fuel consumption in 2023, as calculated from the California Air Resources Board EMFAC2021.
4. Project fuel consumption calculated based on CalEEMod results. The Project increases in fuel consumption are compared with the projected Countywide fuel consumption in 2024, as calculated from the California Air Resources Board EMFAC2021.

Construction-Related Energy Consumption

Project construction would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, which are limited to native soil, seed, and piping used for temporary watering of vegetation. Fossil fuels for construction vehicles and other energy-consuming equipment would be used during construction. Fuel energy consumed during the Project's habitat restoration activities would be temporary and would not represent a significant demand on energy resources. As indicated in Table 4-10, the Project's fuel consumption from off-road construction and on-road construction would be approximately 60,070 gallons and 27,110 gallons, which would increase fuel use in the County by 4.1787% and 0.1593%, respectively. As such, restoration activities would have a nominal effect on the local and regional energy supplies (**Criterion 2**).

Some incidental energy conservation would occur during Project activities through compliance with state requirements that equipment not in use for more than 5 minutes be turned off. Project construction equipment would also be required to comply with the latest U.S. Environmental Protection Agency (EPA) and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency and reduce unnecessary fuel consumption. Due to increasing transportation costs and fuel prices, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction (**Criterion 4**).



It is noted that construction fuel use would be temporary and would cease upon completion of Habitat Restoration Installation. There are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or state. Therefore, fuel energy and construction materials consumed during Habitat Restoration Installation would not represent a significant demand on energy resources (**Criterion 5**). Therefore, construction fuel consumption would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. A less-than-significant impact would occur.

Operational Energy Consumption

The Proposed Project would not involve construction of new buildings or uses that would consume electricity or natural gas. Following completion of Habitat Restoration Installation, periodic trips to monitor and maintain the restoration areas would be required. The Project would generate up to 658 trips per year during the Maintenance and Monitoring Activities phase and would not cause any other changes in long-term operations when compared to existing conditions. The Project would consume approximately 2,848 gallons of fuel during maintenance and monitoring, which would increase fuel use in the County by 0.0017%. As such, Maintenance and Monitoring Activities would have a nominal effect on the local and regional energy supplies, and the Project would not result in inefficient, wasteful, or any consumption of energy during operation. A less-than-significant impact would occur in this regard (**Criterion 2 through Criterion 6**).

Mitigation Measures: No mitigation measures are required.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The County's Energy Element of the Comprehensive Plan lists goals and policies to help the County reduce its energy usage. Table 4-11, Project Energy Use Comprehensive Plan Consistency Analysis, shows the Project's consistency with the applicable General Plan energy efficiency goals and policies.

**Table 4-11
Project Energy Use Comprehensive Plan Consistency Analysis**

Comprehensive Plan Goals and Policies	Consistency Analysis
Goal 4: Water Use and Solid Waste – Increase the efficiency of water and resource use to reduce energy consumption associated with various phases of using resources (pumping, distribution, treatment, heating, etc.).	
Policy 4.1: Construction – Encourage recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.	Consistent. Project activities would involve removal of sediment and debris, which are organic, naturally derived, and biodegradable. Based on previous communications with the accepting landfill (Tajiguas Landfill in Goleta), these materials would be used as daily cover at the landfill.
Goal 5: Alternative Energy – Encourage the use of alternative energy for environmental and economic benefits and encourage opportunities for businesses that develop or market alternative energy technologies.	
Policy 5.6: Alternative Fuel Reduction Credits – Provide regulatory flexibility for use of mobile source Emission Reduction Credits in meeting County clean air goals.	Consistent. The vehicles associated with construction workers' commute and hauling trips during Project activities would comply with the latest EPA and CARB engine emissions standards. Therefore, the Project would not impede meeting County clean air goals.

Source: County of Santa Barbara 2015a..

As shown in Table 411, the Project would be consistent with the Comprehensive Plan Energy Element Policies 4.1 and 5.6 (County of Santa Barbara 2015a). In addition, the County adopted the Energy and Climate Action Plan (ECAP) in May 2015, which includes greenhouse gas emissions reduction measures that would also improve energy efficiency. As discussed in Section 4.8, Greenhouse Gas Emissions, the Project would be consistent with the measures included in the ECAP. Therefore, the Project would help promote the energy efficiency goal, policies, and measures found in the Comprehensive Plan and ECAP and would not conflict with state or local plans for renewable energy or energy efficiency. Further, as discussed in the analysis in response 4.6.2(a), the Project would result in nominal fuel



consumption during the maintenance and monitoring phase and would not result in increased operational electricity and natural gas consumption compared to existing conditions. Therefore, the Proposed Project would not result in impacts associated with consistency with renewable energy or energy efficiency plans.

Mitigation Measures: No mitigation measures are required.

4.7 GEOLOGY AND SOILS

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

4.7.1 Environmental Setting

Soils

The Project area is in the western Transverse Ranges geomorphic province, a complex series of young, east-west-trending mountain ranges and valleys that contrast with general north-south orientation of California's other mountain ranges, such as the Peninsular Ranges and Coastal Ranges (Matti et al. 1992). The Transverse Ranges begin at Point Conception in Santa Barbara County and extend in an easterly direction, terminating at the San Bernardino Mountains in San Bernardino County. According to the Natural Resources Conservation Service (NRCS) Web Soil Survey of Santa Barbara County, California, South Coastal Part, one soil map unit was mapped within the Project area: Maymen-Rock outcrop (USDA, NRCS 1981, 2020a). Maymen-Rock outcrop complex, 50% to 75% slopes (MbH) primarily consists of somewhat excessively drained soils derived from shale and sandstone. Maymen soils are exclusively found on mountains with slopes ranging from 5% to 100% at elevations 400 to 4,250 feet. A typical soil profile consists of



brown gravelly sandy clay loam topsoil to approximately 10 inches. Below this, hard bedrock extends to approximately 15 inches of depth. This soil map unit is not included on the National Hydric Soils List (USDA, NRCS 2020b).

Seismicity

The Project site is located within the seismically active Southern California area. Based upon a review of the DOC Earthquake Zones of Required Investigation map (DOC 2023a), there are no Alquist-Priolo Earthquake Fault Zones mapped within or adjacent to the Proposed Project site. However, the Mission Ridge Fault is known to lie at the base of the Santa Ynez Mountains, within approximately 8 miles of the Project site (County of Santa Barbara 2015b). The most significant seismic hazard at the site is shaking caused by an earthquake occurring on a nearby fault such as the Mission Ridge fault. The County Comprehensive Plan Seismic Safety and Safety Element identifies the Project site (and the rest of the South Coast County area) as Zone III, which indicates high tectonic potential (County of Santa Barbara 2015b).

Liquefaction and seismically induced settlement or ground failure occurs during strong seismic shaking events in areas where the groundwater table is located at a relatively shallow depth (generally within 50 feet of the ground surface) or where lands are underlain by loose, cohesionless granular deposits. During liquefaction, soil strata can behave similarly to a heavy fluid and can shift or damage the structure of a building. The County Comprehensive Plan Seismic Safety and Safety Element does not identify the Project area as occurring within a region of liquefaction potential.

Paleontology

According to the Mission Creek Habitat Restoration Project: Paleontological Resources Technical Report (Paleontological Report) (Appendix H) prepared for the Project by SWCA in November 2023 (SWCA 2023d), the Project area is underlain by three geologic units: Quaternary Landslide Deposits, the Eocene-Oligocene Sespe Formation, and the Eocene Coldwater Formation. These units and their paleontological potential are discussed below:

- **Quaternary Landslide Deposits (Qls).** Landslide deposits vary from poorly sorted and disrupted mixtures of rock fragments and soil to relatively intact bedrock slump blocks deposited as a result of debris flows and mass wasting. Within the Project area, landslide deposits occur at Road Areas 5 to 7 and the southern part of the Jesusita Trail area (Johnson and Cochran 2014). These deposits date from the Quaternary, from recent times to the middle Pleistocene (approximately 1 million years ago). Due to the high energy of deposition of these sediments, they are unlikely to preserve fossil resources. However, the thickness of this deposit is not known in the Project area, and the Coldwater Formation underlies this landslide at an undetermined depth. While landslides are high-energy events unlikely to preserve fossils from the time of the landslide, the landslide present in the Project area contains abundant large boulders of the Coldwater Formation, which were observed to preserve fossils. Therefore, the clasts within the landslide have the potential to preserve significant fossils and the unit should be considered to have high paleontological potential (SWCA 2023d).
- **Sespe Formation (Tspu, Tspm, Tspl).** The Sespe Formation records transitional marine environments with sediments that consist of interbedded gray siltstone and red claystone with sandstone layers and fluvial conglomerate. Fossils from the Sespe Formation include highly weathered marine mollusks and a wide variety of terrestrial vertebrates such as turtle, opossum, rabbit, pocket mouse, badger, and primate. The closest fossil locality in the Sespe Formation is approximately 5 kilometers south of the Project area, where a member of the Artiodactyla, a large family of cloven-hooved mammals including camels, giraffes, and antelope, was recovered from an unrecorded depth. The Sespe Formation is known to preserve an array of invertebrate and some vertebrate fossils; therefore, the Sespe Formation is assessed as having high paleontological potential (SWCA 2023d).
- **Coldwater Formation (Tcw).** The Coldwater Formation preserves a marine regression, or time of falling sea level, of nearshore marine depositional environments from the upper Eocene (around 33–40 million years ago). The Coldwater Formation is exposed as a narrow band in the Transverse Ranges across Santa Barbara and Ventura Counties. The Coldwater Formation is well known to preserve invertebrate fossils such as oysters and other bivalves, as well as gastropods, which can occur as dense shell beds in some sections. Plant fossils



such as leaf impressions and petrified wood are also known in parts of the Coldwater Formation. The Coldwater Formation is known to preserve an array of invertebrates, including thick shell beds, plants, and some vertebrate fossils; therefore, the Coldwater Formation is assessed as having high paleontological potential (SWCA 2023d).

4.7.2 Impact Analysis

- a) ***Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***
- i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***

No Impact. The Project would be limited to restoration, berm reconstruction, and monitoring activities. Because active faults are not present within or immediately adjacent to the Project site, the potential for active fault rupture is not considered likely. As such, implementation of the Proposed Project would result in no impact associated with the rupture of a known earthquake fault.

Mitigation Measures: No mitigation measures are required.

- ii) ***Strong seismic ground shaking?***

Less than Significant Impact. The Proposed Project is located within the seismically active area of Southern California and involves temporary construction on and adjacent to slopes and streambeds. However, the Project would not include construction of any buildings, dams, levees, or other large structures that could pose a significant or long-term risk to construction workers or the public during strong seismic ground shaking. The Project would be limited to short-term restoration and berm reconstruction followed by monitoring activities and would not include any components that would increase the potential for human loss, injury, or death as a result of strong seismic ground shaking. Therefore, the Project would result in less-than-significant impacts associated with strong seismic ground shaking.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Liquefaction and seismically induced settlement or ground failure occurs during strong seismic shaking events in areas where the groundwater table is located at a relatively shallow depth (generally within 50 feet of the ground surface) or where lands are underlain by loose, cohesionless granular deposits. During liquefaction, soil strata can behave similarly to a heavy fluid and can shift or damage the structure of a building. The County Comprehensive Plan Seismic Safety and Safety Element does not identify the Project area as occurring within a region of liquefaction potential (County of Santa Barbara 2015b). In addition, the Project area has not been evaluated for liquefaction as part of the State of California Seismic Hazards Program (DOC 2023a).

The Proposed Project would be limited to short-term restoration and monitoring activities within the Mission Canyon area. The Project would not include construction of any structures and would not be located within an area of known State or County liquefaction hazards. Therefore, the Project would result in no impacts associated with seismic-related ground failure, including liquefaction.

Mitigation Measures: No mitigation measures are required.



iv) Landslides?

Less than Significant Impact. Terrace deposits within the Project area at Road Areas 5 to 7 and the southern part of the Jesusita Trail area have been mapped by others as landslide deposits (Minor et al. 2009). The County Comprehensive Plan Seismic Safety and Safety Element does not identify the Project area for high landslide potential (County of Santa Barbara 2015b), and the Project area has not been evaluated for landslides as part of the State of California Seismic Hazards Program (DOC 2023a). However, Mission Canyon is characterized by steep, rocky slopes; therefore, it is possible landslides could occur within the Project area in the future.

The Project includes berm reconstruction and stabilization, as well as revegetation, which would reduce the potential for landslides after construction. All work would be conducted as described in the SWPPP (***APM-HYD-1***). Biodegradable rolled erosion control products would be applied to the steep slopes to reduce the potential for landslides or rockfall (refer to Table 2-5, Project Site Photographs – Existing Conditions). Additionally the proposed berm stabilization/reconstruction and revegetation would further stabilize the slopes, access road, and streambed. Long-term stabilization measures would be installed to promote stabilization of stream banks and slopes. Stabilization measures may include approved soil binders, hydromulch, or rolled erosion control products (e.g., coir matting). The Project would not include construction of any permanent structures or new roads that would increase public presence in the area. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. One of the primary goals of the Proposed Project is to stabilize soil and rock along Mission Creek, which otherwise could result in substantial erosion and discharge of soil downstream. Rock and soil material down to the natural bed and bank of Mission Creek would be removed using hand tools. Following material removal, the impacted portions of the creek would be recontoured to match the adjacent existing grades using flagging up and downstream to identify the natural creek topography and restored as part of the revegetation program, including planting, seeding and maintenance, as described in the HRMP (Appendix A). The Project would also include berm reconstruction and stabilization, as well as revegetation, which would reduce the potential for soil erosion within upland areas after construction. Implementation of these measures would result in temporary ground-disturbing activities to an area greater than 1 acre in size; therefore, because the Project site comprises 7.24 acres, the Proposed Project would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, which would require preparation of a SWPPP (***APM-HYD-1***). Slope stabilization methods would be included in the SWPPP to help stabilize impacted slopes and minimize erosion, sedimentation, and water turbidity downstream. Project activities would include stabilizing the ground surfaces in accordance with the Construction General Permit requirements. Thus, with adherence to a SWPPP and associated BMPs, impacts associated with substantial soil erosion or the loss of topsoil would be less than significant.

Mitigation Measures: No mitigation measures are required.

c) 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 on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. Lateral spreading is a phenomenon in which blocks of non-liquefied soil move down a slope on a liquefied soil layer during a seismic event, typically toward a free-face. For lateral spreading to occur, some degree of liquefaction must occur in the subsurface soils. As discussed in the analyses in responses 4.7.2(a)(iii), 4.7.2(a)(iv), and 4.7.2(d), the Project area does not occur in a State- or County-designated hazard area of for liquefaction, landslides, or expansive soils. The Project site is located in Mission Canyon, which is characterized by steep, rocky slopes; however, slope stabilization methods are proposed in the SWPPP (***APM-HYD-1***) to help stabilize the impacted slopes and minimize erosion, sedimentation, and water turbidity downstream. The Project would also include berm reconstruction and stabilization, as well as revegetation, which would reduce the potential for landslide or collapse within upland areas



after construction. Project activities would include stabilizing the ground surfaces in accordance with the Construction General Permit requirements. Therefore, the Project would result in no impact associated with unstable geologic units or soils.

Mitigation Measures: No mitigation measures are required.

d) 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?

No Impact. Expansive soils are those that undergo volume changes as moisture content fluctuates, swelling substantially when wet or shrinking when dry. Soil expansion can damage structures by cracking foundations, causing settlement, and distorting structural elements. The County Comprehensive Plan Seismic Safety and Safety Element does not map the Project area for expansive soil potential (County of Santa Barbara 2015b). The Project’s proposed habitat restoration, berm repair/reconstruction, and erosion control would not involve a change in use that would increase the Project’s risk relating to expansive soils and no permanent structures are proposed. Therefore, the Project would result in no impact associated with expansive soils.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The Proposed Project would not include the construction of structures or uses that would require wastewater disposal. No septic tanks or alternative wastewater systems are proposed by the Project. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. The Paleontological Report prepared for the Project included a records search and ground survey, and was conducted within the Project site by SWCA in 2023 (Appendix H) (SWCA 2023d). The results of the records search of the Natural History Museum of Los Angeles County, search of online collections of the University of California Museum of Paleontology, and field surveys indicated that the three geologic units occurring on the Project site—Quaternary Landslide Deposits, the Sespe Formation, and Coldwater Formations—have high potential for containing fossils, as shown in Table 4-12, Potential for Paleontological Resources, below.

**Table 4-12
Potential for Paleontological Resources**

Geologic Unit	Location within the Project Area	Description	Potential for Paleontological Resources
Quaternary Landslide Deposits	Road Areas 4–7, Trail Road Areas 1 and 2	Boulders of Coldwater Formation in silt-sand matrix	High (boulders of Coldwater Formation)
Sespe Formation	Gate to just south of Road Area 1	Interbedded massive sandstone with conglomerate and shale	High
Coldwater Formation	Road Area 1 to south of Road Area 5, Road Areas 7–9	Massive sandstone with interbeds of shale	High

Source: SWCA 2023d.

During the 2020 and 2021 ground surveys, a variety of fossil types were identified within the Project area, both in rock outcroppings and in debris piles from prior road work. All of the fossils observed are considered common invertebrates,



traces, or plants that do not meet the Society of Vertebrate Paleontology’s definition of significant fossils. However, the presence of significant fossils within sidecast sediments on slopes or within the creek cannot be ruled out.

The Proposed Project would involve sediment removal and restoration activities that include hand removal of rocks 4 to 24 inches in diameter and the use of a guzzler vacuum system for removal of rocks 3 inches in diameter and smaller. Large rocks and boulders, especially those greater than 24 inches in diameter, may be broken up using sledgehammers, expanding grout, or jackhammers; and/or removed from steeper slopes by a small excavator. Small rocks not used for erosion control and stream enhancement, as well as some of the large boulders from the steeper slopes, would be placed in the road and collected using a small dozer or excavator, transported to a staging area, and then hauled away from the area. As summarized in Table 4-12, above, the geologic units underlying the Project area have high paleontological potential; therefore, there is the potential to encounter fossils during future ground-disturbing activities in the Project area. The Project includes **APM-GEO-1 Paleontological Resources Monitoring and Mitigation Plan, APM-GEO-2 Worker Environmental Awareness Program (WEAP) Training, APM-GEO-3 Paleontological Monitoring, APM-GEO-4 Fossil Discovery and Salvage, and APM-GEO-5 Paleontological Monitoring Documentation** (see Section 2.7.5), which would require assessment of any fossils encountered for significance and, if significant, salvage and curation with an accredited repository. The inclusion of the APMs ensures that impacts to paleontological resources associated with the Project would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.8 GREENHOUSE GAS EMISSIONS

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✓

4.8.1 Environmental Setting

California is a substantial contributor of global greenhouse gases (GHGs), emitting approximately 369 million metric tons of carbon dioxide equivalent (MMTCO₂e) per year (CARB 2022). Carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) are among the important GHGs that contribute to global climate change. These three GHGs are estimated in CalEEMod and, as such, are evaluated herein. GHGs are global in their effect, which is to increase the earth’s ability to absorb heat in the atmosphere. As primary GHGs have a long lifetime in the atmosphere, accumulate over time, and are generally well mixed, their impact on the atmosphere is mostly independent of the point of emission. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

The Intergovernmental Panel on Climate Change constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of GHGs at 400 to 450 parts



per million carbon dioxide equivalent (CO₂e)⁶ concentration is required to keep global mean warming below 2°C, which in turn is assumed to be necessary to avoid dangerous climate change.

State of California Regulations

Executive Order S-3-05 was issued in June 2005, which established the following GHG emission reduction targets:

- 2010: Reduce GHG emissions to 2000 levels
- 2020: Reduce GHG emissions to 1990 levels
- 2050: Reduce GHG emissions to 80% below 1990 levels

Assembly Bill (AB) 32 requires that CARB determine what the statewide GHG emissions level was in 1990 and approve a statewide GHG emissions limit that is equivalent to that level, to be achieved by 2020. CARB approved a 2020 emissions limit of 427 MMTCO₂e.

Executive Order B-30-15, which was issued in April 2015, requires statewide GHG emissions to be reduced 40% below 1990 levels by 2030. Senate Bill (SB) 32, signed into law in September 2016, codifies the 2030 GHG reduction target in Executive Order B-30-15. The bill authorizes CARB to adopt an interim GHG emissions level target to be achieved by 2030. CARB also must adopt rules and regulations in an open public process to achieve the maximum, technologically feasible, and cost-effective GHG reductions.

AB 1279, which was signed into law in September 2022, declares the policy of the state to both achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter, and to ensure that by 2045, statewide anthropogenic GHG emissions are reduced to at least 85% below the 1990 levels.

Due to the nature of global climate change, it is not anticipated that any single development project would have a substantial effect on global climate change. GHG emissions from the Proposed Project would combine with emissions emitted across California, the United States, and the world to cumulatively contribute to global climate change.

Thresholds of Significance

Amendments to CEQA Guidelines Section 15064.4 were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions and give lead agencies the discretion to determine whether to assess those emissions quantitatively or qualitatively. This section recommends certain factors to be considered in the determination of significance (i.e., the extent to which a project may increase or reduce GHG emissions compared to the existing environment; whether the project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHGs). The amendments do not establish a threshold of significance; rather, lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including looking to thresholds developed by other public agencies or suggested by other experts, such as the California Air Pollution Control Officers Association, so long as any threshold chosen is supported by substantial evidence (CEQA Guidelines Section 15064.7(c)). The California Natural Resources Agency has also clarified that the CEQA Guidelines amendments focus on the effects of GHG emissions as cumulative impacts, and therefore GHG emissions should be analyzed in the context of CEQA's requirements for cumulative impact analyses (CEQA Guidelines Section 15064(h)(3)) (CNRA 2009; OPR 2009). 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 to avoid or substantially lessen the cumulative problem within the geographic area of the project (14 CCR Section 15064(h)(3)).

⁶ Carbon dioxide equivalent (CO₂e) is a metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.



The County has adopted a numerical significance threshold for assessing impacts related to GHG emissions. According to the Environmental Thresholds and Guidelines Manual (County of Santa Barbara 2021), all stationary-source projects other than residential or commercial development shall be subject to a numeric, bright-line threshold of 1,000 metric tons of carbon dioxide equivalent (MTCO_{2e}) per year to determine if GHG emissions constitute a significant cumulative impact. Annual GHG emissions that are equivalent to or exceed the threshold are determined to have a significant cumulative impact on global climate change unless mitigated. The threshold applies to both direct and indirect emissions of GHGs, and construction-related emissions are to be accounted for in the year that they occur.

4.8.2 Impact Analysis

- a) **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-related GHG emissions would include emissions from habitat restoration activities. Such emissions have been quantified and compared to the County’s GHG threshold. The Project’s anticipated GHG emissions are identified in Table 4-13, Estimated Greenhouse Gas Emissions. GHG emissions for the Proposed Project were estimated using the CalEEMod Version 2020.4.0 software. CalEEMod is a statewide model designed to quantify GHG emissions from land use projects. The model quantifies direct GHG emissions from construction and operation, as well as indirect GHG emissions such as GHG emissions from energy use, solid waste disposal, vegetation, and water use.

**Table 4-13
Estimated Greenhouse Gas Emissions**

Source	CO ₂	CH ₄		N ₂ O		Total Metric Tons of CO _{2e}
	Metric tons/year	Metric tons/year	Metric tons of CO _{2e} ^{1,2}	Metric tons/year	Metric tons of CO _{2e} ^{1,2}	
Restoration Activity Emissions^{2,3}						
Construction Emissions (amortized over 30 years)	50.05	0.01	0.32	<0.01	0.56	50.94
Helicopter Emissions ⁴	17.25	<0.01	0.01	<0.01	0.15	17.42
Total Construction Emissions	67.31	0.01	0.34	<0.01	0.71	68.36
Maintenance and Monitoring Emissions^{2,3}						
Annual Emissions	27.48	<0.01	0.05	<0.01	0.13	28.84
Project Total Maximum Emissions Per Year²	97.20 MTCO_{2e}/year					
<i>County of Santa Barbara Threshold</i>	1,000 MTCO _{2e} /year					
Is Threshold Exceeded?	No					

Source: Refer to Appendix C, Air Quality CalEEMod Modeling Output, for detailed model input/output data.

Notes: CO₂ = carbon dioxide; CH₄ = methane; N₂O = nitrous oxide; CO_{2e} = carbon dioxide equivalent; MTCO_{2e} = metric tons of carbon dioxide equivalent.

- CO₂ Equivalent values calculated using the Greenhouse Gas Equivalencies Calculator (EPA 2023).
- Totals may be slightly off due to rounding. Due to rounding, the results given by the equation calculations used in the Greenhouse Gas Equivalencies Calculator may not return the exact results shown in CalEEMod.
- The Project proposes restoration strategies to remediate resource impacts to Mission Creek and would not change or increase the existing operational emissions, as the completed Project would not create new water, solid waste, energy, or mobile sources or uses. Construction emissions are amortized over the lifetime of the project (assumed to be 30 years).
- The hourly helicopter greenhouse gas emissions are from Construction Air Quality Emissions Methodology (Panorama Environmental, Inc. 2014). The analysis assumes the helicopter would be used 8 hours per day and 3 days in total.

Project activities would emit GHG emissions as indicated in Table 4-13. In total, Project activities would result in approximately 97.20 MTCO_{2e}. The total emissions would be accounted for in the year that they occur and would not exceed the County’s cumulative significance threshold of 1,000 MTCO_{2e} per year.

The Project would not include additional operational water, solid waste, or energy uses. Following completion of the short-term Project activities, periodic trips to monitor and maintain the restoration areas would be required. The Project



would generate up to 658 trips per year during the maintenance and monitoring phase and would not cause any changes in long-term operations when compared to existing conditions. As shown in Table 4-13, anticipated mobile source emissions generated by vehicle traffic associated with the maintenance and monitoring phase would be approximately 28.84 MTCO_{2e} per year, which would not exceed the County's cumulative significance threshold of 1,000 MTCO_{2e} per year. Operational GHG emissions generated by the Project over the long term would be nominal. Overall, annual GHG emissions generated by the Project would be 97.20 MTCO_{2e} per year, which would not exceed the County's cumulative significance threshold of 1,000 MTCO_{2e} per year. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. In May 2015, the County Board of Directors adopted the Energy and Climate Action Plan (ECAP). The ECAP established a goal of reducing GHG emissions in the unincorporated parts of the County to 15% below 2007 levels by 2020 and identified 53 emissions reduction measures to achieve this goal. Although the GHG emissions reduction target has expired, the GHG emissions reduction measures identified in the ECAP are for long-term planning and remain applicable. Table 4-14, Project's Energy and Climate Action Plan Consistency Analysis, discusses how the Project would comply with the applicable measures found in the County's ECAP. As shown in Table 4-14, the Project would be consistent with the County's ECAP measures. The County Draft 2030 CAP is also currently under review (County of Santa Barbara 2023a). However, evaluation of the Project's potential to conflict is not evaluated herein because the 2030 CAP has not been adopted. Thus, no impact would occur.

Table 4-14
Project's Energy and Climate Action Plan Consistency Analysis

Measures	Consistency Analysis
Construction Equipment Operations (BE 10) – Implement best management practices (BMPs) for construction equipment operation; examples of BMPs include reduced equipment idling, use of alternative fuels or electrification of equipment, and proper maintenance and labeling of equipment.	Consistent. The Project would comply with state requirements that equipment not in use for more than 5 minutes be turned off. Project restoration activity equipment would also be required to comply with the latest EPA and CARB engine emissions standards. These emissions standards require highly efficient combustion systems that maximize fuel efficiency. The Project would also properly maintain and label the construction equipment to ensure they will be in good condition.
Construction and Demolition Waste Recycling (WR 3) – Increase the recycling and reuse of construction waste to reduce energy consumption associated with extracting and manufacturing virgin materials.	Consistent. Project activities would involve removal of sediment and debris, which are organic, naturally derived and biodegradable. Based on previous communications with the accepting landfill (Tajiguas Landfill in Goleta), these materials would be used as daily cover at the landfill.

Mitigation Measures: No mitigation measures are required.



4.9 HAZARDS AND HAZARDOUS MATERIALS

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

4.9.1 Environmental Setting

Regulatory Site Review

Existing and past land use activities are used as potential indicators of hazardous material storage and use. For example, many historic sites have soil or groundwater contamination as a result of spills of hazardous substances and petroleum products. Other hazardous materials sources include leaking underground storage tanks (LUSTs) in commercial and rural areas. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board (SWRCB) to compile and update a regulatory site's listing (per the criteria in the code section). Based upon a review of the EnviroStor database managed by DTSC (2024), no records of federal Superfund, State Response, Voluntary or School Cleanup, or Corrective Action or Evaluation occurs within 1 mile of the Project site. However, based upon a review of the SWRCB GeoTracker website (SWRCB 2024), one record of potential diesel contamination of soil was reported at the Tunnel Road Reservoir, located at 1501 Tunnel Road, approximately 0.05 miles from the Proposed Project site (refer to Exhibit 6, Soil Contamination Site). This record indicates that an unauthorized release was detected when a 675-gallon diesel LUST was removed. Assessment and remedial excavation of the LUST occurred on March 30, 2015, and the cleanup status was reported as a closed case as of March 17, 2016. The site record documents indicate that the LUST was removed and any contaminated soils surrounding the tank were removed to the extent practicable and disposed of. Although residual concentrations of total



petroleum hydrocarbons remained in the soil, the County Public Health Department determined such concentrations were de minimis. Clean soil was used to backfill the tank site. The County determined no further action was required and deemed the site cleanup status as “closed.”

Schools

There are no existing schools in the Project vicinity. The nearest school to the Proposed Project site is Marymount Elementary and Middle School (grades K–8), which is located approximately 1.5 miles to the south.

Airports

There are no existing airports in the Project vicinity. The nearest airport to the Project area is the Santa Barbara Municipal Airport, 7.6 miles southwest of the Project site.

Emergency Response Plans

Applicable emergency response plans include the County’s 2023 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) and the 2013 Santa Barbara Operational Area Emergency Management Plan, which describe the actions the County will take during natural and human-caused emergencies and identify emergency evacuation routes and centers (County of Santa Barbara 2023b, 2013). The Project site would not be not located on or adjacent to any of the identified evacuation routes.

Wildland Fire Risk

According to the California Department of Forestry and Fire Protection (CAL FIRE), the Proposed Project site would be located within a very high fire hazard severity zone and designated as a State Responsibility Area (CAL FIRE 2020). These zones are designated by CAL FIRE based upon statewide criteria established for the vegetation type, topography, weather, crown fire potential, ember production, and burn likelihood. Areas designated as a very high fire hazard severity zone typically occur in areas with unmaintained vegetation or steep terrain at the wildland/urban interface. Structures built in this fire zone are required to use fire-resistant features identified in the California Building Code (Chapter 7).



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Legend

- Soil Contamination Site
- Project Site
- Parking/Staging Area
- Storage/Staging Area
- Contingency Buffer

Restoration

- Restoration Area

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4.9.2 Impact Analysis

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

Less Than Significant Impact. The Proposed Project would involve rock, soil, and sediment removal; habitat restoration; slope stabilization; and maintenance and monitoring activities within a 7.24-acre footprint, located along an existing access road and Mission Canyon, including a portion of Mission Creek and tributaries to Mission Creek. The materials transported from the Project site would consist of clean native soil, sediment, and rock removed from Road Areas 1 and 2, Mission Creek, and the sidecast areas. This material would be hauled to and disposed of at the closest landfill, which is the Tajiguas Landfill located at 14470 Calle Real in the City of Goleta, approximately 27.6 miles west of the Project site.

Operation of equipment and trucks to implement the Proposed Project would require the use of minor amounts of potentially hazardous materials, including equipment lubricants, oils, gasoline, and diesel fuels. Accidental spills, leaks, fires, explosions, or pressure releases involving hazardous materials represent a potential threat to human health and the environment if not properly managed.

Although small amounts of hazardous materials may be used during the course of Project construction to operate equipment, the transport, storage, use, and disposal of these materials would be subject to the requirements of **APM-ENV-1** through **APM-ENV-11**. These APMs require storage of vehicles, equipment, and materials at the designated staging areas only and the use of best management practices (BMPs) (e.g., oil drip pans, plastic sheeting) under vehicles left overnight in the staging areas to prevent the accidental release of oil, gasoline, and lubricants to Mission Creek and other drainage features. Additionally, materials and equipment would be contained in designated areas within the staging and storage areas only. Vehicles/equipment must be inspected for leaks (e.g., fuel, oil, hydraulic fluids, etc.) and repaired prior to work. Equipment fueling would be contained to the designated staging areas to contain spills, to facilitate cleanup, and for proper disposal. Spill kits/absorbent cleanup materials shall be available on site and, if used, disposed of properly. All of these water quality and hazardous materials requirements would be conveyed to Project construction workers through the WEAP training (**APM-ENV-4**) and reiterated during the daily tailboard meetings (**APM-ENV-1**).

Hazardous materials would not be disposed of or released onto the ground, into the underlying groundwater, or into any surface water. Totally enclosed containment shall be provided for all trash. All construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, would be removed and sent to a waste facility permitted to treat, store, or dispose of such materials. Although refueling at the designated staging areas may be required, any fuels, oils, and solvents used would be utilized pursuant to existing state and local regulatory requirements for handling, storage, and disposal of hazardous substances and in accordance with the Project SWPPP (**APM-HYD-1**). All work within sensitive resource areas (including regulatory waters) would be conducted by crews using hand tools. All heavy equipment would remain on the road and within the associated staging/storage areas to reduce the potential for discharge of hazardous materials to Mission Creek. No other hazardous materials would be transported to or from the Project site or used during restoration or monitoring activities and all such use would end following completion of the Proposed Project. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the temporary nature of the Construction Activities (up to approximately 6 months total) and the small volume and low concentration of the potentially hazardous materials that would be used, which would be further reduced thereafter during any remaining Restoration Installation Activities and periodic Maintenance and Monitoring Activities. Thus, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.



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

Less Than Significant Impact. As described in the analysis in response 4.9.2(a), implementation of the Proposed Project would involve rock, soil, and sediment removal; habitat restoration; slope stabilization; and maintenance and monitoring activities, as well as off-site hauling of sediment, debris, and rock to Tajiguas Landfill. The potential exists for accidental release of hazardous substances, such as petroleum-based fuels or hydraulic fluid from construction equipment and vehicles, during Habitat Restoration Installation and Maintenance and Monitoring Activities. The level of risk associated with the accidental release of hazardous substances is not considered significant due to the temporary nature of the activities (up to approximately 6 months total during the Habitat Restoration Installation and periodically thereafter during the Maintenance and Monitoring Activities) and the small volume and low concentration of the potentially hazardous materials that would be used. The contractor would be required to use standard construction controls and safety procedures that would avoid or minimize the potential for accidental release of such substances into the environment. As described above, these requirements have been set forth in **APM-ENV-1** through **AMP-ENV-11**, which require storage of vehicles, equipment, and materials at the designated staging areas only and the use of BMPs (e.g., oil drip pans, plastic sheeting) under vehicles left overnight in the staging areas. Materials and equipment must be contained in designated areas within the staging and storage areas and vehicles/equipment will be regularly inspected for leaks (e.g., fuel, oil, hydraulic fluids, etc.) and repaired prior to work. Equipment fueling would be contained to the designated staging areas to contain spills, to facilitate cleanup, and for proper disposal. Spill kits/absorbent cleanup materials would be available on site and, if used, disposed of properly. All of these water quality and hazardous materials requirements would be conveyed to Project construction workers through the WEAP training (**APM-ENV-4**) and reiterated during the daily tailboard meetings (**APM-ENV-1**).

Standard construction practices would be observed such that any materials released are appropriately contained and remediated as required by local, state, and federal law and in accordance with the Project SWPPP (**APM-HYD-1**). Therefore, the Proposed Project would not create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Mitigation Measures: No mitigation measures are required.

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

No Impact. There are no existing or proposed schools located within 0.25 miles of the Project site. Additionally, the materials that would be stockpiled at the staging areas and transported to the Tajiguas Landfill are limited to native soil, sediment, and rock. Therefore, there is no potential for impacts related to hazardous emissions or the handling of hazardous materials and wastes within 0.25 miles of an existing or proposed school.

Mitigation Measures: No mitigation measures are required

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

No Impact. There was no record in the EnviroStor or SWRCB GeoTracker websites of a hazardous materials site within the Project site. The single record of hazardous materials release consisting of a diesel LUST (Tunnel Road Reservoir) approximately 0.05 miles from the Project site was reported as remediated and the case closed by the County. As described in Section 4.9.1, Environmental Setting, above, remediation of the site included removal of the LUST and any diesel-contaminated soils to the extent practicable. Clean soil was used to backfill the tank site and completion of the remediation effort was verified by the County before the case was deemed “closed.” No work is proposed within the vicinity of the former diesel LUST site and no contaminated soils are expected to be present in the



Project area. Since the Project site is not listed as a hazardous materials site and there are no known active hazardous materials sites within 2 miles of the Project site, implementation of the Proposed Project would not create a significant hazard to the public or the environment. There would be no Project activities located on a hazardous materials site and, thus, no impact.

Mitigation Measures: No mitigation measures are required.

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

No Impact. The nearest airport to the Project area is the Santa Barbara Municipal Airport, located 7.6 miles southwest of the Project site. The Santa Barbara Municipal Airport Land Use Compatibility Plan (SBCAG 2019) includes noise ranges and safety zones around the airport, each with a specific set of land use compatibility guidelines. Based on a review of Figure 4-1, Noise Compatibility Policy Map, and Figure 4-2, Safety Compatibility Policy Map, of the Santa Barbara Municipal Airport Land Use Compatibility Plan (SBCAG 2019), the Project site would be located outside of the noise exposure range and the six safety zones. It should be noted that the Proposed Project would include the use of one helicopter for Construction Activities. The helicopter would use the Santa Barbara Municipal Airport as the takeoff and landing facility for flight operations. All flight operations would be required to comply with local, state, and federal flight regulations. Thus, no impacts associated with public airport safety hazards or excessive airport noise would occur.

Mitigation Measures: No mitigation measures are required.

- f) ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

No Impact. Applicable emergency response plans include the County's 2023 MJHMP and the 2013 Santa Barbara Operational Area Emergency Management Plan, which describe the actions the County will take during natural and human-caused emergencies and identify emergency evacuation routes and centers (County of Santa Barbara 2023b, 2013). The Project site is not located on or adjacent to any of the identified evacuation routes.

The Proposed Project would consist of the restoration of stream and nearby habitat in the Mission Canyon area. While Habitat Restoration Installation is in progress, construction equipment would be delivered via local roadways and then stored at the designated staging areas within the Project site. As described in response 4.17.2(a) below, ***APM-TR-1 Traffic Management Plan*** requires the preparation and implementation of a Traffic Management Plan (TMP) that would describe the sequence of Project activities and the routes that would be utilized by all construction-related traffic. The TMP would also provide specific details regarding construction signage, parking restrictions, trail closures, and emergency services coordination. The draft TMP would be submitted to the County for review at least 30 days prior to initiation of Project activities to solicit comment on any proposed routes or measures. The proposed Project site and planned haul routes are not located within a County-identified evacuation route and Project-related traffic would be restricted to designated areas to avoid blocking or restricting traffic movement. Therefore, implementation of the Proposed Project would result in no impact to implementation of an adopted emergency response plan or emergency evacuation plan.

Mitigation Measures: No mitigation measures are required.

- g) ***Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?***

Less Than Significant Impact. The Proposed Project would consist of the restoration of stream and upland habitat, berm restoration and reconstruction, and maintenance and monitoring, and would not include the construction of new habitable or flammable structures that would result in long-term exposure of the public to increased risk of wildland fires. However, the Project activities would require use of construction equipment and vehicles within Mission Canyon



in an area supporting natural vegetation. These activities have the potential to generate heat or sparks from construction equipment or vehicles, and the use of flammable hazardous materials have the potential to ignite adjacent vegetation and start a fire, especially during weather events that include low humidity and high wind speeds. For example, heated exhausts or sparks from earth-moving and excavating equipment or other small gas-powered equipment like chainsaws may result in vegetation ignition.

APM-HAZ-1 Fire Prevention and Emergency Response Plan would require the preparation and implementation of a Fire Prevention and Emergency Response Plan that addresses on-site fire prevention, protocols, and response. SCE would contract with a fire watch services contractor to provide wildland fire prevention and suppression services for the Project. The fire watch services contractor would provide on-site personnel with a plan to coordinate with fire agencies and implement the plan during construction. The plan would detail the types of equipment that would be kept in each vehicle (e.g., shovel and extinguisher) and restrictions that must be followed by all construction staff (e.g., no smoking and no unauthorized off-road vehicle use) while working on site. The plan would also address procedures involving red flag warnings and sundowner wind warnings, as well as fire reporting, response, prevention, and evacuation routes. The Fire Prevention and Emergency Response Plan would be submitted to Santa Barbara County Fire Department (SBCFD) for review at least 30 days prior to initiation of Project activities.

All fire prevention protocols set forth in the plan would be implemented on site by fire watch services contractor personnel and using contractor equipment, which includes a fire engine that would be available on site in case of emergency. SCE safety monitors and inspectors would also be present to assist in monitoring compliance with the Fire Prevention and Emergency Response Plan throughout the course of Project activities. Each day will include a review of the Project Activity Level to determine the type of equipment, regulations, and monitoring required at each work location, which would then be conveyed to construction workers during the morning tailboard meeting. Fire watch services contractor personnel and SCE safety monitors would be responsible for ensuring compliance with all rules and safety regulations. Therefore, with the inclusion of **APM-HAZ-1** as part of the Project, the potential for Project activities to expose people or structures to significant risk of loss, injury, or death involving wildland fires would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>Would the project:</i>				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?		✓		
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in a substantial erosion or siltation on- or off-site;		✓		
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				✓



<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		✓		
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			✓	
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓

4.10.1 Environmental Setting

Potential impacts to hydrology and water quality associated with the Proposed Project were determined in part from results presented in the Drainage Report prepared for the Proposed Project, which is included as Appendix I to this IS/MND.

Hydrology

Mission Creek is part of the County's South Coast Watershed system. The Proposed Project site is located on the main stem of Mission Creek, which is an intermittent stream that meanders through the foothills of the Santa Ynez Mountains, through the County and City of Santa Barbara, and eventually drains to the Pacific Ocean (MBI 2022). The Proposed Project site is located within the Mission Creek-Frontal Santa Barbara Channel watershed (Hydrologic Unit Code 180600130203), defined by Mission Creek and its tributaries. The tributary area to the Project site is approximately 1,260 acres.

Within the Project area, Mission Creek is an intermittent waterway and generally consists of a riffle-pool habitat sequence, which is commonly found in mountain streams and can provide habitat for fish and other wildlife. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Riffles also provide bank (lateral) and/or bed (vertical) stability. The stability of bed and banks provided by riffle habitat reduces the potential for channel degradation.

Within the Project site, Mission Creek is classified as both Riverine habitat (R4SBA1) and Freshwater Forested/Shrub Wetland (PFOC2) by the NWI (USFWS 2024). Two unnamed tributaries located at Road Areas 1 and 2, found to be regulatory, are classified as Riverine habitat (R4SBA1).

Groundwater

The segment of Mission Creek within the Project site is identified by the Santa Barbara County General Plan High Groundwater Map as occurring within an area of Moderate Groundwater Level (County of Santa Barbara 2015b). According to the HRMP (Appendix A), the Project site is located within an intermittent system near the headwaters of the watershed. Groundwater recharge is limited in the Project reaches due to lack of water and narrow drainage invert. The Project area is predominantly uplands.

Flood Hazards

According to the Federal Emergency Management Agency National Flood Hazard Layer website (FEMA 2005), the Proposed Project site is located in an area designated as Zone D, which is defined as areas where there are possible, but undetermined, flood hazards. In areas designated as Zone D, no analysis of flood hazards has been conducted.



Although the Project site does not occur in a designated flood hazard zone, localized flooding could occur during large storm events.

4.10.2 Impact Analysis

- a) ***Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?***

Less Than Significant Impact With Mitigation Incorporated. One of the primary goals of the Proposed Project would be to stabilize exposed soil and rock along Mission Creek, which otherwise could result in substantial erosion and discharge of soil downstream. SCE's proposed method for rock and sediment removal would be conducted using only manual labor and hand tools within the streambed and bank. Vehicles and heavy equipment would be staged on the road. As described below, prior to initiating Construction Activities or Restoration Installation Activities within a stream or tributaries at the Project site, SCE would prepare a TIP in accordance with the requirements of ***MM-HYD-1 Technical Implementation Plan***. Following material removal, the impacted portions of the creek would be recontoured to near pre-impact conditions using flagging up and downstream to identify the natural creek topography. All recontoured areas that previously supported native vegetation would be restored as part of the revegetation program, including seeding and maintenance, to provide long-term natural soil stabilization (refer to the HRMP [Appendix A]).

Projects that involve the disturbance of one or more acres of soil are required to obtain coverage under the NPDES Construction General Permit, which would require preparation of a SWPPP. Since the Project site comprises 7.24 acres, the Proposed Project would include the preparation of a SWPPP (***APM-HYD-1***) that would identify BMPs to be implemented with the Project to prevent erosion, minimize siltation impacts, and protect water quality in Mission Creek during Project activities. Project activities would include stabilizing the ground surfaces in accordance with the Construction General Permit and erosion and sediment control APMs (***APM-EC-1*** through ***APM-EC-4***). The Project would also include berm reconstruction and stabilization, as well as revegetation, which would reduce the potential for sediment transport from upland Project areas to Mission Creek. Lastly, the Proposed Project activities within regulatory waters are subject to the requirements of an RWQCB Section 401 Water Quality Certification, which must be issued prior to initiation of work in Mission Creek or its tributaries, and is intended to protect water quality standards within Mission Creek and all receiving waters. There are no long-term operational activities proposed. Therefore, the potential for a violation of water quality standards or waste discharge requirements would be less than significant with implementation of ***MM-HYD-1***.

Mitigation Measures: Implementation of ***MM-HYD-1*** would minimize impacts to surface and groundwater quality.

- b) ***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?***

No Impact. The Proposed Project would involve short-term, restoration, slope stabilization, and maintenance and monitoring activities within the 7.24-acre Project site. There is no proposed use or extraction of groundwater or installation of groundwater wells associated with the Proposed Project, nor are any new impervious surfaces or structures proposed that could interfere with groundwater recharge. Removal of the sidecast soil and rock material from the creek is anticipated to improve infiltration through removal of loose soil materials and exposure of native creek soils. Therefore, implementation of the Proposed Project would result in no impact associated with depletion of groundwater supplies or interference with groundwater recharge.

Mitigation Measures: No mitigation measures are required.



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

Less Than Significant Impact With Mitigation Incorporated. A Drainage Report was prepared by Wilson Mikami Corporation (Appendix I) to address hydrologic conditions in the Project area. Additionally, the report compares the flow regime within the segments of Mission Creek and its tributaries within the Project site between existing conditions (with sidecast present) and proposed condition (following sidecast removal). Mission Creek is an intermittent waterway that generally consists of a riffle-pool habitat sequence found in mountain streams and provides habitat for fish and other wildlife. Riffle-pool habitat is created through rapid movement of water over coarse substrate, resulting in a rough flow and turbulent surface, which provides high dissolved oxygen levels that support fish species (Wilson Mikami Corporation 2021). The discharge of sediment to these types of habitats cover the exposed rock in the bottom of creek pools and slows the rate of water movement. During larger storm events, the sediment can be washed downstream increasing siltation in the Mission Creek. A total of approximately 2,331.8 cubic yards of sediment and rock material is believed to have been discharged to Mission Creek and adjacent upland areas as a result of the December 2019 work, nearly 100% of which is anticipated to be removed through implementation of the HRMP with noted constraints (see HRMP Figures 8a–b [Appendix A]).

To reduce sidecast material potentially moving through the creek system during rain events, and following preparation of the TIP (**MM-HYD-1**), SCE would implement the least invasive methods set forth in the HRMP by removing rock, coarse woody material, and fine sediment sidecast within Mission Creek. The removal of sidecast rock and sediment would result in changes to water surface elevations and channel flow velocities within the Project area as channel geometry is restored to conditions similar to pre-sidecast deposition. The difference in water surface elevations following implementation of the Proposed Project is anticipated to range from -5.2 feet to +0.9 feet, while the difference in channel flow velocities is anticipated to range from -5.7 feet per second to +15.6 feet per second. These changes would occur due to the removal of 1 to 4 feet of sidecast material at, or near, the bottom of the stream bed while reestablishing a near pre-sidecast deposit condition. These small changes in channel geometry would not impede, but rather would restore flow prior to the actions that took place throughout the sidecast removal areas. Overall, the Drainage Report (Appendix I) concludes that the post-developed condition (with sidecast removals) will result in minimal impact to upstream and downstream properties in terms of water depth or velocity changes. In accordance with **MM-FGC-3** (Hydrologic Monitor), a qualified hydrologic monitor (hydrologic monitor) would monitor work activity within stream portions of the Project site to help identify sidecast material versus native material and determine materials that may remain in place and would not impact the overall hydrology of the system.

As previously discussed, the Proposed Project would result in temporary ground-disturbing activities to an area greater than 1 acre in size; therefore, the Project would be subject to the requirements of the NPDES Construction General Permit, which would require preparation of a SWPPP (**APM-HYD-1**). Slope stabilization methods would be proposed in the SWPPP to help stabilize impacted slopes and minimize erosion, sedimentation, and water turbidity downstream. Implementation of the Proposed Project would not result in substantial erosion or siltation on or off site through alteration of existing drainage patterns. On the contrary, implementation of the Proposed Project is expected to benefit the surrounding area by restoring segments of Mission Creek within the Project site and removing sediment and debris that might otherwise be carried downstream during large storm events. Additionally, removal of the sediment and debris would improve flows within the Mission Creek channel. The Project would also include berm reconstruction and stabilization, as well as revegetation, which would reduce the potential for erosion from upland Project areas.

Further, maintenance and monitoring of the Project would continue to be conducted through the stream and upland remediation and reestablishment process to ensure Project goals are met. Adaptive management within the creek bed can be separated into two distinct phases: sidecast removal and post-Project. Sidecast removal within the creek would be overseen by the fluvial morphology team, who would implement the adaptive management approach as rocks are



being removed consistent with the TIP (**MM-HYD-1**). Adaptive management during sidecast removal would allow for iterative decision-making as removal progresses.

Post-Project adaptive management would focus on the extended period of monitoring that spans from the completion of Habitat Restoration Installation until such time as when success criteria have been met. The HRMP (Appendix A) provides a list of potential Project challenges that may occur during this period, the point at which adaptive management considerations would be “triggered,” and the potential adaptive management action(s) (see HRMP Table 21, Upland Habitat Adaptive Management Triggers and Actions for Upland Habitats, and Table 23, Stream Habitat Adaptive Management Triggers and Actions [Appendix A]). The framework of this outline relies heavily on adaptive management assessment and incremental action at appropriate times during the 5-year maintenance and monitoring period. The Stream Habitat Adaptive Management Program would be implemented with ongoing and frequent engagement with relevant agencies. Agencies would be notified and consulted prior to the implementation of any adaptive management activity listed in the HRMP.

Therefore, this impact is less than significant with implementation of **MM-FGC-3** and **MM-HYD-1**.

Mitigation Measures: Implementation of **MM-FGC-3** and **MM-HYD-1** would minimize impacts to drainage patterns.

- ii) ***substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?***

No Impact. The Proposed Project would be limited primarily to short-term restoration, berm reconstruction/stabilization and revegetation, and maintenance and monitoring activities within the Mission Canyon area. The Project is located within an area of natural open space and would incorporate a 0.94-acre area of Mission Creek and its tributaries where rock and sediment would be removed to restore hydrologic capacity and conditions. The Project does not propose the placement of any impervious surfaces or construction of roads or structures that could generate increased stormwater or surface runoff. Additionally, the Project’s berm reconstruction/stabilization and revegetation would reduce the rate and amount of surface runoff from upland Project areas. Therefore, implementation of the Proposed Project will result in no impact to on- or off-site flooding.

Mitigation Measures: No mitigation measures are required.

- 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?***

No Impact. As discussed in the analysis in response 4.10.2(c)(ii), the Proposed Project would be limited primarily to short-term restoration, and maintenance and monitoring activities within the Mission Canyon area. Existing road berms within the Proposed Project would be stabilized or reconstructed and revegetated. While this would result in changes to the current condition of the road, it would result in limited changes to the existing road drainage patterns. One McCarthy drain in Road Area 1 would need to be temporarily removed to enable sidecast removal. Upon completion of sidecast removal, the McCarthy drain would be reinstalled at the same location. This drain structure includes an approximately 30-foot corrugated metal flume and 15-foot by 6-foot riprap dissipater. The in-kind replacement drain would be the same size and configuration as the existing drain. The Project does not propose the placement of any impervious surfaces or construction of structures that could generate increased stormwater or surface runoff, nor are any stormwater drainage systems required to serve the Project. Additionally, the Project would include erosion and sediment control APMs (**APM-EC-1** through **APM-EC-4**) that would reduce erosion from Project activities. Implementation of the Proposed Project would not create or contribute runoff water to an existing or planned stormwater drainage system or provide additional sources of polluted runoff; therefore, there would be no impact.

Mitigation Measures: No mitigation measures are required.



iv) *impede or redirect flood flows?*

Less Than Significant Impact With Mitigation Incorporated. As described in the analysis in response 4.10.2(c)(i), the Proposed Project is intended to remove sediment and rock from the creek bed and stabilize the channel slopes to prevent conditions that could impede or redirect flows during heavy rainfall. Existing road berms within the Proposed Project would be recontoured or reconstructed. While this would result in changes to the current condition of the road, stabilization/reconstruction and revegetation of the existing berms would result in negligible changes to the existing road drainage patterns in Road Areas 5 through 9. Berm stabilization/reconstruction would utilize specialized equipment to implement high incline work. Insetting berms or tamping soil by compressing soil inward toward the road (instead of in a downward motion) or other such methods may be used in conjunction with BMPs to avoid sending debris downslope. The SWPPP would consider site-specific conditions and temporary stabilization measures for the unique site conditions, including steep slopes.

The Project would include oversight by a qualified hydrologic monitor for work activity within the streams to identify sidecast material versus native material and to work with the contractor to determine materials that may remain in place and not impact the overall hydrology of the system, as well as requirements to keep debris (i.e., spoils), vehicles and equipment, and construction materials from entering drainage features unless the drainage feature is actively being worked in or traversed. In addition, the Project is required to provide temporary measures to stabilize soil and sediment flow prior to Project actions (e.g., filter fabric, silt fencing, straw wattles), and implement long-term stabilization measures to promote stabilization of stream banks and slopes; refer to **MM-FGC-3**, **APM-BIO-5**, and **APM-EC-1**. There are no long-term operational activities proposed as part of the Project. Therefore, implementation of the Proposed Project would result in a less-than-significant impact associated with impeding or redirecting flood flows.

Mitigation Measures: Implementation of **MM-FGC-3** would minimize impacts to flood flows.

d) *Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Less Than Significant Impact. The Proposed Project is located within Santa Barbara County, which is located along the coastline of the Pacific Ocean where a tsunami could occur following a significant offshore earthquake. However, based upon a review of the DOC Geological Survey, the Project site is approximately 3 miles inland of the coast and located at the base of the Santa Ynez Mountains at a higher elevation, which is well outside of the shoreline areas delineated to be at risk of impact from tsunami (DOC 2023b). The Project would be limited primarily to short-term streambed restoration and maintenance and monitoring activities and would not include the construction of any development or change of uses that would result in the release of pollutants in the event of inundation.

A seiche can occur within an enclosed waterbody and is a wave typically created by seismic activity. The nearest large, enclosed body of water is Lauro Reservoir, which is located approximately 0.25 miles southwest of the Project site. Due to the distance from the reservoir, intervening topography, and higher elevation of the Project site, there is no potential for inundation of the Project site by a seiche.

As discussed above, the Project site is not within a designated flood hazard zone; however, localized flooding could occur during large storm events. The Proposed Project Habitat Restoration Installation would be conducted for a short timeframe (see Section 2.7.4) and work occurring within the creek and associated banks would occur under dry conditions. Implementation of the SWPPP (**APM-HYD-1**) and erosion and sedimentation control measures (**APM-EC-1** through **APM-EC-4**) would minimize the potential for any off-site discharge of non-stormwater materials during Habitat Restoration Installation. There are no long-term activities proposed that could potentially result in the release of pollutants during a flood event. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.



e) **Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

No Impact. The Proposed Project area is not subject to any known water quality control plans or sustainable groundwater management plans. As described in the analyses in responses 4.10.2(a) to (c), the Proposed Project would be limited primarily to short-term restoration, maintenance, and monitoring activities within the 7.24-acre Project site (including 0.94 acres of Mission Creek and its tributaries). There is no proposed use or extraction of groundwater or installation of groundwater wells associated with the Proposed Project. Additionally, there are no new impervious surfaces or structures proposed that could interfere with groundwater recharge. Therefore, implementation of the Proposed Project would result in no impact associated with conflict or obstruction of a water quality control plan or sustainable groundwater management plan.

Mitigation Measures: No mitigation measures are required.

4.11 LAND USE AND PLANNING

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				✓
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✓

4.11.1 Environmental Setting

The Proposed Project site's land use and zoning designations were determined using the County Comprehensive Plan Land Use Element (County of Santa Barbara 2016) and the GIS-based online Santa Barbara County Land Use and Zoning Map (County of Santa Barbara 2022), as identified below:

- Land Use: The map identifies two land use designations for the Proposed Project site of "Other Open Lands" (defined as lands subject to environmental constraints, lands with no agricultural potential, or lands with outstanding resource value) and "Mountainous Area" (MA-100) (defined in the County Comprehensive Plan Land Use Element as land having an average slope in excess of 40% and isolated table land surrounded by slopes exceeding 40%, intended to be kept free of intensive development and reserved for such uses as watershed, scenic enjoyment, wildlife habitat, grazing, orchards, and vineyards).
- Zoning: The map identifies one zoning designation for the Proposed Project site of "Agricultural-II-40 (AG-II-40) and "Agricultural-II-100" (AG-II-100) (defined in the County Comprehensive Plan Land Use Element as areas that are appropriate for agricultural land uses on prime and non-prime agricultural lands located within the Rural Area as shown on the County Comprehensive Plan land use maps).



4.11.2 Impact Analysis

a) **Would the project physically divide an established community?**

No Impact. The Proposed Project site comprises 7.24 acres of property located on the southern slopes of the Mission Canyon area and surrounded on all sides by open space. The nearest established community is a residential neighborhood within the Mission Canyon Community Plan Area, located approximately 0.13 miles south of the Proposed Project site. There are no existing structures or residences within the Proposed Project footprint and no permanent structures are proposed that could divide a community. Therefore, implementation of the Proposed Project would result in no impact associated with the physical division of an established community.

Mitigation Measures: No mitigation measures are required.

b) **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?**

No Impact. The Project site comprises 7.24 acres of property zoned as AG-II-100 (County of Santa Barbara 2020b), and designated in the County Comprehensive Plan Land Use Element as both Other Open Lands and Mountainous Area (County of Santa Barbara 2016). The AG-II zone is applied to open lands that are appropriate for agricultural land uses on prime and non-prime agricultural land, with the intent to preserve these lands for long-term agricultural use. The Other Open Lands classification is reserved for lands subject to environmental constraints on development or have outstanding resource value, while the Mountainous Area classification is meant to delineate land having an average slope in excess of 40% and isolated table land surrounded by slopes exceeding 40%. The Proposed Project is a restoration project that would not change the existing uses of the Project site or conflict with the existing agricultural and resource protection-based land use designation and zoning.

Implementation of the Proposed Project would result in no conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measures: No mitigation measures are required.

4.12 MINERAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				✓
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

4.12.1 Environmental Setting

Based upon a review of the DOC Geological Survey (DOC 2022b) and the County Comprehensive Plan Conservation Element (County of Santa Barbara 2010), the Proposed Project site is not located within a known mineral resource area. In addition, no mineral resource recovery activities currently occur within the Project area.



4.12.2 Impact Analysis

- a) **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. The Proposed Project would involve restoration of native vegetation, trees, streambeds, and existing road berms, as well as maintenance and monitoring activities in accordance with the HRMP (Appendix A). There is no new development, construction, or paving proposed that could preclude the future recovery of any mineral resources in the Proposed Project area. Therefore, implementation of the Proposed Project would result in no impact to the availability of a state or regionally important mineral resource.

Mitigation Measures: No mitigation measures are required.

- b) **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 site is not located within an area supporting known mineral resources, nor would the proposed restoration and monitoring activities preclude future recovery of any mineral resources. Therefore, implementation of the Proposed Project would have no impact on the availability of a locally important mineral resource recovery site delineated on a local General Plan, Specific Plan, or other land use plan.

Mitigation Measures: No mitigation measures are required.

4.13 NOISE

<i>Would the project result in:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?			✓	
b. Generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. 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?				✓

4.13.1 Environmental Setting

Noise is generally defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale, is used to quantify sound intensity. Noise generated by mobile sources typically attenuates (is reduced) at a rate between 3 A-weighted decibels (dBA) and 4.5 dBA per doubling of distance. The rate depends on the ground surface and the number or type of objects between the noise source and the receiver. Noise generated by stationary sources typically attenuates at a rate between 6 dBA and about 7.5 dBA per doubling of distance. The Project site consists of natural open space located in Mission Canyon. The existing noise environment is predominantly characterized by neighborhood noise and vehicle traffic, and the ambient noise level is generally low due to the rural location of the Project site.



The Project site comprises a total of 7.24 acres where sidecast removal (including a Helicopter Removal method), habitat and streambed restoration, and maintenance and monitoring would occur. As shown in Exhibit 3, Project activities would occur nearest to sensitive receptors in close proximity to Road Area Gate and Road Area 1. The nearest sensitive receptors were considered for this analysis. The nearest sensitive receptors are located approximately 700 feet south of the proposed construction limits within Road Area 1 (residence located at 1470 Tunnel Road) and approximately 270 feet south of the proposed storage/staging area within Road Area Gate (residence located at 1498 Tunnel Road). The nearest residential use to Road Area 5 (i.e., 1530 Mission Canyon Road) would be located approximately 1,300 feet south of the Proposed Project construction limits and the nearest sensitive receptor for helicopter operations is located at 1505 Mission Canyon Road, approximately 600 feet away.

To quantify existing ambient noise levels in the Project area, Padre Associates, Inc. conducted six short-term noise measurements on November 12, 2021 (Padre 2021); refer to Table 4-15, Ambient Noise Levels, and Appendix J, Noise Data. The noise measurement sites were representative of typical existing noise exposure in the Project site vicinity. The 20-minute measurements were taken between 10:40 a.m. and 1:32 p.m. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the day and relate closely with the noise standards for the Project area. Noise monitoring equipment used for the ambient noise survey consisted of a Larson Davis SoundTrack LxT Type 1 precision integrating sound level meter.

**Table 4-15
Ambient Noise Levels**

Site No.	Coordinates (Latitude/Longitude)	L_{eq} (dBA)	Time Period
1	34.46800/119.70943	46.8	10:40 a.m. – 11:03 a.m.
2	34.46990/119.70730	45.8	11:08 a.m. – 11:35 a.m.
3	34.47113/119.70477	36.5	11:40 a.m. – 12:00 p.m.
4	34.47193/119.70184	40.4	12:10 p.m. – 12:30 p.m.
5	34.46488/119.71265	45.0	10:11 a.m. – 10:31 a.m.
6	34.46367/119.70826	45.4	1:12 p.m. – 1:32 p.m.

Source: Padre 2021; refer to Appendix J.

Notes: L_{eq} = energy equivalent level; dBA = A-weighted decibels.

4.13.2 Impact Analysis

- a) ***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?***

Less Than Significant Impact.

Construction Activities are generally temporary and have a short duration, resulting in periodic increases in the ambient noise environment. The Project's Construction Activities would span up to approximately 6 months total, beginning in spring 2024. Construction Activities would occur across the Project area and, depending on the condition of each area, construction equipment may operate individually or simultaneously. Construction noise levels at the closest sensitive receptor in each area were calculated based on the assumptions of equipment usage and simultaneity, as shown in Table 4-16, Construction Noise Levels.



**Table 4-16
Construction Noise Levels**

Construction Location	Closest Sensitive Receptor	Distance to Closest Sensitive Receptor	Construction Equipment	L _{eq} Noise Level at Closest Sensitive Receptor ¹
Roadside Sidecast Area 1	1498 Tunnel Road	300 feet	Guzzler Truck	38.5 dBA
Road Area 1	1470 Tunnel Road	700 feet	Guzzler Truck	31.2 dBA
			Forklift	45.1 dBA
			Jackhammer, Loader, Dump Truck	53.1 dBA
Road Area 5	1530 Mission Canyon Road	1,300 feet	Guzzler Truck	28.8 dBA
			Excavator	39.7 dBA
			Rock Crusher, Loader, Dump Truck	57.2 dBA

Source: FHWA 2006.

Notes: L_{eq} = energy equivalent level; dBA = A-weighted decibels.

Noise level calculated from reference noise level for each piece of equipment at 50 feet, obtained from the Roadway Construction Noise Model User's Guide (FHWA 2006), except for guzzler truck, which is based on a field measurement conducted by Michael Baker International on November 5, 2021, and rock crusher, which is based on a research study (Yoshida and Ozawa 2003). L_{eq} level calculated from L_{max} level based on the acoustical use factor and the formula below:

$$L_{eq} = L_{max} + 10\log(\text{Acoustical Use Factor in Percentage})$$

**Table 4-17
Helicopter Noise Levels**

	Reference Noise Level at 100 Feet L _{max} Levels (in dBA)	Reference Noise Level at 600 Feet L _{max} Levels (in dBA)
Bell 429		
-Takeoff	Insufficient data	Insufficient data
-Landing	93.0	77.4
-Overflight	103.4	87.8
Bell 407		
-Takeoff	97.2	81.6
-Landing	98.1	82.5
-Overflight	77.5	61.9
-Hovering	95.9	80.3

Source: FHWA 2006.

Notes: L_{max} = maximum sound level recorded during the measurement interval; dBA = A-weighted decibels.

Helicopter takeoff and landing would not occur at the Project site.

Primary components of the Proposed Project that may generate construction noise would involve removal and off-site hauling of sediment and debris, berm reconstruction, stabilization, and repair, and slope stabilization. The nearest residential use to Roadside Sidecast Area 1 (i.e., 1498 Tunnel Road) would be located approximately 300 feet south of the Proposed Project construction limits. Only guzzler trucks would be used in this area and the noise level would be approximately 38.5 dBA L_{eq}. The nearest residential use to Road Area 1 (i.e., 1470 Tunnel Road) would be located approximately 700 feet south of the Proposed Project construction limits. Guzzler trucks and forklifts would generally be used individually, while jackhammers, loaders, and dump trucks could generally operate simultaneously in this area. The noise levels would range between 31.2 and 53.1 dBA L_{eq} at the closest sensitive receptor. The nearest residential use to Road Area 5 (i.e., 1530 Mission Canyon Road) would be located approximately 1,300 feet south of the Proposed Project construction limits. Guzzler trucks and excavators would generally be used individually, while rock crushers, loaders, and dump trucks could generally operate simultaneously in this area. The noise levels would range between 28.8 and 57.2 dBA L_{eq} at the closest sensitive receptor.

The Proposed Project would include limited use of a helicopter for restoration operations to allow for transport of rocks from Mission Creek to a nearby staging area for processing. Typical noise levels from operation of helicopters are shown in Table 4-17, Helicopter Noise Levels. Helicopter operations would be limited to periodic durations over a



maximum of 3 days. The helicopter would hover approximately 100 to 150 feet in the air while ground crews fill the basket with rock sacks. Once the basket is full, the pilot would relocate the material to a designated staging location within the Project site. A landing zone and refueling location, such as the Santa Barbara Airport, must be located within 10 to 15 minutes of flight time from the Project area. No helicopter takeoff or landing would occur within the Project area. Due to the short intervals that helicopter operations would occur, the limited time period that is proposed (over a maximum 3-day period), and the distance to the closest sensitive receptor (1505 Mission Canyon Road, approximately 600 feet), impacts related to helicopter noise would be less than significant.

Therefore, noise levels generated from Construction Activities would not exceed the County's exterior noise threshold for sensitive receptors of 65 dBA Community Noise Equivalent Level (CNEL) (County of Santa Barbara 2021). The Project's Construction Activities duration would be short-term in nature (see Section 2.7.4) and Construction Activities would be restricted to the Project site. The County's interior noise threshold of 45 dBA CNEL for sensitive receptors is for operational noise levels, not construction noise levels. However, the County's construction noise thresholds for exterior noise for construction do generally consider the impacts to interior noise levels, and attenuation of noise for interior spaces. Additionally, **APM-NOI-1** would be incorporated for the duration of the Project. This APM would limit noise-generating Construction Activities to occur between 8:00 a.m. to 5:00 p.m. Monday through Saturday, unless other hours are approved by the County. In the event that noise-generating Construction Activities are required beyond these hours (excluding helicopter use, which requires daylight and would occur only on weekdays), SCE would request approval from the County.

The use of trucks and passenger vehicles on local roadways would be required to deliver equipment to the site, to remove sediment and other material to the landfill, and for daily work commutes by Project construction personnel. The Project would require the delivery by truck of construction equipment to the Project site prior to initiation of work and removal of construction equipment by truck following completion of the Project activities. Passenger vehicles used by construction personnel (maximum of 44 workers per day) would generate trips in the morning to arrive at the Project site and then in the evening to leave the Project site during the period when Construction Activities would occur. Additionally, the Project would generate a maximum of six hauling trips per day for a period of approximately 45 days to transport soil and rock material removed from the streambeds and sidecast areas to the Tajiguas Landfill, at 14470 Calle Real in the City of Goleta. The proposed haul route would include the following roadways from the Project site: south on Mission Canyon Road via Spyglass Ridge Road and Tunnel Road; west on Foothill Road/CA-192; south on Ontare Road; west on State Street; west on US-101 N; and north on Tajiguas Landfill Road. This haul route will be described in the TMP (**APM-TR-1**) to restrict trucks from using other routes through neighborhoods. This level of temporary construction-related trip generation would be minor. There would be no long-term increase in traffic associated with the Proposed Project. Therefore, traffic noise impact associated with construction trips would be less than significant.

The Proposed Project would not introduce any new permanent noise-generating sources to the area. The Project involves short-term habitat restoration and monitoring activities within the Mission Canyon area. Following completion of these activities, periodic trips to monitor and maintain the restoration areas would be required. Specifically, the Project would generate a maximum of 658 light/medium truck trips per year. However, these trips would not significantly vary or exceed existing conditions since the access road is currently used to maintain and monitor SCE's facilities. The Project would not generate long-term traffic trips or cause any changes in operations when compared to existing conditions. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact. Construction activities can generate varying degrees of groundborne vibration, depending on the construction phase and equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. Ordinary buildings that are



not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, buildings that are constructed with typical timber frames and masonry show that a vibration level of up to 0.2-inch-per-second peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage (FTA 2018). Groundborne vibrations from construction activities rarely reach levels that damage structures. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Typical vibration produced by construction equipment is detailed in Table 4-18, Typical Vibration Levels for Construction Equipment.

Table 4-18
Typical Vibration Levels for Construction Equipment

Equipment	Reference Approximate peak particle velocity at 25 feet (inches/second) ¹	Approximate peak particle velocity at 270 feet (inches/second) ¹	Approximate peak particle velocity at 700 feet (inches/second) ¹
Loaded trucks	0.076	0.002	0.0005
Jackhammer	0.035	N/A	0.0002

Source: FTA 2018.

Notes: N/A = not applicable¹ Calculated using the following formula:

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance

PPV (ref) = the reference vibration level in in/sec from Table 7-4 of the FTA Transit Noise and Vibration Impact Assessment Manual (FTA 2018).

D = the distance from the equipment to the receiver

The Federal Transit Administration’s (FTA) Transit Noise and Vibration Impact Assessment Manual identifies various vibration damage criteria for different building classes (FTA 2018). This evaluation uses the FTA architectural damage threshold for continuous vibrations at non-engineered timber and masonry buildings of 0.2-inch-per-second PPV. As the nearest structures to Project construction areas are residential structures, this threshold is considered appropriate. Additionally, the California Department of Transportation’s Transportation and Construction Vibration Guidance Manual identifies the criterion for human annoyance as 0.2 inch-per-second PPV (Caltrans 2020). The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural.

The nearest structures are single-family residences located approximately 270 feet south of the proposed storage/staging area within Road Area Gate and approximately 700 feet south of the proposed construction limits within Road Area 1. As indicated in Table 4-18, vibration velocities from typical heavy construction equipment used during Project construction would range from 0.0002- to 0.002-inch-per-second PPV at the nearest structures, which would not exceed the structural damage or human annoyance criteria of 0.2-inch-per-second PPV. It is acknowledged that the Project would include part of a popular public trail (lower Tunnel Trail/Inspiration Point trailhead) used for hiking and mountain biking. However, the lower portion of Tunnel Trail would be closed during period for Construction Activities. As a result, groundborne vibration generated from Construction Activities would not be perceptible for people recreating in the general vicinity of the Project site. Further, although structures may be located in close proximity to the proposed haul route, the vibration generated from rubber-tired traffic traveling along paved roadways is rarely perceptible (FTA 2018, p. 112). Therefore, groundborne vibration generated from use of the proposed construction equipment during Habitat Restoration Installation would be less than significant.

As discussed in the analysis in response 4.13.2(a), above, the Proposed Project would not introduce any new permanent noise-generating sources to the area, including equipment or uses that create groundborne vibration or noise. The Project would be limited to short-term restoration and monitoring activities within the Mission Canyon area. Therefore, impacts would be less than significant.



Mitigation Measures: No mitigation measures are required.

- c) **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 not located within an airport land use plan and there are no public or private airports or airstrips within 2 miles of the Project site. The nearest airport to the Project site is the Santa Barbara Airport, located approximately 7.6 miles to the southwest in the City of Santa Barbara. Thus, Project implementation would not expose people residing or working in the Project area to excessive airport noise levels. No impact would occur.

Mitigation Measures: No mitigation measures are required.

4.14 POPULATION AND HOUSING

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✓
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✓

4.14.1 Environmental Setting

The Proposed Project site is located in unincorporated Santa Barbara County on property owned by the City of Santa Barbara and a private landowner. Designated land uses within the Project area consist of Other Open Lands and Mountainous Area. There are no existing houses or other residences within the Proposed Project site.

4.14.2 Impact Analysis

- a) **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 would involve restoration, maintenance, and monitoring activities along an existing access road and Mission Canyon that include a portion of Mission Creek and tributaries to Mission Creek to restore past impacts to native vegetation, trees, streambeds, and existing road berms. The Proposed Project would not include the construction of any residential or commercial development, extension of roads, or any other infrastructure that may result in direct population growth. Further, the proposed restoration, maintenance, and monitoring activities are temporary in nature and would not create new jobs that would introduce new residents into the Santa Barbara County area. Therefore, the Project would result in no direct or indirect impact to population growth.

Mitigation Measures: No mitigation measures are required.



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

No Impact. The Proposed Project site comprises a 7.24-acre footprint along an existing access road in Mission Canyon that includes a portion of Mission Creek and tributaries to Mission Creek where restoration, maintenance, and monitoring activities would be conducted. The proposed restoration, maintenance, and monitoring activities would not displace any residents or demolish any housing. Workers associated with the proposed restoration activities would be local or anticipated to commute to the site during Project implementation. Permanent relocation of workers is not anticipated. Therefore, implementation of the Proposed Project would not necessitate the construction of replacement housing elsewhere.

Mitigation Measures: No mitigation measures are required.

4.15 PUBLIC SERVICES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
i) Fire protection?				✓
ii) Police protection?				✓
iii) Schools?				✓
iv) Parks?			✓	
v) Other public facilities?				✓

4.15.1 Environmental Setting

Fire Protection

The Santa Barbara County Fire Department (SBCFD) provides fire protection services within the Proposed Project area. The nearest fire station is SBCFD Station 15, located at 2491 Foothill Road, approximately 1.25 miles south of the Proposed Project area.

Police Protection

The Santa Barbara County Sheriff’s Office provides law enforcement services to Santa Barbara County, including the Proposed Project area. The nearest Santa Barbara County Sheriff’s Station is located at 4434 Calle Real, approximately 3.8 miles southwest of the Project site.

Schools

There are no existing schools in the Project vicinity. The nearest school to the Proposed Project site is Marymount Elementary and Middle School (grades K–8), which is located approximately 1.5 miles south of the Project site.



Parks

There are no public parks located within the Project area. However, the Project site occurs on land that supports public recreational uses, including hiking and mountain biking. The Tunnel Trail follows the Project alignment for a 1.6-mile portion of the trail's 3.5-mile route. Other nearby trails include the Jesusita Trail (to Inspiration Point) and Rattlesnake Canyon Trail, which can be accessed from trailheads located off of San Roque Road (to the west of Tunnel Road) and Las Canoas Road (to the east of Tunnel Road), respectively. See Exhibit 7a, Trails in Project Vicinity, and Exhibit 7b, Front Country Trails in the Project Area. The County Comprehensive Plan's Land Use Element identifies a need for 4.7 acres of parkland for every 1,000 persons within the County of Santa Barbara (County of Santa Barbara 2016, p. 40). The South Coast Region of the County currently has approximately 631.5 acres of public parkland and open space available for the approximately 68,000 residents within the South Coast unincorporated area, which is 9.3 acres of park and open space per 1,000 persons without including City Parks, State Parks or National Forest lands (Amoon, pers. comm., 2023). The number of trail miles for riding and hiking paths within Santa Barbara County have not been quantified (County of Santa Barbara 2016, p. 41); however, within the incorporated limits of the City of Santa Barbara, there are more than 1,800 acres of parkland, including 35 miles of front country trails (City of Santa Barbara 2022); refer to Exhibits 7c and 7d, Overview of Recreational Resources, in north and south Santa Barbara County, respectively.

4.15.2 Impact Analysis

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

i) ***Fire protection?***

No Impact. During implementation of the Proposed Project, there could be a minor increase in the risk of equipment fire or release of a hazardous substance (oil or gasoline) that would require an emergency response from the fire department. As discussed in the analysis in response 4.9.2(g), **APM-HAZ-1** includes preparation and implementation of a Fire Prevention and Emergency Response Plan that addresses on-site fire prevention, protocols, and response. SCE would contract with a fire watch services contractor to provide wildland fire prevention and suppression services for the Project. The fire watch services contractor would provide on-site personnel with a plan to coordinate directly with fire agencies and implement the plan during Project activities. The plan would detail the types of equipment that would be kept in each vehicle (i.e., shovel and extinguisher) and restrictions that must be followed by all construction staff (e.g., no smoking and no unauthorized off-road vehicle use) while working on site. The plan would also address procedures involving red flag warnings and sundowner wind warnings, as well as fire reporting, response, prevention, and evacuation routes. The plan would be implemented throughout the duration of the Project. The Fire Prevention and Emergency Response Plan would be submitted to SBCFD for review at least 30 days prior to initiation of Project activities. There would be no potential need for new or physically altered fire protection facilities to maintain adopted service ratios or response times, either during or after completion of the Project, and no impact would occur.

Mitigation Measures: No mitigation measures are required.

ii) ***Police protection?***

No Impact. The Proposed Project would involve Construction Activities and Restoration Installation Activities of short duration (see Section 2.7.4), as well as periodic Maintenance and Monitoring Activities along an existing access road and locations within Mission Canyon including a portion of Mission Creek and tributaries to Mission Creek. Periodic restoration maintenance and monitoring activities would be conducted within the Project site for a minimum of 5 years to support the success of the restoration efforts. These activities are not expected to attract criminal activity; however, SCE personnel are anticipated to be on site at the restoration activity staging areas during nighttime and weekend



hours for security purposes during the short-term Construction Activities and Restoration Installation Activities. There is no component of the Project that would directly or indirectly induce population growth, requiring additional law enforcement services. Therefore, the Proposed Project would not create a new demand for additional new or physically altered police protection facilities to maintain adopted service ratios or response times and no impact would occur.

Mitigation Measures: No mitigation measures are required.

lii) Schools?

No Impact. The Proposed Project would not include the addition of residential uses, nor would it propose nonresidential uses that could indirectly result in population growth within the area. Therefore, the Project would not generate additional demand for schools. No impacts would occur in this regard.

Mitigation Measures: No mitigation measures are required.

iv) Parks?

Less Than Significant Impact. The Project site is located within the Mission Canyon area in unincorporated Santa Barbara County, which supports a number of designated trails, as well as informal trails and access roads used by the public for hiking, mountain biking, and other types of outdoor recreation. The access road within the Project site is referred to alternatively as Mission Canyon Catway or the lower Tunnel Trail. The Tunnel Trail connects to other area trails including the Rattlesnake Canyon Trail and Jesusita Trail (leading to Inspiration Point); refer to Exhibits 7a and 7b. Temporary closure of the access road would occur for public safety purposes during Construction Activities. The temporary closure of the access road would require temporary closure of lower Tunnel Trail and the Inspiration Point Trailhead; however, access to Inspiration Point via the Jesusita Trail will not be affected by the Project's temporary closure of the lower Tunnel Trail. Project Construction Activities requiring trail closure would be of short duration (see Section 2.7.4) and would not result in permanent alterations or changes to any existing trails or parks. As discussed in the environmental setting above and in the Recreation impacts analysis at response 4.16.2(a) below, the Santa Barbara area hosts many parks and other trails, so there would be no need for new trails or parks to serve recreationalists during the temporary closure. Following completion of Construction Activities, the lower Tunnel Trail would be reopened for public use. No local trails would be closed to public use as a result of the Project during Restoration Installation Activities or Maintenance and Monitoring Activities (see Section 2.7.4). The Project would not include the addition of residential uses, nor would it propose nonresidential uses that could indirectly result in population growth in the area that might require the development of additional parklands or facilities to adequately serve residents. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

v) Other public facilities?

No Impact. The Proposed Project would not result in the addition of new residents to the area that might impact or create the need for other new public facilities (i.e., libraries). A maximum of approximately 44 construction workers, monitors, and restoration specialists are anticipated to work on site during peak work periods during the Habitat Restoration Installation phase (see Section 2.7.4). Workers associated with the Proposed Project activities would be local or anticipated to commute to the site during Project implementation. Permanent relocation of workers is not anticipated. As a result, the Project does not represent a significant new source of employment that would attract residents and require new services or facilities. No impact would occur.

Mitigation Measures: No mitigation measures are required.



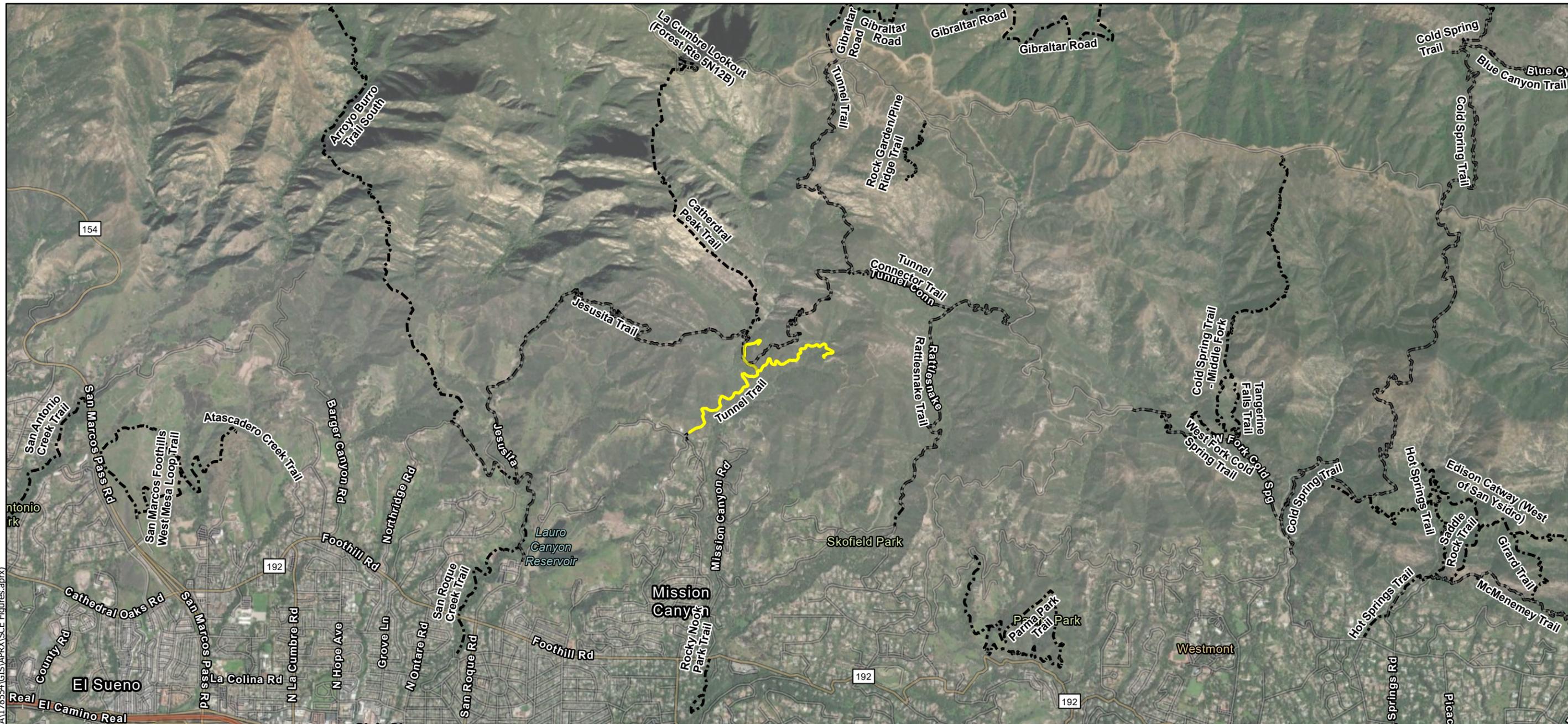
Legend

- Mission Canyon Stream Habitat Restoration Project (Proposed Project)
- Mission Canyon Stream Project Alignment
- Regional Trails
- Closed During Construction

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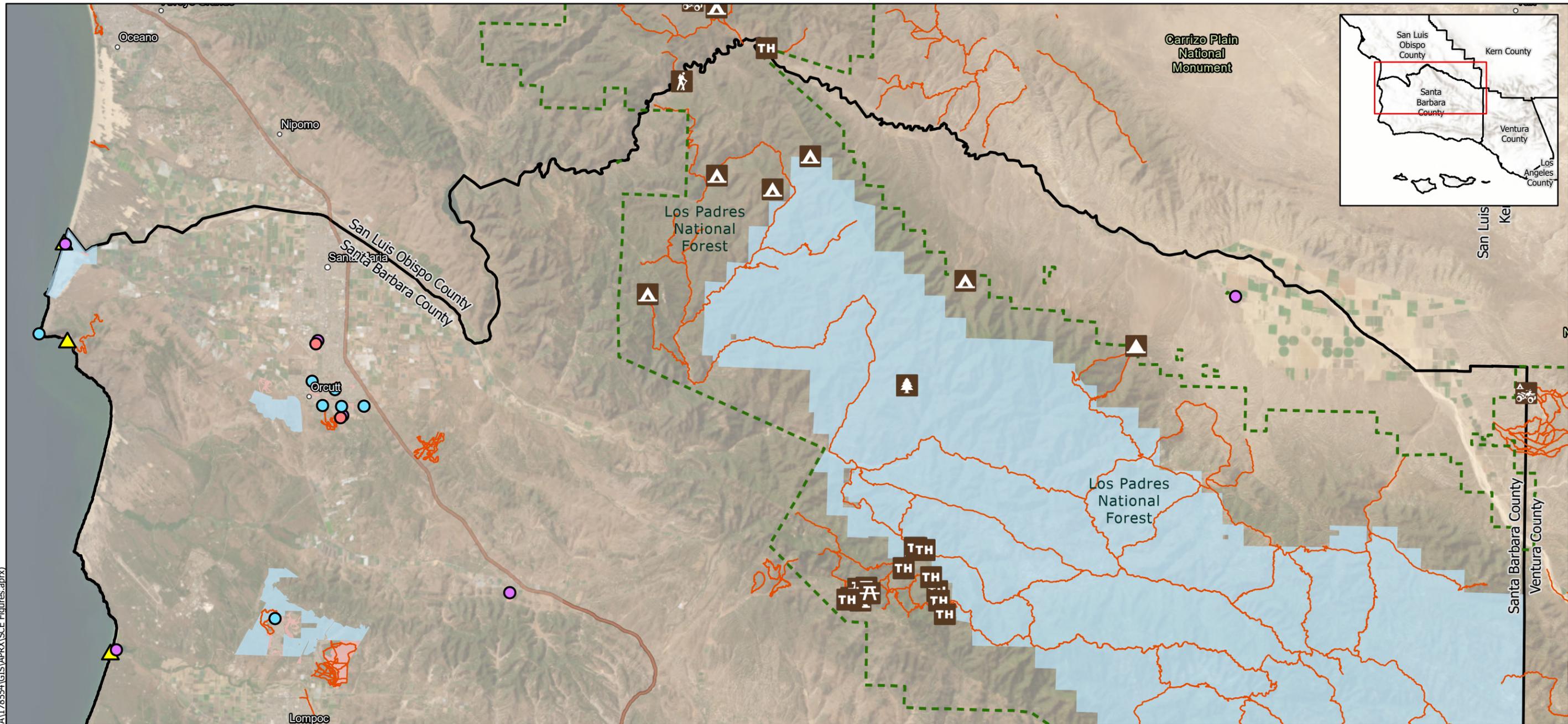


- Closed During Construction
- - - - Regional Trails

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Santa Barbara County Coastal Plan

- Adopted Beach Access

Santa Barbara County Parks

- Camping Parks
- Day-Use Parks
- Off-Leash Dog Areas
- Open Spaces

Recreation Area Activities

- Backpacking
- Campground Camping
- Day Hiking
- Dispersed Camping
- General Purpose

OHV Activities

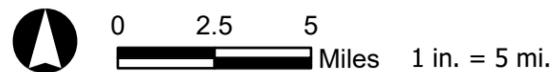
- OHV Camping
- OHV Riding
- Picnicking
- Trailhead
- Los Padres National Forest Trails

Santa Barbara City Parks

- Mountainous Area
- Open Lands
- Recreation

Administrative Forest Boundaries - Regional Extent

- Santa Barbara County



MISSION CANYON STREAM HABITAT RESTORATION PROJECT

Overview of Recreational Resources, North County

Source: County of Santa Barbara Planning and Development - Land Use and Zoning Map, County of Santa Barbara Parks - Parks Map, City of Santa Barbara MAPS, OpenTrails: Los Padres National Forest Regional Trail & Road Status by Los Padres ForestWatch, USDA Forest Service



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|--|---|---|--|--|--|
| <ul style="list-style-type: none"> Project Site Santa Barbara County Coastal Plan Adopted Beach Access | <ul style="list-style-type: none"> Santa Barbara County Parks Camping Parks Day-Use Parks Off-Leash Dog Areas Open Spaces | <ul style="list-style-type: none"> Recreation Area Activities Backpacking Campground Camping Day Hiking General Purpose | <ul style="list-style-type: none"> Group Camping OHV Riding Picnicking Trailhead Los Padres National Forest Trails | <ul style="list-style-type: none"> Santa Barbara City Parks Santa Barbara County Open Land Uses Mountainous Area Open Lands Recreation | <ul style="list-style-type: none"> Administrative Forest Boundaries - Regional Extent Santa Barbara County |
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4.16 RECREATION

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✓

4.16.1 Environmental Setting

The Proposed Project is located on private property in unincorporated Santa Barbara County that supports public recreational opportunities, such as hiking and mountain bike riding. The access road within the Project site is referred to alternatively as Mission Canyon Catway or lower Tunnel Trail. The Tunnel Trail is a 3.5-mile-long heavily trafficked recreational trail (Front Country Trails Multi-Jurisdictional Task Force 2011)⁷ with a 2,950-foot elevation gain and is identified in the County Comprehensive Plan as an Existing Off-Road Trail (County of Santa Barbara 2016, Figure PRT-3). The Inspiration Point Trailhead is located at the southern terminus of the Tunnel Trail, approximately 0.75 miles up Tunnel Road. At its northern terminus, nearly 2 miles beyond the 1.6-mile extent of the Tunnel Trail within the Project site, the trail terminates at the Tunnel Trail Trailhead at East Camino Cielo near the intersection with Gibraltar Road. The Tunnel Trail connects to other area trails in the unincorporated County, including the Rattlesnake Canyon Trail and Jesusita Trail (leading to Inspiration Point); refer to Exhibits 7a and 7b.

The County Comprehensive Plan's Land Use Element identifies a need for 4.7 acres of parkland for every 1,000 persons within the County of Santa Barbara (County of Santa Barbara 2016, p. 40). The South Coast Region of the County currently has approximately 631.5 acres of public parkland and open space available for the approximately 68,000 residents within the South Coast unincorporated area, which is 9.3 acres of park and open space per 1,000 persons without including City Parks, State Parks, or National Forest lands (Amoon, pers. comm., 2023; Hendel, pers. comm., 2023). The total number of trail miles for riding and hiking paths within Santa Barbara County have not been quantified (County of Santa Barbara 2016, p. 41); however, within the incorporated limits of the City of Santa Barbara, there are more than 1,800 acres of parkland, including 35 miles of front country trails (City of Santa Barbara 2022); refer to Exhibits 7c and 7d.

Table 4-19, Trail Attributes, provides a comparison of attributes of some of the front country trails in south Santa Barbara County.

⁷ Front Country Trails Multi-Jurisdictional Task Force, Trail Count and Survey Project report (Dec. 7, 2011), pg. 1, indicates "that the front country trails [including the Tunnel, Rattlesnake Canyon and Cold Springs trails surveyed] see consistent use by hundreds of visitors every week, primarily by Santa Barbara City and County residents." The 2011 surveys indicated 79% "Local Visitors" on Tunnel Trail. Trail user counts performed by CDFW in December 2023 on the lower Tunnel Trail, Rattlesnake Canyon Trail, Jesusita Trail, and Cold Springs Trail yielded comparable results (84% of lower Tunnel Trail users indicated they reside in South Santa Barbara County); refer to Table 4-20, Trail User Counts, for trail users counted during the 2011 and 2023 counts.



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**Table 4-19
Trail Attributes**

Trail	Tunnel	Mission Canyon Catway (affected portion) ¹	Rattlesnake Canyon ²	Jesusita	Cathedral Peak Trail	Arroyo Burro Trail South	Cold Spring-East Fork	Cold Spring-West Fork	Cold Spring-Middle Fork	Hot Springs	Parma Park
Mileage	3.5 miles	1.75 miles (from Tunnel Trail to power lines)	2.95 miles	4.50 miles	2.0 miles (Cathedral Peak), 2.75 miles (La Cumbre Peak)	5.0 miles	4.5 miles	2.0 miles	2.4 miles	1.3 miles	3.3 miles
Elevation Gain	2,350 feet (crest) - 2,950 feet (La Cumbre Peak)	1,250 feet (from Tunnel Trail to power lines)	200 feet to the first creek crossing; 1,000 feet to the connector trail leading to Tunnel Trail; 1,550 feet to the intersection with Gibraltar Road	100 feet to end of canyon; 1,225 feet to Inspiration Point	2,350 feet (Cathedral Peak), 2,950 feet (La Cumbre Peak)	2,700 feet to East Camino Cielo	2,675 feet	1,175 feet	2,766 feet	822 feet	823 feet
Parking	Limited street parking on Tunnel Road	Limited street parking on Tunnel Road	Limited street parking on Las Canoas Road	Limited street parking on San Roque Road	Limited street parking on Tunnel Road (Tunnel Trail) and San Roque Road (Jesusita Trail)	Limited street parking on San Roque Road	Limited street parking on Mountain Drive	Limited street parking on Mountain Drive	Limited street parking on Mountain Drive	Small dirt parking lot on E Mountain Drive and very limited street parking	Limited street parking on W Mountain Drive or Stanwood Drive
Amenities	Chaparral, pools, and scenic views of Cathedral Peak and La Cumbre Peak, Mission Falls	Panoramic views of Mission Canyon, Creek, and Montecito coastline	Views of Santa Barbara, the ocean, and the Channel Islands. Oak trees, meadows, and gullies.	Oak woodlands, avocado orchards, Mission Craggs, Seven Falls, Inspiration Point, Stevens Park	Cathedral Peak, La Cumbre Peak, Mission Craggs, Seven Falls pools	Rocky ridges, coastline views, creek crossings	Bedrock pools, coastline views	Canyon views, access to Tangerine Falls trail	Waterfall, view of Tangerine Falls, stream crossings	Hot spring, wildflowers	Panoramic views of the ocean and Cielito neighborhood, large coast live oaks, creekside habitats
Physical Challenge	Strenuous	Moderate	Moderate	Very easy (end of canyon) - Moderate (Inspiration Point)	Difficult	Moderate to Difficult	Moderate to Strenuous	Moderate to Strenuous	Strenuous	Moderate	Moderate
Closures	Partially closed by U.S. Forest Service order 5-07-00-23-11	No current closures	Currently open to non-motorized use only	Currently open to non-motorized use only; however, a storm-damaged segment is closed	Currently open to non-motorized use only	Currently open to non-motorized use only	Currently open to non-motorized use only	Currently open to non-motorized use only	Currently open to non-motorized use only	Currently open to non-motorized use only	Currently open to non-motorized use only
Available Connections to Other Trails	Jesusita, Rattlesnake Canyon	Jesusita, Tunnel, and Rattlesnake Canyon	Jesusita, Tunnel	Mission Canyon Catway, Rattlesnake Canyon, Tunnel, Arroyo Burro South	Jesusita, Tunnel, La Cumbre Lookout Road (Forest Rte 5N12B)	Jesusita, East Camino Cielo Road, Arroyo Burro Trail North (closed) via Arroyo Burro Road (closed)	Cold Spring-West Fork, Hot Springs (via Mission Canyon Catway), Blue Canyon, Gibraltar	Cold Spring-East Fork, Tangerine Falls, Cold Spring-Middle Fork	Cold Spring-West Fork, Tangerine Falls	McMenemey, Mission Canyon Catway	None

Sources: Santa Barbara County Trails Council 2023; Michael Baker International GIS; U.S. Forest Service 2023; Los Padres ForestWatch 2023; AllTrails 2023; City of Santa Barbara 2023; Hike Los Padres 2023; Wilkinson, pers. comm., 2023.

Notes:

¹ Mission Canyon Catway is not officially named on trail maps, but is named on Google Maps. See Exhibit 7a, Trails in Project Vicinity. It provides access to SCE towers and connects Tunnel Trail with Rattlesnake Canyon Trail. This trail is rated moderate-strenuous; however, the portion of the Catway affected by the Project is rated moderate.

² Includes Rattlesnake Canyon Trail, Rattlesnake Canyon 1 Trail, and Rattlesnake Canyon 2 Trail.



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Currently and historically, temporary closures affecting one or more of the front country trails in the County occur for various reasons and durations (e.g., weather, fire, or other safety concerns; construction or maintenance projects; storm or other damage to facilities) (USFS 2024; Los Padres ForestWatch 2023). Roads and trails in and around the Los Padres National Forest are occasionally closed by the U.S. Forest Service, California State Parks, the County, and other entities (such as SCE would do temporarily on the lower Tunnel Trail to perform the Proposed Project). Other roads and trails are closed seasonally in some areas (USFS 2024; Los Padres ForestWatch 2023).

The lower Tunnel Trail within the Project area has been subject to months-long closures several times in the past 3 years for assorted reasons. Recent trail closures occurred in:

- Winter 2020 (approximately 2–3 months trail closure) following the December 2019 work and until SCE completed emergency remediation measures to remove imminent safety hazards (e.g., loose rock and debris) (County Emergency Permit 20EMP-00000-00001).
- Late summer and fall 2020 (approximately 3–4 months trail closure) due to U.S. Forest Service facility closures and SCE’s construction of the 2020 Road Repair Project (County LUP No: 20LUP-00000-00132).
- Winter and spring 2023 (approximately 4 months trail closure) due to major winter storm damage that prevented safe passage along the trail, SCE’s emergency Storm Event Tunnel Trail Road Repair Project (TROW Storm Recovery Project) to repair the storm damage and restore safe passage (County Emergency Permit 23EMP-00007), and the 2023 Tunnel Trail Drainage Enhancement Project (County LUP Exemption No: 22EXE-00000-00043).

During the recent trail closures listed above, recreationalists were excluded from using the lower Tunnel Trail. Neither the County nor the City of Santa Barbara indicated that any new or expanded recreation facilities were planned or constructed in the past 3 years (2020 to present) in response to temporary closure of a trail or other recreational resource (Amoon, pers. comm., 2023; Hendel, pers. comm., 2023).⁸

In December 2023, CDFW conducted trail user counts and surveys on the lower Tunnel Trail, Jesusita Trail, Rattlesnake Canyon Trail, and Cold Springs Trail. Refer to Table 4-20, Trail User Counts, for the results of the December 2023 trail user counts and previous counts conducted by the Front Country Trails Multi-Jurisdictional Task Force in April 2011.

**Table 4-20
Trail User Counts**

Trail Users Counted	Lower Tunnel Trail ¹	Jesusita Trail ¹	Rattlesnake Canyon Trail ²	Cold Springs Trail ²
Dec. 2023	279	288	207	259
Apr. 2011 ³	440	N/A	238	425
Apr. 2011 ⁴	170	N/A	63	183

Notes: N/A = not applicable.

CDFW trail user counts on lower Tunnel Trail and Jesusita Trail occurred on Saturday, December 2, 2023, from 7:00 a.m. to 5:00 p.m. in mild weather conditions (sunny with temperatures ranging from 48°F to 60°F).

¹ CDFW trail user counts on Rattlesnake Canyon Trail and Cold Springs Trail occurred on Saturday, December 9, 2023, from 7:00 a.m. to 5:00 p.m. in mild weather conditions (sunny with temperatures ranging from 47°F to 62°F).

² Front Country Trails Multi-Jurisdictional Task Force trail user counts on Tunnel Trail, Rattlesnake Canyon Trail, and Cold Springs Trail occurred on Saturday, April 9, 2011, from 7:00 a.m. to 5:00 p.m.

³ Front Country Trails Multi-Jurisdictional Task Force trail user counts on Tunnel Trail, Rattlesnake Canyon Trail, and Cold Springs Trail occurred on Wednesday, April 6, 2011, from 7:00 a.m. to 5:00 p.m.

⁸ Correspondence from the City of Santa Barbara Parks and Recreation Department on November 30, 2023, and the County Community Service Department–Parks Division, on December 8, 2023, referenced the County’s ongoing Recreation Master Plan update process (<https://www.countyofsb.org/1214/Recreation-Master-Plan>) and the County’s Capital Improvement Plan (CIP) that includes improvements to County parks facilities. The County identified 39 CIP projects to improve recreation facilities that have been planned, are under construction, or were completed since 2020 in areas of the County between Carpinteria and Goleta.



4.16.2 Impact Analysis

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

Less Than Significant Impact. There are no public parks within the Project area; however, the Project site is located within the Mission Canyon area on property that supports a designated trailhead (the Inspiration Point Trailhead/Tunnel Trail), as well as informal trails and access roads used by the public for hiking, mountain biking, and other types of outdoor recreation. The access road within the Project site is referred to alternatively as Mission Canyon Catway or lower Tunnel Trail. The Tunnel Trail connects to other area trails including the Rattlesnake Canyon Trail and Jesusita Trail (leading to Inspiration Point); refer to Exhibit 7b. Temporary closure of the access road would occur for public safety purposes during Construction Activities. The temporary closure of the access road would require temporary closure of the lower Tunnel Trail and the Inspiration Point Trailhead; however, access to Inspiration Point via the Jesusita Trail would not be affected by the Project's temporary closure of the lower Tunnel Trail. Construction Activities requiring temporary trail closure would be of short duration (either continuous or broken into two or more construction phases totaling approximately 6 months) and would not result in permanent alterations or changes to any existing trails. Additionally, based upon a review of trails and other recreation facilities identified in the Parks, Recreation, and Trails Map (Figure PRT-3) in the County Comprehensive Plan (County of Santa Barbara 2016), and Exhibits 7a–d, several other public trails and recreational facilities in the vicinity of the Project site would remain open to the public during the Project activities (City of Santa Barbara 2022). For example, the Rattlesnake Canyon Trail and the upper Tunnel Trail would continue to be accessible throughout implementation of the Project activities via the Rattlesnake Canyon Trailhead at Los Canoas Road and the Tunnel Trail Trailhead at East Camino Cielo, respectively. Similarly, the Jesusita Trail leading to Inspiration Point, as well as its connection to the Arroyo Burro Trail, would continue to be accessible throughout implementation of the Project activities via the Jesusita Trail Trailhead at San Roque Road. Many of these trails lead north into the Los Padres National Forest where they connect with a system of additional trails. Following completion of Construction Activities, the lower Tunnel Trail would be reopened for public use. No trails will be closed to public use by the Project during Restoration Installation Activities or Maintenance and Monitoring Activities (see Section 2.7.4).

Because of the short duration of the temporary closure of the lower Tunnel Trail, the Project is not expected to increase the use of any other trail or recreational facility such that substantial physical deterioration of any recreational facility would occur. In December 2023, CDFW conducted trail user counts and surveys on the lower Tunnel Trail, Rattlesnake Canyon Trail, Jesusita Trail, and Cold Springs Trail. When lower Tunnel Trail users were asked what they would have done instead if the Tunnel Trail were closed on the day of the survey⁹, the majority of survey participants (113 out of 134) responded that they would use another trail in the area (such as Rattlesnake Canyon, Jesusita, Cold Springs, Hot Springs, or another trail), while the remainder responded with a variety of alternative recreational and non-recreational activities (not limited to visiting the beach, farmers market, the gym, a park, or preserve; surfing; bike riding; walking sidewalks/streets; or staying home). Based on these results, it is reasonable to anticipate that prospective users of lower Tunnel Trail on other days would similarly choose to pursue a variety of alternative trails and activities if unable to use the lower Tunnel Trail due to a temporary trail closure. It follows further that persons who would be unable to use the lower Tunnel Trail during implementation of Construction Activities are likely to similarly disperse to various other trails and alternative activities, thereby limiting any potential physical impact from temporary increased use of other recreational resources. Importantly, there are no capacity limits identified for any of the front country trails in the County, and no quantitative CEQA significance thresholds have been established relating to trail or other recreational resource use.

The Project would include ***APM-REC-1 Trail Access Plan*** that requires the preparation of a Trail Access Plan that maximizes trail access during Project implementation to the maximum extent that is feasible and safe for project personnel and the public. The plan would specify which Construction Activities are anticipated to require full or partial trail closure and would describe strategies, methods, and tools to safely maximize public access, including access

⁹ Specifically, survey participants were asked, "If this trail were closed, where would you go instead?"



controls and communication of scheduled closures to the public. The Trail Access Plan would be submitted to the County for review and approval.

The potential for Project impacts associated with the deterioration of existing recreational facilities would be less than significant.

Mitigation Measures: No mitigation measures are required.

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

No Impact. Refer to analyses in responses 4.15.2(a)(iv) and 4.16.2(a), above. The Proposed Project would involve Construction Activities of short duration (either continuous or broken into two or more construction phases totaling approximately 6 months), Restoration Installation Activities, and periodic Maintenance and Monitoring Activities for a minimum of 5 years along an existing access road and locations within Mission Canyon including a portion of Mission Creek and tributaries to Mission Creek. The end results of these activities would contribute to the overall user experience of trails in the Project area, which are used by the public for recreational purposes. The Proposed Project would not include the construction or expansion of recreational facilities, nor is there any component of the Project that would induce population growth or result in the construction or expansion of new recreational facilities. The City of Santa Barbara Parks and Recreation Department did not identify any new or expanded recreation facilities that were either planned or constructed in the City during recent closures of lower Tunnel Trail (2020–present) (Hendel, pers. comm., 2023). Similarly, the County Community Services Department–Parks Division did not identify any new or expanded recreation facilities that were planned or constructed in the County in the past three years that were attributed to the temporary closures of lower Tunnel Trail that occurred during that time period (Amoon, pers. comm., 2023). Based on this record, it is unlikely that future temporary closure(s) of lower Tunnel Trail of similar duration for Project implementation would result in the need for any new or expanded recreational facilities in the City or County. No impacts would occur.

Mitigation Measures: No mitigation measures are required.

4.17 TRANSPORTATION

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

4.17.1 Environmental Setting

Existing highways and local roads would be used to transport equipment, to haul sediment by truck to Tajiguas Landfill in Goleta, and for travel by construction workers and monitors to and from the site. The soil and rock material removed from the streambeds and sidecast areas would be temporarily stockpiled on site at the designated staging areas, then



hauled to the Tajiguas Landfill at 14470 Calle Real, Goleta, California, located 27.6 miles west of the Project site. As part of the Project's Traffic Management Plan (TMP) (**APM-TR-1**), contractors would use the approved haul route, which includes the following roadways from the Project site: south on Mission Canyon Road via Spyglass Ridge Road and Tunnel Road; west on Foothill Road/CA-192; south on Ontare Road; west on State Street; west on US-101 N; and north on Tajiguas Landfill Road; refer to Exhibit 8, Proposed Haul Route.

The following policies from the County Comprehensive Plan Circulation Element (County of Santa Barbara 2014) are applicable to the Proposed Project:

Policy A: The roadway classifications, intersection levels of service, and capacity levels adopted in this Element shall apply to all roadways and intersections within the unincorporated area of the County, with the exception of those roadways and intersections located within an area included in an adopted community area plan. Roadway classifications, intersection levels of service, and capacity levels adopted as part of any community or area plan subsequent to the adoption of this Element shall supersede any standards included as part of this Element.

Policy E: A determination of project consistency with the standards and policies of this Element shall constitute a determination of project consistency with the Land Use Element's Land Use Development Policy #4 with regard to roadway and intersection capacity.

4.17.2 Impact Analysis

a) ***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. Implementation of the Proposed Project would temporarily add automobile and truck traffic to local roadways during delivery of construction equipment, construction worker trips, and hauling trips to remove soil and rock. Construction Activities would occur over a period of up to 6 months total. Construction equipment would be delivered to the Project site and then parked within designated on-site staging areas until Construction Activities are complete. Daily construction related traffic trips would be limited to arrival and departure from the site by construction workers in passenger vehicles, which would be parked in a designated parking area at the trailhead.



Legend

- Project Alignment
- Proposed Haul Route

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Pacific Ocean



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The soil and rock material removed from the streambeds and sidecast areas would be temporarily stockpiled on site at the designated staging areas, then hauled to the Tajiguas Landfill at 14470 Calle Real, Goleta, California, located 27.6 miles west of the Project site. The proposed haul route would include the following roadways from the Project site: south on Mission Canyon Road via Spyglass Ridge Road and Tunnel Road; west on Foothill Road/CA-192; south on Ontare Road; west on State Street; west on US-101 N; and north on Tajiguas Landfill Road. Trip generation data developed for the Proposed Project (refer to Appendix K, Truck and Vehicle Trip Generation) indicate that the Project would result in approximately 12 daily dump truck trips, which equates to 14,904 total vehicle miles over 45 haul days assuming full removal of all sidecast material remaining on the Project site, potentially excepting only minor areas where constraints to full removal may exist.¹⁰ In addition, a total of 28 daily light truck trips to bring construction crew members, Qualified Biologists and Archaeological Monitors, and restoration specialists to and from the Project site for the Habitat Restoration Installation phase. During this time, a total of six daily trips by light trucks and Type 6 and Type 7 engines would be required to provide fire safety and equipment to the Project site. In addition, during the berm removal and replacement period, an additional 14 light duty truck trips would be required to transport construction crew and Qualified Biologists. The total daily trips will vary depending upon the work that is occurring, and would range from 20 to 60 trips per day. A total of three watering trucks would be used on site; however, these trucks would be stored on site and would only be transported on adjacent roads during the mobilization and demobilization phases.

The Project Habitat Restoration Installation phase is limited to short-term activities (see Section 2.7.4) that would end upon completion of sediment removal, berm removal and replacement, and installation of the native habitat hydroseeding, plants, and trees. Following completion of these activities, periodic trips to monitor and maintain the restoration areas for a period of 5 years would be required. The Project would generate up to 658 trips per year during the maintenance and monitoring phase (Table 4-21).

Table 4-21
Traffic Generation – Maintenance and Monitoring Phase

Year	Vehicle Type	Truck Trips Per Year	Average Vehicle Miles Per Year
Year 1	F250 4WD trucks	658	18,161
Year 2	Light truck	654	18,050
Year 3	2,000 gallon 4WD water truck	570	15,732
Year 4	Hydroseed Rig	570	15,732
Year 5		570	15,732

Source: Refer to Appendix K, Truck and Vehicle Trip Generation.

To ensure that the traffic trips described above do not adversely impact traffic flow and safety, preparation and implementation of a TMP (**APM-TR-1**) would be included as part of the Proposed Project. The TMP would include the sequence of Project activities and the routes that would be utilized by all construction-related traffic during Project implementation and would also provide specific details regarding construction signage, parking restrictions, emergency services coordination, and special construction techniques. The draft plan would be submitted to the County for review at least 30 days prior to initiation of Project activities. As such, implementation of Project activities would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities. Therefore, with implementation of **APM-TR-1**, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

b) Would the project conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?

No Impact. CEQA Guidelines Section 15064.3 refers to the VMT attributed to a project, which is defined as the amount and distance of automobile travel generated through the implementation of a project. The VMT models and thresholds are adopted by each jurisdiction or lead agency; however, VMT refers to long-term operational traffic generation. As

¹⁰ Calculation based on truck capacity of 12 cubic yards per load and an average truck travel route (from the Project site to the landfill) of 27.6 miles each way.



described above in the analysis in response 4.17.2(a) above, the traffic generated by the Proposed Project would be limited to short-term construction and hauling trips (see Section 2.7.4) followed by periodic light truck trips during the maintenance and monitoring phase (over a minimum of 5 years) and would cease when the restoration effort met success criteria set forth in the HRMP (Appendix A). The maintenance and monitoring trips would not significantly vary or exceed existing conditions because the access road is currently used to maintain and monitor SCE's facilities. Therefore, there would be no impact.

Mitigation Measures: No mitigation measures are required.

c) *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. The Proposed Project would consist of restoration of trees, streambeds, native vegetation and existing road berms, as described in Chapter 2. As discussed in Section 2.7.2, there are five areas of potential sidecast removal constraint related to access road width along slopes adjacent to five road bends within Road Areas 6 through 9 within sidecast areas SC 10, SC 11, SC 12, SC 14, and SC 15 (see Constraint Areas shown on Figures 6c and 6e of the HRMP [Appendix A]). These berms were built upon sidecast material during the 2019 work. To remove the sidecast material beneath and supporting the outer edge of the berms in these locations, the berms and sidecast would need to be removed, and the berms would need to be reconstructed within the pre-existing road prism, thereby narrowing the current width of the roadway in these locations. If SCE conducts full removal of sidecast material in these areas, it could have the potential to narrow the road width to below the tolerance levels necessary to provide safe access for utility or emergency vehicles. Therefore, in these five potential areas of constraint, the focus will be on the maximum removal of all sidecast material from the December 2019 work while maintaining a safe road width. This would be determined in the field by the Resource Specialists (as defined in Section 3.5 of the HRMP [Appendix A]) as subsurface conditions are revealed during sidecast excavation. As such, no impact would occur due to a hazardous road design feature. The Project would not involve a new use or introduce new types of equipment or generate new or additional vehicle trips after completion of Project activities.

As discussed in the analysis in response 4.17.2(a) above, ***APM-TR-1*** includes preparation and implementation of a TPM to ensure construction and hauling activities would not adversely impact traffic flow or safety in the Project area during Project execution. As such, with implementation of ***APM-TR-1*** during Project execution, impacts of the Proposed Project would be less than significant.

Mitigation Measures: No mitigation measures are required.

d) *Would the project result in inadequate emergency access?*

Less Than Significant Impact. As described in the analysis in response 4.9.2(f) above, the Project area is not located on or adjacent to evacuation routes identified in the County's 2023 MJHMP or the 2013 Santa Barbara Operational Area Emergency Management Plan (County of Santa Barbara 2023b, 2013). Short-term Project vehicle trips would include the delivery of construction equipment, construction worker trips, and hauling trips as a result of the removal of sidecast soil and debris. Construction Activities would occur over a period of approximately 6 months and would cease upon completion (see Section 2.7.4). Construction staging areas are proposed at designated on-site staging areas located at existing road shoulders and pullouts. Therefore, Construction Activities would be temporary in nature and staging areas would be situated to avoid potential conflicts related to emergency access.

A TMP (***APM-TR-1***) would be prepared and implemented as described in response 4.17.2(a) above, which would provide traffic control and protect public safety during all stages of Project construction. Following completion of the Project, no additional traffic would be generated by the Project's operation and there would be no impact to emergency access. Therefore, with implementation of ***APM-TR-1*** during Project execution, the potential for Project related impacts to emergency access would be less than significant.

Mitigation Measures: No mitigation measures are required.



4.18 TRIBAL CULTURAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			✓	

4.18.1 Environmental Setting

SB 18, effective September 2004, requires a local government to notify and consult with California Native American tribes when the local government is considering adoption or amendment of a General Plan or a Specific Plan. SB 18 provides California Native American tribes an opportunity to participate in local land use decisions at an early stage of planning, for the purpose of protecting or mitigating impacts to cultural places. Prior to adoption or amendment of a General Plan or a Specific Plan, a local government must refer the proposed action to those tribes that are on the Native American Heritage Commission contact list and have traditional lands located within the city's or county's jurisdiction. The referral must allow a 45-day comment period pursuant to Government Code Section 65453.

AB 52 was enacted on July 1, 2015, and expanded CEQA by establishing a formal consultation process for California tribes within the CEQA process. The bill specifies that any project that may affect or cause a substantial adverse change in the significance of a Tribal Cultural Resource would require a lead agency to "begin consultation with a California Native American tribe that is traditional and culturally affiliated with the geographic area of the proposed project." Section 21074 of AB 52 also defined a new category of resources under CEQA called "Tribal Cultural Resources." Tribal Cultural Resources are defined as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and are either listed on or eligible for the California Register of Historical Resources or a local historic register, or if the lead agency chooses to treat the resource as a Tribal Cultural Resource.

On February 19, 2016, the California Natural Resources Agency proposed to adopt and amend regulations as part of AB 52 implementing Title 14, Division 6, Chapter 3 of the California Code of Regulations, CEQA Guidelines, to include consideration of impacts to Tribal Cultural Resources pursuant to Government Code Section 11346.6. On September 27, 2016, the California Office of Administrative Law approved the amendments to Appendix G of the CEQA Guidelines, and these amendments are addressed within this IS.



Letters were distributed to Native American tribes that requested notification from CDFW in accordance with AB 52 requirements and following guidelines established by the Native American Heritage Commission. The following tribes were notified via certified mail on June 30, 2021:

- Barbareño Band of Chumash Indians
- Barbareño–Ventureño Band of Mission Indians
- Santa Ynez Band of Chumash Indians

4.18.2 Impact Analysis

- a) *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*
- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).*
 - 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 § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Less Than Significant Impact. As described above, in compliance with AB 52 and SB 18, CDFW distributed letters on June 30, 2021, notifying each tribe that requested to be on the list for the purposes of AB 52 and SB 18 of the opportunity to consult on the Project and assist CDFW in determining whether there were potential Tribal Cultural Resources associated with the Project area. Responses were received from two of the tribes as described below. No response was received from the Santa Ynez Band of Chumash Indians.

- A response from the Barbareño Band of Chumash Indians (Ms. Eleanor Fishburn, Chairperson) was received via email on July 30, 2021, requesting that a Tribal Monitor be present on site during sediment removal activities.
- A response from the Barbareño/Ventureño Band of Mission Indians (Mr. Patrick Tumamait) was received via phone call on July 6, 2021, requesting that a Tribal Monitor and an archaeologist be present on site during sediment removal activities. Mr. Tumamait also stated he believed SCE should be responsible for the associated monitoring costs.

As a result of the tribal consultation process, CDFW has agreed to implement monitoring as part of Project activities, provided for in ***APM-TCR-1 Local Tribal Representative*** and ***APM-TCR-2 Tribal Monitoring*** (see Section 2.7.5). With implementation of these APMs, the Project's potential impacts to Tribal Cultural Resources would be less than significant.

Mitigation Measures: No mitigation measures are required.



4.19 UTILITIES AND SERVICE SYSTEMS

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				✓
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			✓	
c. Result in a determination by the waste water 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?				✓
d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✓	
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			✓	

4.19.1 Environmental Setting

Utilities

The Proposed Project site is located on public and private property where potable water infrastructure is limited to an existing water hydrant at the Road Area Gate. No other utilities or public service systems serve the Proposed Project site.

Solid Waste

The Resource Recovery and Waste Management Division in the Santa Barbara County Public Works Department is responsible for providing regional solid waste management services. The Project would be served by the Tajiguas Landfill located 27.6 miles west of the Project site at 14470 Calle Real, Goleta, California. According to the California Department of Resources Recycling and Recovery, the Tajiguas Landfill has a permitted capacity to receive 1,500 tons per day and has a remaining capacity of 4,336,335 cubic yards with an anticipated closure date of 2036 (CalRecycle 2019).



4.19.2 Impact Analysis

- a) ***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?***

No Impact. The Proposed Project would involve restoration activities of short duration (see Section 2.7.4), and periodic maintenance and monitoring along an existing access road and locations within Mission Canyon including a portion of Mission Creek and tributaries to Mission Creek. As discussed in the HRMP (Appendix A), seeding and planting would be scheduled prior to the onset of the rainfall season; however, the Proposed Project may require supplemental watering to promote establishment of trees and plants. If Project activities are completed in a season not suitable for planting and seeding (i.e., summer), installation of these components would be postponed until an appropriate season as determined by the Restoration ecologist. Potable water infrastructure within the Project site is limited to an existing water hydrant at the Road Area Gate. Therefore, any water necessary for restoration and dust control would be delivered to the Proposed Project site via water trucks that are filled at the water hydrant. The need for water to irrigate restored vegetation would be temporary in correlation with the maintenance and monitoring period and would be limited to approximately 1 to 2 gallons of water per container plant or tree at each application (refer to Table 4-22, Estimated Water Usage - Construction). The Proposed Project would not construct new or expanded potable water infrastructure in the area, nor would the minimal amount of water brought to the site by water truck require the expansion of potable water treatment facilities.

The Proposed Project would consist of short-term restoration and periodic maintenance and monitoring activities within the 7.24-acre Project site and would not include construction of any new development or infrastructure that would require potable water service, wastewater treatment, stormwater drainage, or other utilities. The Project would have no impact to the environment associated with the relocation or construction of water or utility facilities.

Mitigation Measures: No mitigation measures are required.

- b) ***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. As discussed in the analysis in response 4.19.2(a) above, water supplies for the proposed restoration and dust control activities would be delivered to the Proposed Project site from an existing hydrant at the Road Area Gate. Dust control would be limited to spraying of the access roads and work areas up to three times per day during Habitat Restoration Installation (see Section 2.7.4). Supplemental watering would be limited to 1 to 2 gallons of water per plant or tree at each application. Supplemental watering may only be needed outside of the normal rainy season and until the plants are established in correlation with the maintenance and monitoring period. Due to the small size of the Project site (7.24 acres) and the temporary nature of the supplemental watering and dust control needs, sufficient water supply would be available to serve the Proposed Project during normal, dry, and multiple dry years. The anticipated water usage for construction (including dust control and hydroseeding) and both initial and restoration phase plant irrigation are summarized below in Table 4-22, Estimated Water Usage – Construction, and Table 4-23, Estimated Water Usage - Temporary Plant Irrigation.



Table 4-22
Estimated Water Usage - Construction

Disturbance Area	Duration (days)	Demand (gal/acre/day)	Active Work Areas (acres)	Daily Water Demand (gal/day)	Evaporation Loss (gal/day)	Total Water Demand (gallons)
Roads	186	1,815	1.6	2,922	257	591,391.78
Staging Areas	186	1,815	0.4	801	71	162,138.67
Work Areas	186	1,815	0.7	1,255	110	253,894.41
Berm Stabilization	107	1,815	0.3	599	53	69,680.19
Hydroseeding			---	---	---	71,050
Grand Total						1,148,155.1

Source: SCE 2023.

Notes: Assumes that 25% of work areas and 70% of roads would be active at any given time throughout the Project.

Assumes that the access roads may utilize soil binders and the number of water applications for dust suppression per day may be reduced.

Table 4-23
Estimated Water Usage - Temporary Plant Irrigation

Activity	Scenario	Number of Plants	Frequency	Watering Events	Gallons Per Plant	Total Gallons	Total with 20% Contingency
Installation	Initial Watering	1,224	Once	1	2	2,448	2,938
Post-Construction Maintenance	Year 1 of 5	1,224	Every Other Week	26	2	63,648	76,378
	Year 2 of 5	1,224	Monthly	12	2	29,376	35,251
	Year 3 of 5	1,224	Monthly (Summer)	5	2	12,240	14,688
	Year 4 of 5	500	Oak Tree Extended Watering (Summer), Replanting	5	2	5,000	6,000
	Year 5 of 5	500	Oak Tree Extended Watering (Summer), Replanting	5	2	5,000	6,000
Grand Total						138,317	

Source: HELIX 2024.

The total estimated water usage for the Project is 1,286,472 gallons during Habitat Restoration Installation and Mitigation and Monitoring Activities (see Section 2.7.4). Efforts to reduce the amount of water used by the Project would be made through timing of the hydroseeding and plant installation period to coincide with seasonal rains when possible. However, the amount of water needed for irrigation will depend upon weather patterns and precipitation received during the year following installation and whether the success criteria are achieved within 5 years or require a longer period of irrigation. All water usage associated with the Proposed Project would cease upon completion of the restoration monitoring and achievement of success criteria. Sufficient on-site water supply is provided by the existing hydrant and no new entitlements, permanent water sources, or permanent water infrastructure are required to serve the Project. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

- c) **Would the project result in a determination by the waste water 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. As discussed in the analysis in response 34.19.2(a) above, the Proposed Project would involve restoration and periodic maintenance and monitoring activities within the 7.24-acre Project site. The Proposed Project does not propose the development of a new land use that would require wastewater treatment; therefore, no impact associated with wastewater treatment capacity would occur.



Mitigation Measures: No mitigation measures are required.

d) **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. The proposed restoration activities associated with the Proposed Project would generate solid waste; however, such waste would consist of natural materials, such as soil, rocks, woody debris, and weedy biomass. The materials would be temporarily stockpiled on site within the designated staging areas and then hauled off site using SCE contractor equipment to the Tajiguas Landfill located 27.6 miles west of the Project site at 14470 Calle Real, Goleta, California. Project activities are expected to result in up to 2,331.8 cubic yards of soil/biomass export material, which is less than 0.001% of the remaining permitted capacity of the landfill. No additional solid waste would be generated upon completion of Project activities. Therefore, implementation of the Proposed Project would not impact the capacity of landfills serving the Santa Barbara area and would not impair the County’s attainment of solid waste reduction goals. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

e) **Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

Less Than Significant Impact. As described in the analysis in response 4.19.2(d) above, the Proposed Project would result in up to 2,331.8 cubic yards of soil/biomass export material during construction. All waste materials would be hauled off site and disposed of at the Tajiguas Landfill in accordance with County requirements. The Proposed Project would not involve a change in land use that would generate waste in the long term or have the potential to conflict with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.20 WILDFIRE

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



4.20.1 Environmental Setting

According to CAL FIRE, the Proposed Project site is located within a very high fire hazard severity zone and designated as a State Responsibility Area (CAL FIRE 2020). These zones are designated by CAL FIRE based upon statewide criteria established for the vegetation type, topography, weather, crown fire potential, ember production, and burn likelihood. Areas designated as a very high fire hazard severity zone typically occur in areas with unmaintained vegetation or steep terrain at the wildland/urban interface.

4.20.2 Impact Analysis

a) ***Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

No Impact. The Proposed Project consists primarily of the restoration of stream and nearby habitat in the Mission Canyon area. While Project activities are in progress, construction equipment would be delivered via local roadways and then stored at designated staging areas within the Project site, which occur at existing turnouts along the existing dirt access road north of the nearest residential areas. Access to the Project site is provided via Tunnel Road and the Mission Canyon Catway, neither of which are designated as evacuation routes by the City of Santa Barbara in its Wildland Fire Evacuation Procedure Analysis (City of Santa Barbara 2014). Similarly, these roads are not located on or adjacent to any of the evacuation routes identified by the County of Santa Barbara in its 2023 MJHMP and the 2013 Santa Barbara Operational Area Emergency Management Plan (County of Santa Barbara 2023b, 2013). Therefore, implementation of the Proposed Project would not impair an adopted emergency response plan or emergency evacuation plan.

Mitigation Measures: No mitigation measures are required.

b) ***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 Proposed Project primarily would involve the restoration of stream and nearby habitat and would not include the construction of new residential units or other structures. However, Project activities would require use of construction equipment and vehicles within Mission Canyon in an area with steep slopes supporting natural vegetation. These activities have the potential to generate heat or sparks from construction equipment or vehicles, and the use of flammable hazardous materials has the potential to ignite adjacent vegetation and start a fire, especially during weather events that include low humidity and high wind speeds. For example, heated exhausts or sparks from earth-moving and excavating equipment or other small gas-powered equipment like chainsaws may result in vegetation ignition.

As discussed in response 4.9.2(g), ***APM-HAZ-1*** would include preparation and implementation of a Fire Prevention and Emergency Response Plan that addresses on-site fire prevention, protocols, and response. The plan would detail the types of equipment that would be kept in each vehicle (e.g., shovel and extinguisher) and restrictions that must be followed by all construction staff (e.g., no smoking and no unauthorized off-road vehicle use) while working on site. The plan would also address procedures involving red flag warnings and sundowner wind warnings, as well as fire reporting, response, prevention, and evacuation routes. The Fire Prevention and Emergency Response Plan would be submitted to the County Fire Department for review at least 30 days prior to initiation of Project activities.

SCE would contract with a fire watch services contractor to provide wildland fire prevention and suppression services for the Project. The fire watch services contractor would provide on-site personnel to implement the Fire Prevention and Emergency Response Plan and coordinate with fire agencies during restoration and monitoring activities. The fire watch services contractor would have fire containment equipment on site, including fire engine(s), which may be used, along with the water trucks used on site in dust control, to extinguish fire. Each construction vehicle and truck would



be required to be “forest ready” equipped with a polaski, fire extinguisher, spill kit, and radio or cell phone for communication. All construction staff would receive WEAP training that includes fire safety protocols, rules against smoking, and communication/response steps in case of suspected fire or smoke. Monitoring and enforcement of the rules and protocols set forth in the Fire Prevention and Emergency Response Plan would be overseen by on-site fire watch services contractor fire safety specialists. SCE safety monitors and inspectors would also be present to assist in monitoring compliance with the Fire Prevention and Emergency Response Plan throughout the course of Project activities. Each day would include a review of the Project Activity Level to determine the type of equipment, regulations, and monitoring required at each work location, which would then be conveyed to construction workers during the morning tailboard meeting. The fire watch services personnel and SCE safety monitors would be responsible for ensuring compliance with all rules and safety regulations. Therefore, with implementation of the Fire Prevention and Emergency Response Plan, **APM-HAZ-1**, the potential for Project impacts associated with the exacerbation of wildfire risks and exposure of Project occupants to wildfire pollutant concentrations or spread of wildfire would be less than significant.

Mitigation Measures: No mitigation measures are required.

- c) ***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?***

No Impact. The Proposed Project would involve Construction Activities and Restoration Installation Activities of short duration (see Section 2.7.4) and periodic Maintenance and Monitoring Activities along an existing access road and locations within Mission Canyon including a portion of Mission Creek and tributaries to Mission Creek. An existing water hydrant at the Road Access Gate would provide the water source for temporary irrigation and dust watering needs. Any temporary irrigation pipeline systems installed would be removed following completion of the Maintenance and Monitoring Activities phase. There is no construction or extension of permanent infrastructure proposed and access to the Project site would be restricted to existing roadways. As such, the Project would result in no impact related to the installation or maintenance of associated infrastructure that may exacerbate fire risk or result in impacts to the environment.

Mitigation Measures: No mitigation measures are required.

- d) ***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. The Proposed Project is located within Mission Canyon, which is used by the public for recreational purposes (hiking and mountain biking). However, the Project would not include construction of structures. The Project is intended to stabilize slopes through restoration of upland and riparian vegetation and restore hydrologic function within the Project area by removing sidecast sediment and rock from areas of Mission Creek and its tributaries. Additionally, the Project includes berm stabilization/reconstruction and revegetation that would decrease runoff and increase slope stability after construction. During the Habitat Restoration Installation phase, the potential for fire risk, leading to post-fire slope instability, mudslides and downstream flooding, landslides or drainage changes would be minimized through implementation of the Fire Prevention and Emergency Response Plan (**APM-HAZ-1**). As described above, SCE would contract with a fire watch services contractor to prepare and implement the Fire Prevention and Emergency Response Plan, including the provision of on-site fire suppression equipment and fire agency coordination. The fire prevention and suppression services that would be implemented would prevent widespread burn of trees and vegetation that can lead to mud and debris flow during the rainy season due to a lack of ground cover to stabilize creek banks and slopes. During construction, slopes and unvegetated areas within the Project footprint would be stabilized through installation of BMPs set forth in the SWPPP to prevent erosion and downstream flooding during storm events (**APM-HYD-1**). The SWPPP requires final stabilization of all exposed ground surfaces within the Project footprint before the Project is considered complete. SCE safety monitors and inspectors would also



be on site to ensure that the measures set forth in both the SWPPP and Fire Prevention and Emergency Response Plan are followed throughout Project activities. The Project would include removal of stream impediments caused by sidecast and restore natural hydrology, in-stream habitat, and restoration of native vegetation, which would improve slope and creek stability and reduce sedimentation in the long term. There are no other grading, construction, or soil-disturbing activities proposed that could result in the exposure of people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Therefore, with implementation of the Fire Prevention and Emergency Response Plan (*APM-HAZ-1*), the potential for Project impacts associated with post-fire downstream flooding or landslides would be less than significant.

Mitigation Measures: No mitigation measures are required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓		
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

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

Less Than Significant Impact With Mitigation Incorporated. As discussed in Section 4.4, Biological Resources, the Proposed Project would involve Construction Activities and Restoration Installation Activities of short duration (see Section 2.7.4) and periodic Maintenance and Monitoring Activities along an existing access road and within Mission Canyon including a portion of Mission Creek and tributaries to Mission Creek. As Project work would occur within the creek and associated banks, all removal and associated revegetation and stabilization activities would occur under dry conditions to ensure work can be completed safely.

Based upon the results of the habitat assessments, rare plant surveys, fish habitat surveys, and vegetation mapping, the Proposed Project has the potential to result in direct impacts to one special-status plant species—Santa Barbara



honeysuckle (CRPR 1B.2)—and five special-status wildlife species—Southwestern pond turtle (SSC), Coast Range newt (SSC), coastal whiptail (SSC), coast horned lizard (SSC), and two-striped gartersnake (SSC).

The Proposed Project would not result in significant temporary or permanent impacts to any state- or federally listed plant or wildlife species. The APMs and **MM-BIO-1** and **MM-BIO-2** are incorporated into the Project to ensure impacts to sensitive plant and wildlife species and sensitive vegetation communities are kept to less-than-significant levels during implementation of the Project activities. The Project would include the removal of stream impediments caused by sidecast to restore natural stream hydrology and habitat within the Project area. The Project would also restore impacted native vegetation habitats and promote the regrowth of upland chaparral habitats, sensitive plants, and native trees. As such, the Project is not anticipated to reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal.

As discussed in Section 4.5, Cultural Resources, and Section 4.18, Tribal Cultural Resources, unanticipated discovery of cultural resources and/or Tribal Cultural Resources (including human remains) may occur during the Project's ground-disturbing activities. However, implementation of **APM-CUL-1** through **APM-CUL-5**, and **APM-TCR-1** and **APM-TCR-2** would reduce these impacts to a less-than-significant level.

Lastly, as described in Section 4.7, Geology and Soils, three geologic units occurring on the Project site, the Quaternary Landslide Deposits, Sespe Formation, and Coldwater Formations, have high potential for containing fossils. A variety of common fossil types were identified in rock outcroppings and in debris piles from prior road work in the Project area. Minimal subsurface excavation (maximum depth of 18 to 24 inches) may occur in previously undisturbed soil to plant trees and container plants; however, SCE would retain a qualified paleontologist to conduct monitoring when Project activities take place in areas that have not been previously disturbed. The level of monitoring may be adjusted in response to subsurface conditions at the discretion of the qualified paleontologist. The Proposed Project also includes an APM that requires that work be stopped and the SCE cultural resource specialist contacted if there is a discovery of fossils during construction as set forth in **APM-GEO-1** through **APM-GEO-5**. Thus, the Project is not anticipated to eliminate examples of California history or prehistory.

Mitigation Measures: Implementation of **MM-BIO-1** and **MM-BIO-2** would ensure that impacts to sensitive plant and wildlife species and sensitive vegetation communities are kept to less-than-significant levels during implementation of the Project activities.

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

Less Than Significant Impact With Mitigation Incorporated. An impact of the Proposed Project is cumulatively considerable if the *incremental effect* of conducting the Proposed Project would result in the combined impacts of past, current, and probable future projects increasing from below to above a significance threshold (i.e., a *less-than-significant* cumulative project impact would become *significant* if the impact of the Proposed Project is added). If the Proposed Project would not result in a direct or indirect impact to a resource, it would not contribute to a cumulative impact on that resource and need not be evaluated with respect to potential cumulative impacts. Resources for which direct or indirect impacts are not anticipated (agriculture and forestry resources, land use and planning, mineral resources, and population and housing), or for which the Project's potential impacts were already analyzed in a cumulative context (air quality, energy, GHG emissions, and noise), are not evaluated again here.



The potential for the Proposed Project to result in cumulatively considerable impacts is evaluated in the context of past, current, and probable future projects within the upper Mission Canyon Watershed that are similar to the Proposed Project in type or potential impacts. The past and probable future SCE projects in the upper Mission Canyon Watershed are:

- Past Projects
 - The December 2019 work
 - 2020 emergency work at Tunnel Trail Road and Inspiration Point Trailhead
 - 2020 Mission Canyon Road Repair Project
 - 2023 Storm Event Tunnel Trail Road Repair Project (TROW Storm Recovery Project)
 - 2023 Tunnel Trail Drainage Enhancement Project
- Probable Future Projects
 - Goleta-Santa Barbara Access Road Maintenance Project
 - Drainage improvements for Road Areas 5–9

Past projects conducted within the upper Mission Canyon Watershed that are similar in type or potential impacts to the Proposed Project include the December 2019 work; 2020 emergency work at Tunnel Trail Road and Inspiration Point Trailhead (County Emergency Permit 20EMP-00000-00001); the 2020 Mission Canyon Road Repair Project; the 2020 Mission Canyon Sidecast, Drain, and Tree Repair Project (conducted as part of the 2020 Mission Canyon Road Repair Project) (the 2020 work, collectively, authorized under ministerial County LUP No: 20LUP-00000-00132 and Grading Permit 20GRD-00034, and SWRCB Construction General Permit WDID #3 42C389878); the TROW Storm Recovery Project (County Emergency Permit 23EMP-00007); and the 2023 Tunnel Trail Drainage Enhancement Project. See Exhibit 9, Cumulative Projects. Except for the TROW Storm Recovery Project and the Tunnel Trail Drainage Enhancement Project (County LUP Exemption No: 22EXE-00000-00043), these past projects are each separate projects that acted to lessen or remediate different long-term impacts of the December 2019 work. The TROW Storm Recovery Project and the Tunnel Trail Drainage Enhancement Project are each separate projects unrelated to the December 2019 work. The TROW Storm Recovery Project was an emergency project needed to clear debris and repair the access road after major winter storms rendered the access road impassable. The Tunnel Trail Drainage Enhancement Project installed a single McCarthy drain with energy dissipator and three water diverters on the access road.

SCE submitted notifications to CDFW and obtained all other necessary regulatory authorizations to conduct the past projects listed above. SCE submitted a notification to CDFW for emergency work pursuant to Fish and Game Code Section 1610 for the 2020 emergency work at Tunnel Trail Road and Inspiration Point Trailhead (Notification No. 1600-2020-0090-R5). SCE submitted a notification to CDFW pursuant to Fish and Game Code Section 1602 for the 2020 Mission Canyon Road Repair Project (Notification No. 1600-2020-0142-R5); CDFW determined on August 26, 2020, that based on the notification an LSA agreement was not needed because the project would not substantially adversely affect an existing fish or wildlife resource. SCE submitted a notification to CDFW pursuant to Fish and Game Code Section 1602 for the 2020 Mission Canyon Sidecast, Drain, and Tree Repair Project (Notification No. 1600-2020-0146-R5); CDFW determined on October 28, 2020, that based on the notification an LSA agreement was not needed because the project would not substantially adversely affect an existing fish or wildlife resource. SCE submitted a notification to CDFW for emergency work pursuant to Fish and Game Code Section 1610 for the 2023 TROW Storm Recovery Project (Notification No. EPIMS-SBA-37214-R5) on February 28, 2023. The following projects are all complete: 2020 emergency work at Tunnel Trail Road and Inspiration Point Trailhead; the 2020 Mission Canyon Road Repair Project; the 2020 Mission Canyon Sidecast, Drain, and Tree Repair Project; the 2023 TROW Storm Recovery Project; and the Tunnel Trail Drainage Enhancement Project. No discretionary authorizations were required to perform any of these past projects and, therefore, each was determined exempt from CEQA.

Future projects in Mission Canyon that could occur at the same time as (unlikely) or after (likely) the Proposed Project are the Goleta-Santa Barbara Access Road Maintenance Project and drainage improvements for Road Areas 5–9 (see Exhibit 9). The Goleta-Santa Barbara Access Road Maintenance Project involves maintenance grading, road



improvements (installation of McCarthy drains, rolling dips/water bars, earthen berms, and riprap aprons) along Tunnel Trail Road/Mission Canyon Gateway access roads. Impacts to regulatory waters and sensitive vegetation communities associated with the Goleta-Santa Barbara Access Road Maintenance Project would total less than 1 acre. A Habitat Restoration Plan has been prepared to mitigate for impacts associated with implementation of the Goleta-Santa Barbara Access Road Maintenance Project, which would involve seeding and planting of native vegetation in sites within and adjacent to the Proposed Project. SCE separately anticipates installing McCarthy drains and riprap aprons within Road Areas 5–9 to improve drainage along Tunnel Trail Road. SCE submitted a notification to CDFW pursuant to Fish and Game Code Section 1602 for the Goleta-Santa Barbara Access Road Maintenance Project and proposed drainage improvements for Road Areas 5–9 (Notification No. EPIMS-LAN-13408-R5). As part of its issuance of an LSA agreement for the Goleta-Santa Barbara Access Road Maintenance Project and the drainage improvements for Road Areas 5–9, CDFW determined that the Goleta-Santa Barbara Access Road Maintenance Project and drainage improvements for Road Areas 5–9 would result in less-than-significant environmental impacts and issued a CEQA Notice of Exemption (State Clearinghouse No. 2021090575) on September 29, 2021, based on CCR, Title 14, Sections 15301, 15303, and 15304. On February 19, 2021, the Central Coast RWQCB issued CWA Section 401 Water Quality Certification No. 34220WQ17 authorizing USACE Nationwide Permit 12 coverage for the project under CWA Section 404, concluding that if implemented as described, the Project actions would be protective of beneficial uses of State waters in compliance with applicable provisions of Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards) of the CWA and State Water Board Water Quality Order No. 2003-0017-DWQ. The project also obtained authorization under SWRCB Construction General Permit WDID #3 42C393135. The Central Coast RWQCB determined the project exempt from review under CEQA pursuant to CCR, Title 14, Section 15031. The Goleta-Santa Barbara Access Road Maintenance Project and drainage improvements for Road Areas 5–9 include the maintenance and repair of the existing unpaved road, including minor grading of slopes less than 10%, trenching, and other associated alterations to topographical features to provide access to power lines and related structures to supply power to the public. The repair, maintenance, and minor alteration of the existing public roadway would not result in expansion of roadway capacity and was designed to reduce siltation from the road use to Mission Creek.

The incremental impacts of the Proposed Project would not be cumulatively considerable when viewed in connection with effect of the future projects described above because the impacts of the Goleta-Santa Barbara Access Road Maintenance Project and proposed drainage improvements for Road Areas 5–9 are limited and temporary.

As part of the Proposed Project, to remediate the impacts of the December 2019 work, SCE has also committed to provide a minimum of \$700,000.00 into an endowment to be used toward a future separate fish passage or other stream restoration project in Santa Barbara County. No specific project has been identified at this time, and any future project would be subject to separate CEQA review when a specific project is developed.

The Project is located in the Mission Canyon area. No other trails are closed within the Mission Canyon area; however, the winter storms of 2023 did close a number of trails nearby in Montecito and other parts of the County. These trails include the Arroyo Burro trail west of the Project site and the North Tunnel and Mattias Trails located on the back side of the Santa Ynez Mountains. In addition, the front side of the Romero Canyon Trail, portions of the San Ysidro Trail, and the Franklin Trail in Montecito are closed according to the U.S. Forest Service. These trail closures are temporary until necessary repairs have been completed. In addition, the County is processing a permit for a project that would require the temporary closure of the Hot Springs Trail in order to construct a new bridge. The project is estimated to require a temporary closure of the trail for 4 months. This project is in the land use entitlement phase so it is unclear when or if construction will occur. A substantial number of trails will remain open within the south coast area of Santa Barbara County and are available for use by the public during the proposed closure of Tunnel Trail. The trails that are open to the public include the following: portions of the Jesusita Trail, Rattlesnake Trail, Cold Springs Trail (both east and west), Hot Springs Trail, and Buena Vista Trail. In addition, numerous other recreational opportunities exist within Santa Barbara County, including a number of beaches, parks, and open space areas. The temporary closure of Tunnel Trail to conduct the restoration work would not cause a significant degradation of these other trails from overuse by



additional hikers because the closure is temporary and a substantial number of trails and other sources of recreation within the County remain open to accept the additional people that are not able to hike Tunnel Trail during the closure. Since a substantial number of trails and other recreational opportunities would remain open in the south coast area of the County and are not expected to be degraded by the additional hikers, the Project would not have a cumulatively considerable effect on recreational resources within the County.

The incremental effects of the Proposed Project are not cumulatively considerable when viewed in connection with the effects of past projects and probable future projects. As discussed in Chapter 4, the Proposed Project's potential impacts are generally related to restoring aesthetic and biological resources, geology and soils, and hydrology and water quality (less-than-significant temporary impacts and long-term benefits), along with less-than-significant temporary increases in use of water, energy and hazardous materials, hazards (including wildfire), noise, and air quality impacts associated with construction equipment use and hauling of sediment and rock to the landfill. Potential indirect impacts to public services (parks) and recreation would also be temporary and less than significant. Temporary impacts would cease upon completion of the Project and would only have the potential to combine with similar impacts of other projects if they occur at the same time and in proximity. Similar projects are unlikely to occur in the upper Mission Canyon Watershed concurrent with the Proposed Project.

The Project design, as well as APMs and MMs applied to the Project, would ensure that the Proposed Project is conducted in compliance with applicable regulatory requirements to protect environmental resources and the incremental effect of the Project's potential direct and indirect impacts would be less than significant. Following completion of the Proposed Project, the proposed slope stabilization, restoration of native vegetation, and removal of rock and sediment from the creek bed would result in benefits to biological resources, geology and soils, hazards, hydrology and water quality, and other environmental resources on the Project site and in the surrounding area of the upper Mission Canyon Watershed, including safer access for work crews and recreationalists, improved scenic vistas, and restored overall visual character and quality. Therefore, the Proposed Project's incremental effects on aesthetics, biological resources, tribal and other cultural resources, geology and soils, hydrology and water quality, transportation, hazards (including wildfire) and hazardous materials, public services, recreation, utilities and service systems, and other resources, when combined with the identified past and probable future projects, are not anticipated to result in any short- or long-term significant cumulative impact.

Mitigation Measures: Implementation of **MM-FGC-1, MM-FGC-2, MM-FGC-3, MM-FGC-4, MM-FGC-5, MM-BIO-1, MM-BIO-2** and **MM-HYD-1** would ensure that impacts of the Project would not be cumulatively considerable.

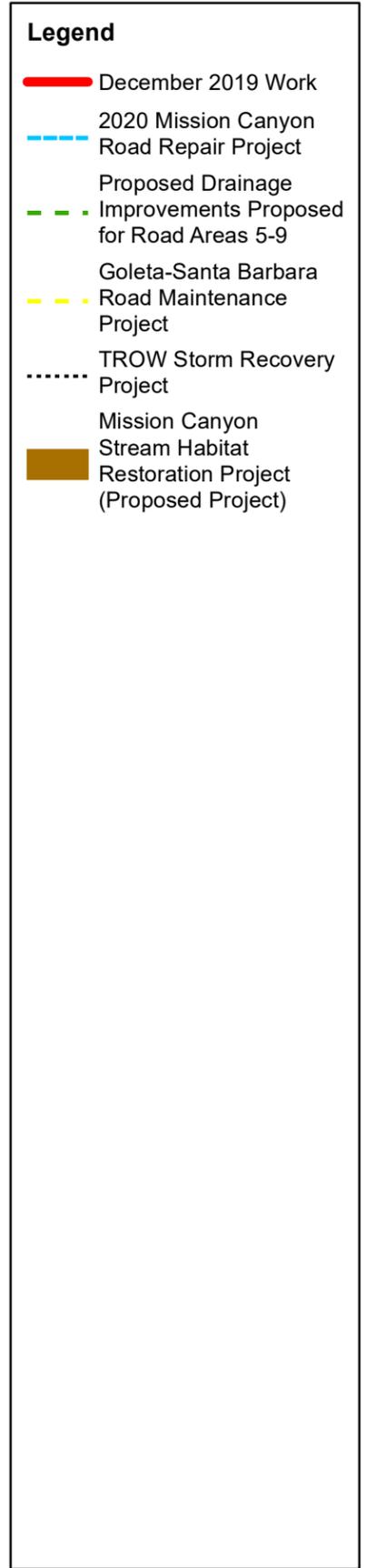
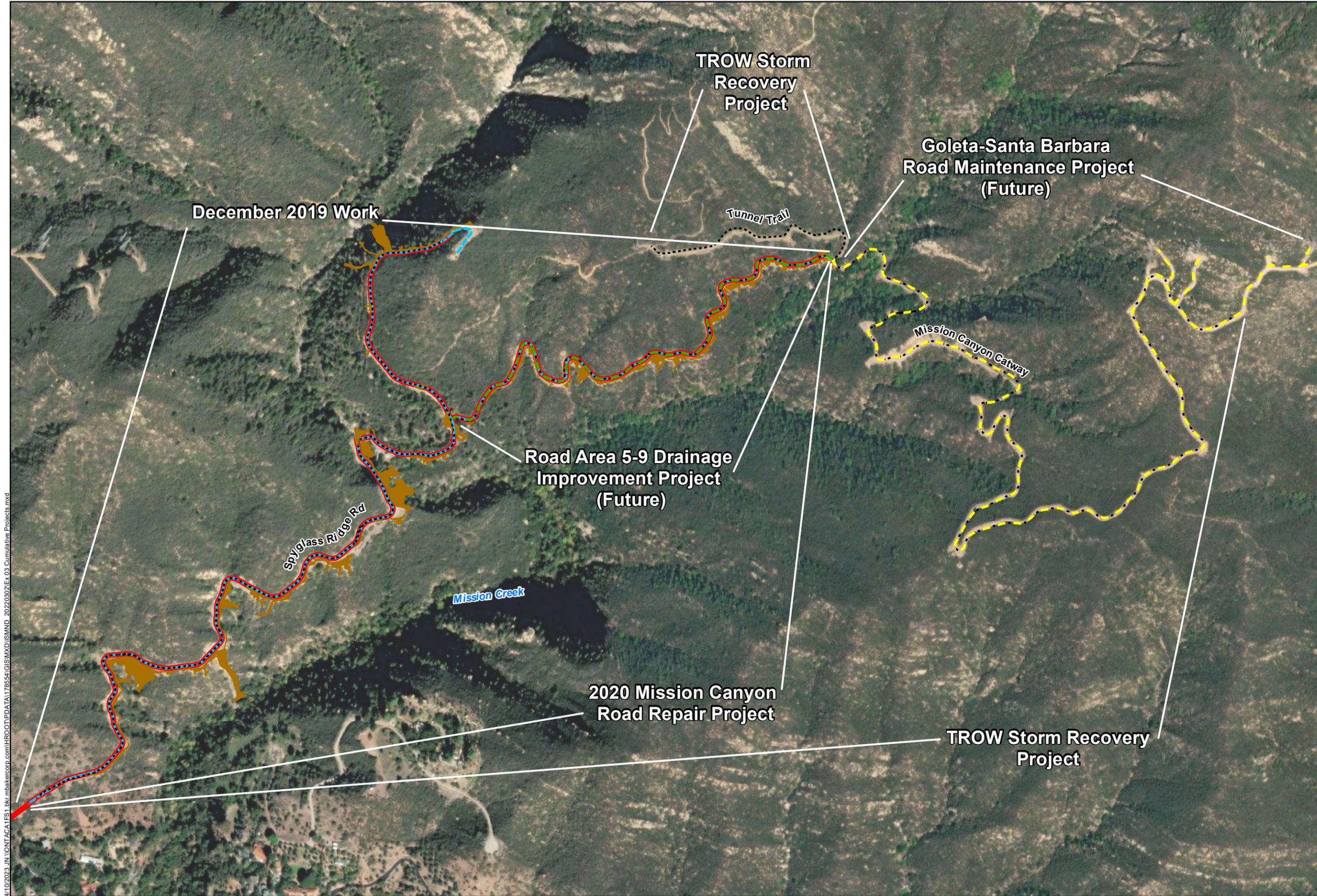
c) ***Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?***

Less Than Significant Impact With Mitigation Incorporated. Previous sections of this IS reviewed the Proposed Project's potential impacts related to aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, GHG 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, and wildfire. The Proposed Project is intended to restore the Project site, including Mission Creek, to its natural condition before the December 2019 work occurred. In the long term, the Proposed Project is intended to restore the natural character and improve the scenic value of the Project area, resulting in beneficial aesthetic impacts. Additionally, as concluded in the previous discussions, implementation of the sidecast removal and restoration activities in accordance with the HRMP (Appendix A), including application of the APMs and MMs, would result in less-than-significant environmental impacts. Therefore, the Proposed Project would not result in environmental impacts that would cause substantial adverse effects on human beings, either directly or indirectly.

Mitigation Measures: Implementation of **MM-FGC-1, MM-FGC-2, MM-FGC-3, MM-FGC-4, MM-FGC-5, MM-BIO-1, MM-BIO-2** and **MM-HYD-1** would ensure that adverse effects on human beings would be less than significant.



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6.0 REFERENCES

The following references were utilized during preparation of this IS/MND. These documents are available for review at the Santa Barbara Public Library (40 East Anapamu Street Santa Barbara, California 93101) and the CDFW Seal Beach Field Office (3030 Old Ranch Parkway, Suite 400 Seal Beach, California 90720) or accessed at the indicated web page.

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