

State Route 138 Curve Correction

SAN BERNARDINO, CALIFORNIA
DISTRICT 8 –SBD–138 (PM T16.20/R17.35)
08-1M080/0821000070

Initial Study with Proposed Mitigated Negative Declaration



Prepared by the
State of California, Department of Transportation



February 2025

General Information about This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of the alternatives being considered for the proposed project located in San Bernardino County. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

What you should do:

- Please read this document.
- Additional copies of this document and the related technical studies are available for review at the Caltrans District 8 Office at 464 West 4th Street, San Bernardino, California. This document may also be requested from the contact listed below.
- We'd like to hear what you think. If you have any comments about the proposed project, please send your written comments via postal mail or email to Caltrans by the deadline.
- Send comments via postal mail to:
 - Gita Tokhmafshan
464 West 4th Street, MS 827
San Bernardino, CA 92401
- Send comments via email to: Gita.Tokmafshan@dot.ca.gov.
- Be sure to send comments by the deadline: March 20, 2025.

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans could design and construct all or part of the project.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Gita Tokhmafshan; (909) 501-5742 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

SCH# _____
08-SBd-138-PM T16.20/R17.35
08-1M080
0821000070

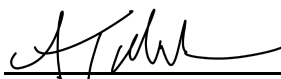
Realign State Route 138 (SR-138), from 1.0 mile east of Interstate 15 (I-15) to just west of Hog Ranch Creek Bridge (PM T16.20 to R17.35) near the City of Hesperia in San Bernardino County.

Draft INITIAL STUDY with Proposed Mitigated Negative Declaration
Submitted Pursuant to: (State) Division 13, California Public Resources Code
(Federal) 42 USC 4332(2)(C)

THE STATE OF CALIFORNIA
Department of Transportation

Responsible Agencies: California Transportation Commission, State Historic Preservation Officer, California Department of Fish and Wildlife, Santa Ana Regional Water Quality Control Board, U.S. Army Corps of Engineers

02/10/2025
Date

For 
Kurt Heidelberg
Deputy District Director
California Department of Transportation
NEPA and CEQA Lead Agency

The following persons may be contacted for more information about this document:

Gita Tokhmafshan
464 W 4th Street MS 827
San Bernardino, CA
(909) 501-5742

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to realign State Route 138 (SR-138) from 1.0 mile east of Interstate 15 (I-15) to just west of Hog Ranch Creek Bridge, near the City of Hesperia in San Bernardino County.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on Agriculture/Forestry Resources, Air Quality, Energy, Hazards & Hazardous Materials, Land Use/Planning, Mineral Resources, Noise, Population/Housing, Public Services, Recreation, Utilities/Service Systems.

In addition, the proposed project would have less than significant effects to Cultural Resources, Geology/Soils, Greenhouse Gas Emissions, Hydrology/Water Quality, Transportation, Tribal Cultural Resources, and Wildfire.

With the following mitigation measures incorporated, the proposed project would have less than significant effects to: Aesthetics, Biological Resources, and Paleontological Resources.

VIS-1: Revegetation: Disturbed slopes will be revegetated with replacement trees and non-irrigated hydroseed containing native seed. Removal of trees within portions of the project's riparian areas and along hillsides will be replaced at a 3:1 tree replacement-to-removal ratio, with a 1–5-year plant establishment (PE) period.

VIS-2: Slope Stabilization: Native seed will be applied to all disturbed soil areas and cut/fill slopes.

BIO-Mitigation-1: Habitat Compensation: Compensatory mitigation for permanent impacts to California sycamore riparian woodland and Sandbar willow will be provided at a 1:1 ratio, through on-site restoration activities, suitable mitigation/conservation bank credits, and/or suitable in-lieu fee program credits.

BIO-Mitigation-2: Aquatic Resources: Compensatory mitigation for permanent impacts to jurisdictional aquatic will be provided at a 1:1 ratio, through on-site restoration activities, suitable mitigation/conservation bank credits, and/or suitable in-lieu fee program credits.

PAL-1: Paleontological Mitigation Plan: A PMP must be prepared by a qualified paleontologist and must include the following elements:

- Required preconstruction paleontological sensitivity training for earthmoving personnel to include documentation of training (sign-in sheets, hard hat stickers)
- A signed repository agreement
- Field and laboratory methods proposed (must be consistent with repository requirements)
- All elements under reporting: PMP Format (Caltrans 2003)
- Required Paleontological Mitigation Report (PMR) upon completion of project earthmoving.

Kurt Heidelberg
Deputy District Director
District 08
California Department of Transportation

Date

Table of Contents

General Information about This Document.....	ii
Proposed Mitigated Negative Declaration	iv
Table of Contents	vi
List of Tables	viii
List of Figures	viii
Chapter 1 Proposed Project.....	1
1.1 INTRODUCTION.....	1
1.2 PURPOSE AND NEED	2
1.2.1 Purpose	2
1.2.2 Need.....	2
1.3 PROJECT DESCRIPTION.....	3
1.4 PROJECT ALTERNATIVES.....	3
1.4.1 No-Build (No-Action) Alternative.....	3
1.4.2 Build Alternative.....	4
1.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION	4
1.5.1 Shortened Realignment Alternative	4
1.6 PERMITS AND APPROVALS NEEDED	5
Chapter 2 California Environmental Quality Act (CEQA) Evaluation.....	6
2.1 CEQA ENVIRONMENTAL CHECKLIST	6
2.1.1 Aesthetics	7
2.1.2 Agriculture and Forestry Resources	9
2.1.3 Air Quality	11
2.1.4 Biological Resources	13
2.1.5 Cultural Resources	37
2.1.6 Energy	40
2.1.7 Geology and Soils	41
2.1.8 Greenhouse Gas Emissions.....	47
2.1.9 Hazards and Hazardous Materials	49
2.1.10 Hydrology and Water Quality.....	52
2.1.11 Land Use and Planning	55

2.1.12	Mineral Resources	57
2.1.13	Noise	58
2.1.14	Population and Housing	59
2.1.15	Public Services.....	60
2.1.16	Recreation.....	61
2.1.17	Transportation	62
2.1.18	Tribal Cultural Resources.....	64
2.1.19	Utilities and Service Systems	67
2.1.20	Wildfire	69
2.1.21	Mandatory Findings of Significance.....	71
2.2	CLIMATE CHANGE	74
2.2.1	Regulatory Setting	74
2.2.2	Environmental Setting	76
2.2.3	Project Analysis	79
2.2.4	Greenhouse Gas Reduction Strategies	82
2.2.5	Adaptation	84
2.2.6	References	90
Chapter 3	Comments and Coordination.....	93
3.1	Native American Tribes.....	93
3.2	U.S. Fish and Wildlife Service	93
3.3	Public Participation.....	94
Chapter 4	List of Preparers	95
Chapter 5	Distribution List.....	96
5.1	Public Agencies, Elected Officials, and Service Providers	96
5.2	Interested Parties, Property Owners, and Members of the Public.....	97
Appendix A	Title VI/Non-Discrimination Policy Statement	98
Appendix B	Avoidance, Minimization and/or Mitigation Summary	99
Appendix C	List of Technical Studies	100

List of Tables

Table 1.2.2-1-1 TASAS Table B 36 months Collision Rates 7/1/2020-6/30/2023	2
Table 1.5.1-1: Permits and Approvals	5
Table 2.1.4-1 Impacts to WOTUS, WSC, and CDFW (acres)	31
Table 2.2.2-1 Regional and Local Greenhouse Gas Reduction Plans	79

List of Figures

Figure 1.2.1-1 SR-138 Curve Realignment Project Location and Vicinity	1
Figure 2.1.4-1 USFWS National Wetlands Inventory	28
Figure 2.1.4-2 Federal Aquatic Resources Delineation	29
Figure 2.1.4-3 CDFW Aquatic Resources Delineation	30
Figure 2.1.11-1 LU-1 (A-E) San Bernardino Countywide Plan Land Use Categories 2023	56
Figure 2.2.2-1 U.S. 2022 Greenhouse Gas Emissions.....	77
Figure 2.2.2-2 California 2021 Greenhouse Gas Emissions by Economic Sector.....	78
Figure 2.2.2-3 Change in California GDP, Population, and GHG Emissions since 2000	78
Figure 2.2.5-1 NOAA 10 feet and COSMOS 16.4 feet Sea Level Rise	88
Figure 2.2.5-2 CalFIRE Fire Hazard Severity Zone Map.....	89

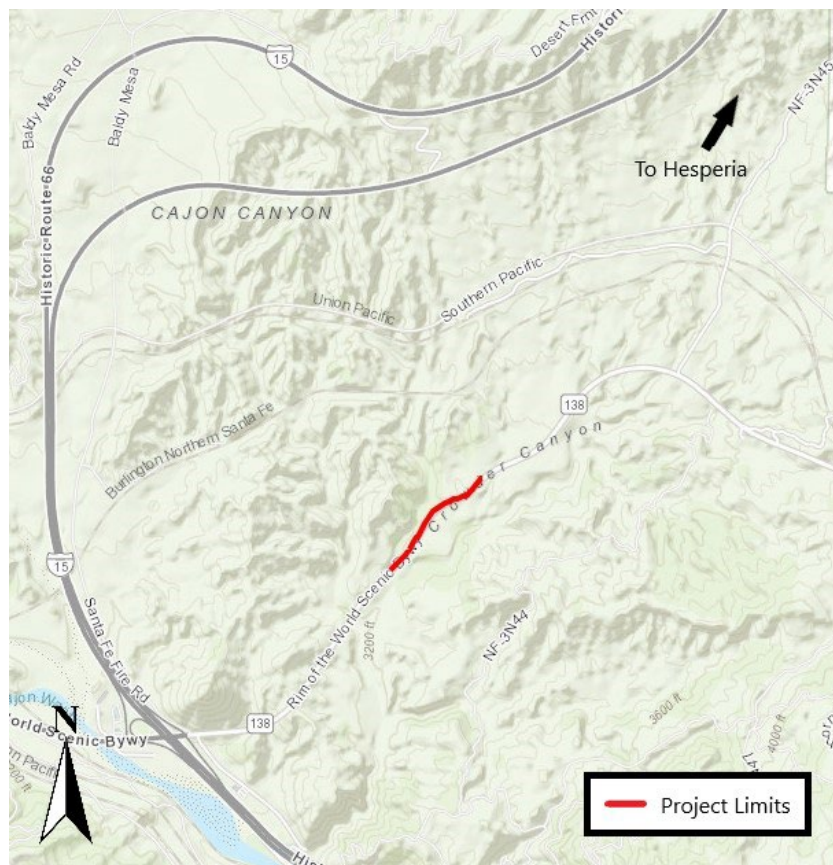
Chapter 1 Proposed Project

1.1 INTRODUCTION

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Caltrans proposes to realign State Route 138 (SR-138) from 1.0 mile east of Interstate 15 (I-15) to just west of Hog Ranch Creek Bridge, near the City of Hesperia, in San Bernardino County. The proposed project would revise the vertical and horizontal alignments within this segment to enhance safety and reduce the number of run-off-the-road and cross-centerline collisions. The project would perform drainage improvements and upgrade the guardrails at the easternmost end of the project limits. The total length of the project is 1.08 miles. Figure 1.1-1 SR-138 Curve Realignment Project Location and Vicinity displays the project location and vicinity.

The project is included in the 2025 Federal Transportation Improvement Program (FTIP) and is proposed for funding under the 2024 State Highway Operation and Protection Program (SHOPP) 201.010/HB1.

Figure 1.2.1-1 SR-138 Curve Realignment Project Location and Vicinity



1.2 PURPOSE AND NEED

1.2.1 Purpose

The purpose of the project is to reduce the frequency and severity of collisions on this segment of SR-138, bring this segment of SR-138 up to current standards, increase the drainage capacity, and improve climate resilience.

1.2.2 Need

The existing highway configuration within the project limits does not meet the current standard for horizontal and vertical alignments, and the rate of collisions resulting in injuries or fatalities for this segment is approximately 4.5 times greater than the statewide average for similar facilities. Recent Traffic Accident Surveillance and Analysis System (TASAS) data has identified this location as one with a high concentration of run off the road and cross centerline collisions. Additionally, the existing 102" culvert located approximately at Post Mile (PM) T16.3 was identified in the Caltrans Adaptation Priority Report as being vulnerable to severe riverine flooding and wildfire associated with climate change.

1.2.2.1 Configuration and Alignment

Within the project limits from PM T16.20 to R17.35, SR-138 is a two-lane conventional highway through mountainous areas, with minimal paved shoulders and little-to-no earth shoulders. The highway alignment consists of small horizontal curve radii, steep grades, and short vertical curve lengths. The horizontal alignment contributes to a nonstandard stopping sight distance, while the steep grades impact braking distance. SR-138 would also benefit from wider shoulders within the project limits to provide a safeguard for drivers to avoid potential collisions.

1.2.2.2 Collision Data

Caltrans TASAS Table B summarizes collision rates for mainline SR-138 from PM T16.20 to R17.35 in San Bernardino County. The TASAS Table B report shown in Table 1.2.2-1-1 depicts collision rates per Million Vehicles (MV). The actual rates of collisions per MV for the project limits during the study period (July 2020-June 2023) were compared to the average rates for similar facilities throughout California.

Table 1.2.2-1-1 TASAS Table B 36 months Collision Rates 7/1/2020-6/30/2023

Location	Total No. of Collisions	Actual Rates (per million vehicles)			Average Rates (per million vehicles)		
		Fatal	Fatal + Injury	Total ⁽¹⁾	Fatal	Fatal + Injury	Total ⁽¹⁾

08-SBd-138 PM T16.22/R17.3	29	0.076	1.360	2.191	0.015	0.210	0.475
----------------------------------	----	-------	-------	-------	-------	-------	-------

Source: TASAS. Data were retrieved on 2/20/2024.

Note:

- 1) Total includes all reported crashes, including Property Damage Only (PDO) Crashes.
- 2) Shading indicates collision rates are higher than the statewide average for similar vehicles.

The TASAS Selective Accident Retrieval (TSAR) analysis, generated February 20, 2024, studied the types of collisions and primary collision factors for the project limits.

Types of collision within project limits:

- 9 collisions were Hit Object
- 7 collisions were Overturn
- 4 collisions were Rear-End
- 4 collisions were Sideswipe
- 3 collisions were Head-On
- 2 collisions were Broadside

Primary collision factors within project limits:

- Speeding
- Improper Turn
- Other Violations
- Influence Alcohol
- Failure to Yield

1.3 PROJECT DESCRIPTION

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are the Build Alternative and the No-Build Alternative.

Caltrans proposes to realign SR-138 from PM T 16.20 1.0-mile east of Wagon Train Road to PM R17.35 at Hog Creek Bridge, near the City of Hesperia, in San Bernardino County. The proposed project will improve the vertical and horizontal alignment within this segment to enhance safety and reduce the number of collisions.

1.4 PROJECT ALTERNATIVES

1.4.1 No-Build (No-Action) Alternative

The No-Build Alternative would take no action to enhance safety within the project area and would not make any other improvements to drainage or climate resiliency of the existing facility. SR-138 would remain at its current alignment and geometry. No ground

disturbance or environmental impacts would be directly associated with the No-Build Alternative. However, damage to the facility from storm or wildfire events exacerbated by climate change could lead to indirect impacts on the project area. The No-Build Alternative would not fulfill the Purpose and Need of the project, and under the No-Build Alternative, the collision rates within the project limits would not be expected to improve.

1.4.2 Build Alternative

Build Alternative 1 proposes to realign SR-138 from 1.0 mile east of I-15 to just west of Hog Ranch Creek Bridge. The project would improve the vertical and horizontal alignments, provide standard 8-foot shoulders for both directions of traffic, install centerline and shoulder rumble strips, and replace metal beam guardrail (MBGR) with new Midwest Guardrail System (MGS). A retaining wall would be constructed along the westbound direction of traffic.

Realigning SR-138 would involve removing the culvert at PM 17.0 (Culvert A) and its associated features, excavating the channel to match the existing upstream and downstream flowline, and constructing a new Culvert A in the same flowline underneath the new alignment. Alternative 1 also proposes rehabilitating a culvert at PM 16.27 (Culvert B), which is located approximately 40 feet underneath the roadway, and performing other drainage improvements as needed at the west end of the project limits.

1.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

Caltrans considered several alternatives and variations on alternatives to meet the Purpose and Need of the project. Potential build alternatives which did not meet the Purpose and Need or would not have been feasible were eliminated from the project.

1.5.1 Shortened Realignment Alternative

Caltrans considered shortening the length of the segment of SR-138 to be realigned to avoid and reduce potential impacts to resources such as the San Bernardino National Forest and the Crowder Canyon Archeological District, as well as to reduce project construction costs. The shortened realignment would have straightened the most severe curves from approximately PM 16.8 to PM 17.3. However, after analyzing the shortened realignment alternative further, Caltrans found that although the shorter realignment would have helped to address the frequency and severity of collisions throughout the project limits, it would have still left non-standard curves within the project limits. Due to the topography of the project area and the shape of the existing facility, it would not be possible to completely bring this segment of SR-138 up to current standards without realigning throughout the entire segment. Furthermore, the shortened realignment does not fully avoid environmental impacts as it is still located within Crowder Canyon Archaeological District and still impacts the same jurisdictional

wetland and wash areas. For these reasons, the shortened realignment alternative was eliminated from further consideration.

1.6 PERMITS AND APPROVALS NEEDED

The following permits, licenses, agreements, and certifications (PLACs) are required for project construction:

Table 1.5.1-1: Permits and Approvals

Agency	PLAC	Status
California Department of Fish and Wildlife (CDFW)	1600 Lake and Streambed Alteration Agreement	Submittal targeted for late Design phase, June 2025
Santa Ana Regional Water Quality Control Board (RWQCB)	Clean Water Act Section 401 Certification	Submittal targeted for late Design phase, June 2025
US Army Corps of Engineers (USACE)	Clean Water Act Section 404 Non-Reporting	Submittal targeted for late Design phase, June 2025

Chapter 2 California Environmental Quality Act (CEQA) Evaluation

2.1 CEQA ENVIRONMENTAL CHECKLIST

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

2.1.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant with Mitigation Incorporated
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a 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?	No Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No Impact

CEQA Significance Determinations for Aesthetics

A Visual Impact Assessment Memorandum was approved October 11, 2024, according to the guidance outlined in the publication Guidelines for the Visual Impact Assessment of Highway Projects published by the FHWA in January 2015, and the Caltrans 2023 VIA Handbook (Handbook).

a) No Impact

The proposed project is not anticipated to have an adverse effect on a scenic vista because the new alignment will be designed to complement the existing visual character of the project area. VIS-2 through VIS-4 will be implemented to enhance the new alignment's aesthetics.

b) Less than Significant Impact with Mitigation Incorporated

SR-138 is eligible as a scenic highway in the project area and is also known as the Rim of the World Scenic Byway.

Minimal damage is anticipated to the scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within the state scenic highway. Tree removal within portions of the riparian areas and along hillsides is anticipated, and any potential impacts to trees will be mitigated to less than significant with mitigation incorporated through implementation of VIS-1, VIS-2, and BIO-Arthropod-PSM-2.

c) No Impact

The proposed project is located within a non-urbanized area and is anticipated to have a moderately beneficial effect to the visual character and quality of public views of the site and its surroundings. The project will be designed to complement the existing visual character and quality of the project area. VIS-2 through VIS-4 as listed above will be implemented to enhance the new alignment's aesthetics.

d) No Impact

The proposed project would not create a new source of substantial light or glare as it would be replacing the existing facility only, and not installing any new lighting or reflective objects. New Midwest Guardrail System (MGS) would receive natural color and staining finishes to help blend the MGS into the surrounding natural landscape as per VIS-3.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to visual resources:

VIS-1: Revegetation: Disturbed slopes will be revegetated with replacement trees and non-irrigated hydroseed containing native seed. Removal of trees within portions of the project's riparian areas and along hillsides will be replaced at a 3:1 tree replacement-to-removal ratio, with a 1–5-year plant establishment (PE) period.

VIS-2: Slope Stabilization: Native seed will be applied to all disturbed soil areas and cut/fill slopes.

VIS-3: MGS Enhancement: Apply natural finish to MGS to blend in with natural landscape and to match the existing MGS to the west of the project limits.

VIS-4: Retaining Wall Enhancement: The retaining wall will receive architectural treatment and railing that matches the aesthetic at the nearby Hog Ranch Creek bridge.

BIO-Arthropod-PSM-2: Plant Seed Mix: Seed mixes must contain a diverse array of pollinator plant species native to California including but not limited to California native *Asclepias*, *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.

2.1.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Question	CEQA Determination
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?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

CEQA Significance Determinations for Agriculture and Forestry Resources

a) No Impact

The project limits are not located within land identified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), and therefore have no potential to convert such lands to non-agricultural use.

b) No Impact

The project limits are zoned for Open Space and Very Low Density Residential, and therefore have no potential to conflict with zoning for agricultural use. No Williamson Act lands exist within the project limits.

c) No Impact

The project limits are entirely within existing Caltrans Right of Way and is not located in an area zoned as a Timber Production Zone by either the County of San Bernardino or the US Forest Service, San Bernardino National Forest (SBNF).

d) No Impact

The project limits are entirely within existing Caltrans Right of Way and would not result in the loss of forest land or conversion of forest land to non-forest use. The existing and new SR-138 alignments are included as a utility corridor in the SBNF Land Management Plan.

e) No Impact

The project limits are entirely within existing Caltrans Right of Way not located within or adjacent to Farmland, so the proposed project has no potential to result in conversion of farmland to non-agricultural use, nor conversion of forest land to non-forest use.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for agriculture and forestry.

2.1.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
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?	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	No Impact

CEQA Significance Determinations for Air Quality

a),b) No Impact

An Air Quality Review Memorandum and Transportation Air Quality Conformity Checklist were approved July 31, 2024 and determined that the project falls under the exempt project type “Safety Improvement Project” listed under Table 1 of the Caltrans Carbon Monoxide Protocol or Table 2 of 40 CFR 93.126. Thus, no Air Quality Study is required. Caltrans 2024 Standard Specifications Section 14-9.02 requires all projects to comply with air pollution control rules, regulations, ordinances, and statutes that apply to work performed under the project contract, including California Government Code Section 11017, and prohibits disposing of material by burning, unless otherwise adjusted. The project also includes standard dust palliatives for earthwork.

The proposed project proposes no capacity-increasing improvements. The scope of the proposed project is consistent with the State Highway Operation and Protection Program (SHOPP) and Southern California Association of Governments’ (SCAG’s) Federal Transportation Improvement Program (FTIP). No net increase of any criteria pollutant is anticipated.

c),d) No Impact

The project area does not contain any developed or recreational areas and does not contain sensitive receptors or a substantial number of people. The proposed project would also follow Caltrans 2024 Standard Specifications (or most recent) to control emissions and dust during construction. The project is not anticipated to expose sensitive receptors to substantial pollutant concentrations. The project

is not anticipated to result in other emissions adversely affecting a substantial number of people.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for air quality.

2.1.4 Biological Resources

Would the project:

Question	CEQA Determination
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 Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant Impact
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 Wildlife or U.S. Fish and Wildlife Service?	Less Than Significant with Mitigation Incorporated
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?	Less Than Significant with Mitigation Incorporated
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?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
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?	No Impact

CEQA Significance Determinations for Biological Resources

A Natural Environment Study (NES) was approved May 29, 2024, and was updated with an NES Addendum which was approved November 6, 2024. The NES incorporated a Western Joshua Tree Habitat Assessment approved March 16, 2023, Small Mammal Habitat Assessment approved March 23, 2023, and Jurisdictional Delineation Report (JDR) approved June 23, 2023. The Project Impact Area (PIA) is defined as the area in which all construction activity will occur. The Biological Study Area (BSA) included a 500-foot buffer around the PIA. The survey area for the JDR included a 100-foot buffer around the PIA.

The NES also contained the following official species lists and mapping:

- Official US Fish and Wildlife Service (USFWS) List of Proposed, Candidate, Threatened, and Endangered Species and Critical Habitats,

obtained through the USFWS Information for Planning and Consultation (IPaC) system on October 1, 2024

- California Natural Diversity Database (CNDDDB) Official Species List, obtained October 1, 2024
- California Native Plant Society (CNPS) Species List, obtained April 24, 2024
- USDA Web Soil Survey Report, Version 14, September 1, 2022
- National Wetlands Inventory, obtained February 22, 2024

a) Less Than Significant Impact

No critical habitat was listed as being present in the project Biological Study Area (BSA). Caltrans has determined that the proposed project will have No Effect on USFWS critical habitat or other protected species.

Rare Plants

The plants listed are considered to be of special concern based on federal, State, or local laws regulating their development, limited distributions, and/or the presence of habitat required by the special-status plants occurring on site. CNPS List 3 and 4 plant species have been eliminated from further analysis unless included on the CNDDDB RareFind Survey. Based on the literature review, site characteristics, and the biological surveys for this Project, it was determined that the federally or State-listed plant species listed below have the potential to occur within the BSA. No federally or State-listed plants were observed during the surveys.

- Greata's aster (*Symphyotrichum greatae*) CNPS Ranked 1B.3
- Latimer's woodland-gilia (*Saltugilia latimeri*) CNPS Ranked 1B.2
- Mojave milkweed (*Asclepias nyctanginiglia*) CNPS Ranked 2B.1
- Palmer's mariposa-lily (*Calochortus palmeri* var. *palmeri*) CNPS Ranked 1B.2
- Plummer's mariposa-lily (*Calochortus plummerae*) CNPS Ranked 1B.2
- San Bernardino aster (*Symphyotrichum defoliatum*) CNPS Ranked 1B.2
- Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) CNPS Ranked 1B.2

- White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) CNPS Ranked 1B.2
- White pygmy-poppy (*Canbya candida*) CNPS Ranked 4.2

Potential permanent impacts to plant species may occur in association with the proposed project due to disturbances associated with road realignment, road widening, vegetation removal, and shoulder backing. Potential temporary impacts may occur due to driving/parking off-pavement, disposal/borrow sites, equipment staging areas, drainage/culvert work, and ground disturbance. Indirect impacts may result to plant species due to nonnative species introduction and increased dust, both of which could reduce the quality of habitat or affect the survival and reproductive fitness of the plant species comprising the community. Indirect impacts may include modified hydrology, dust, and an increased risk of wildfire. The project is anticipated to have No Effect and No Take of federally and State-listed plants.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-6, BIO-General-7, BIO-General-8, BIO-General-16, and BIO-Plant-PSM-3 would be implemented to avoid and minimize effects to plant species during construction.

Special Status Animal Species

The animal species discussed below are considered to be of special concern based on 1) federal, State, or local laws regulating their development, 2) limited distributions, and/or 3) the habitat requirements of special-status animals occurring on site. A red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), gull (*Larus* sp.), northern mockingbird (*Mimus polyglottos*), California towhee (*Melospiza crissalis*), and American robin (*Turdus migratorius*) were observed during the 2023 surveys. No federally or State-listed animals were observed during surveys.

Monarch Butterfly

Monarch butterfly (*Danaus plexippus*) is a Federal Candidate Endangered species. Milkweed is required for monarch habitat for egg laying and to provide food for larvae. The species ranges from South America to Canada and overwintering populations are found in Mexico, California, Arizona, and along the US East Coast. They require access to streams, plenty of sunlight, and appropriate roosting vegetation that is relatively free from predators. While breeding, monarchs can be found in agricultural fields, pasture land, prairie remnants, urban and suburban residential areas, gardens, trees, and roadsides.

Caltrans is a participant in the Monarch Butterfly Nationwide Candidate Conservation Agreement with Assurance (CCAA) with integrated Candidate Conservation Agreement (CCA). Implementation of the CCAA/CCA is directed by the two integrated parts consisting of the CCAA for activities conducted on non-Federal lands and the integrated CCA for conservation measures and covered activities implemented on Federal lands. The Agreements provides participants regulatory assurances that additional conservation measures will not be required if the monarch is protected under the ESA. Should the monarch be listed as a federally endangered or threatened species, areas that are enrolled under the CCAA/CCA do not require further Federal Endangered Species Act (FESA) Consultation for monarch butterflies. The species is considered covered, and no further action is required by Caltrans.

No monarch butterflies were observed during the 2023 surveys. However, the project limits are within the CCAA Proposed Enrolled Acres. Furthermore, the Caltrans Division of Environmental Analysis (DEA) Geographic Information System (GIS) Monarch Butterfly Habitat Suitability Model mapped High and Medium Monarch Butterfly Habitat Suitability within five miles of an overwintering site. CNDDDB also shows historical milkweed found in the area, and this segment of SR-138 is within the Nationwide Candidate Conservation Agreement with Assurances (CCAA) Monarch Butterfly Proposed Enrolled Acres. This indicates that there is a potential for monarch butterflies to be present in the BSA.

The project has the potential to directly impact monarch butterfly during construction by the removal of host plants for construction. Potential impacts to host plant species may occur due to road realignment, road widening, driving/parking off pavement, disposal/borrow sites, equipment staging areas, drainage/culvert work, shoulder backing, ground disturbance, and vegetation removal. Temporary impacts are anticipated from staging areas, construction access points, temporary access ways, and other impacted areas which would contain no permanent structures or materials and are proposed to be restored to pre-construction conditions. Permanent impacts are anticipated due to road widening, road realignment, and shoulder backing. Indirect impacts may result to monarch butterfly due to nonnative species introduction and increased dust, both of which could reduce the quality of habitat or affect the survival and reproductive fitness. Indirect impacts may include modified hydrology, dust, and an increased risk of wildfire. The project is anticipated to have No Effect to monarch butterfly.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-7, BIO-General-8, BIO-General-16, BIO-Arthropod-1, and BIO-Arthropod-PSM-2 would be implemented to avoid and minimize effects to monarch butterfly during construction.

Crotch Bumblebee

Crotch bumblebee (*Bombus crotchii*) is a State Candidate Endangered species. This species inhabits coastal California, east to the Sierra-Cascade crest, and south into Mexico. Food preferences include *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum* species.

No Crotch bumblebees or their host plants were observed during the 2023 surveys. However, CNDDDB has a recorded observation of Crotch bumblebee approximately 0.55 miles from the BSA from 1923. Furthermore, the food preferences for this species are not rare and can be found in the area.

The project has the potential to directly impact Crotch bumblebee by the removal of host plants during construction. Potential temporary impacts to host plant species may occur due to driving/parking off pavement, disposal/borrow sites, equipment staging areas, ground disturbance, and vegetation removal. Potential temporary impacts may occur due to road widening, road realignment, and shoulder backing. Indirect impacts may occur due to nonnative species introduction and increased dust, which could reduce the quality of habitat or affect the survival and reproductive fitness of the plant species comprising the community. Indirect impacts may include modified hydrology, dust, and an increased risk of wildfire. The project is anticipated to have No Take to Crotch bumblebee.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-7, BIO-General-8, BIO-General-16, BIO-Arthropod-1, and BIO-Arthropod-PSM-2 would be implemented to avoid and minimize effects to monarch butterfly during construction.

Arroyo toad

The arroyo toad (*Anaxyrus californicus*) is a federally listed endangered species and CDFW Species of Special Concern (SSC). This species can withstand warmer and drier habitats by burrowing into sand and protecting themselves with a thin shell of epidermis. Arroyo toads are active in warm and rainy conditions, generally January through March. Breeding occurs in late March and extends through late May. Eggs are laid in water about four inches deep and hatch within 4 days to 5 days. This species prefers to forage and live within riparian and upland habitats near cottonwoods and willows.

Several observations of arroyo toad tadpoles, juveniles, and toads were documented on CNDDDB within 5 miles of the project from 1995 through 2007.

The Project has the potential to directly impact arroyo toad by the removal of suitable habitat for construction. Potential impacts to suitable may occur in association with the Project due to disturbances associated with road realignment, road widening, driving/parking off pavement, disposal/borrow sites,

equipment staging areas, drainage/culvert work, shoulder backing, ground disturbance, and vegetation removal.

Temporary impacts for the Project are considered as portions of the Project area that will contain no permanent structures or materials and are planned to be restored to pre- Project conditions, including staging areas, construction access points, and temporary access ways. Permanent impacts for the Project are portions of the Project where permanent structures or materials are to be placed within an aquatic resource. These include road widening, road realignment, and shoulder backing.

Arroyo toad may be removed or crushed from equipment, leading to mortality or decreased fitness, and thus is considered a direct impact that could be permanent if individuals are not able to recover.

Indirect impacts may result to this habitat due to nonnative species introduction and increased dust, both of which could reduce the quality of habitat or affect the survival and reproductive fitness of the plant species comprising the community. Indirect impacts may include modified hydrology, dust, and an increased risk of wildfire.

However, because the most recent observations were from 2007 and this species was not detected during 2023 surveys, this project is anticipated to have *no effect* to arroyo toad.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-4, BIO-General-6, BIO-General-7, BIO-General-8, BIO-General-12, BIO-General-12, BIO-General-13, and BIO-General-14 would be implemented to avoid and minimize effects to arroyo toad during construction.

Special Status Reptiles

Coast horned lizard (*Phrynosoma blainvillii*) is a CDFW Species of Special Concern. This species frequents a variety of habitats, including chaparral; cismontane woodland; coastal bluff scrub; coastal scrub; desert wash; pinyon and juniper woodlands; riparian scrub; riparian woodland; and valley and foothill grassland habitats. It is most common in lowland along sandy washes with scattered low bushes.

Coastal whiptail (*Aspidoscelis tigris stejnegeri*) is a CDFW Species of Special Concern. This species is found in deserts and semi-arid areas with sparse vegetation and open areas. It is also found in woodland and riparian areas within firm, sandy, or rocky substrate.

No reptile species were observed during the spring 2023 surveys. However, CNDDDB did have historical occurrences within 5 miles for both coast horned lizard from 1897 through 2004 and coastal whiptail from 1997 through 2015.

The proposed project has the potential to directly impact special-status reptile species and their habitats by the removal of suitable habitat for construction. Temporary impacts to suitable habitat may occur due to disturbances associated with driving/parking off pavement, disposal/borrow sites, equipment staging areas, drainage/culvert work, ground disturbance, and vegetation removal. Permanent impacts to suitable habitat may occur due to road realignment, road widening, and shoulder backing.

Special-status reptiles may be removed or crushed by equipment, which would result in direct impacts which may be considered permanent or temporary based on individuals' recovery. Burrows may also be destroyed from project activities. Indirect effects may occur due to temporary surface/vibration disturbances, construction related dust, trash, sedimentation, erosion along the site edges, and the introduction of noxious weed seeds. No species were detected during 2023 surveys. The proposed project is not anticipated to cause these species to trend towards becoming listed.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-6, BIO-General-7, BIO-General-8, BIO-General-12, BIO-General-13, BIO-General-14, BIO-Reptile-1, BIO-Reptile-2, and BIO-Reptile-4 would be implemented to avoid and minimize effects to special status reptiles during construction.

Southwestern Willow Flycatcher

Southwestern willow flycatcher (*Empidonax traillii extimus*) is a state and federally listed endangered species. The BSA is located within the known historical range for the species. Southwestern willow flycatcher habitat requirements include dense riparian vegetation near permanent or semi-permanent sources of water or saturated soil, and the species typically breeds in dense tree or shrubby riparian vegetation that is equal to or greater than 10 feet tall.

No southwestern willow flycatchers were observed during the 2023 surveys. There is suitable foraging habitat for southwestern willow flycatcher within the PIA and BSA which is heavily disturbed. Foraging habitat suitability is estimated to be low to moderate. Nesting habitat is absent from the BSA. CNDDDB reported sightings of southwestern willow flycatcher in 2007 over 3 miles away from the BSA.

The Project has the potential to directly impact southwestern willow flycatcher and suitable foraging habitat by the removal of suitable habitat for construction. Potential temporary impacts to suitable habitat would occur associated with staging areas, construction access points, and temporary access ways. Permanent impacts would occur due to road widening, road realignment, and shoulder backing.

Southwestern willow flycatcher has the potential to occur within the BSA. Permanent direct impacts to southwestern willow flycatcher individuals are not anticipated to occur due to the lack of observation during surveys or suitable nesting habitat. Permanent indirect impacts may occur due to transforming the vegetation into non-native, invasive vegetation that are not consumed by foraging southwestern willow flycatchers.

Caltrans anticipates No Effect and No Take to southwestern willow flycatcher.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-6, BIO-General-7, BIO-General-8, and BIO-Avian-1 would be implemented to avoid and minimize effects to southwestern willow flycatcher during construction.

Special-Status Bird Species

The following special-status bird species may occur in the BSA.

- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*) is a USFWS Bird of Conservation Concern-Bird Conservation Region.
- Bell's sage sparrow (*Artemisiospiza belli belli*) is a CDFW Watch Listed Species.
- Black-chinned sparrow (*Spizella atrogularis*) is a USFWS Bird of Conservation Concern Rangelwide species.
- Bullock's oriole (*Icterus bullockii*) is a USFWS Bird of Conservation Concern-Bird Conservation Region.
- California thrasher (*Toxostoma redivivum*) is a USFWS Bird of Conservation Concern Rangelwide species.
- Golden eagle (*Aquila chrysaetos*) is a Non-Bird of Conservation Concern Vulnerable species. It is not a Bird of Conservation Concern in the project area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of activities.

- Long-eared owl (*Asio otus*) is a CDFW Species of Special Concern and USFWS Bird of Conservation Concern.
- Wrentit (*Chamaea fasciata*) is a USFWS Bird of Conservation Concern Rangeland species.
- Yellow warbler (*Setophaga petechia*) is a CDFW Species of Special Concern.

The species listed above were not observed during the 2023 surveys. Suitable breeding habitat is lacking in the BSA. CNDDDB listed observations for the following within 5 miles of the BSA.

- Long-eared owls over 4 miles from the BSA in 1950
- Bell's sparrow 3 miles from the BSA in 2013 and 2015.

The Project has the potential to directly impact special-status bird species by the removal of suitable habitat for construction. Potential temporary impacts to suitable habitat would occur associated with staging areas, construction access points, and temporary access ways. Permanent impacts would occur due to road widening, road realignment, and shoulder backing.

Special-status bird species would have the potential to occur within the BSA. Permanent direct impacts to southwestern willow flycatcher individuals are not anticipated to occur due to the lack of observation during surveys or suitable nesting habitat. Permanent indirect impacts may occur due to transforming the vegetation into non-native, invasive vegetation that are not consumed by foraging bird species.

Temporary impacts may occur to these species if nesting occurs within the BSA, including loss of nesting habitat, nest destruction, nest abandonment, disturbance from construction noise and activities, increased risk of predation and degradation of suitable habitat. Nesting birds are not anticipated to be present within the PIA due to disturbance.

Caltrans anticipates No Take for birds protected under the Migratory Bird Treaty Act and project activities would not cause species to trend towards becoming listed under FESA or CESA.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-6, BIO-General-7, BIO-General-8, and BIO-Avian-1 would be implemented to avoid and minimize effects to special status bird species and nesting birds during construction.

American Badger

American badger (*Taxidea taxus*) is a CDFW Species of Special Concern. This species is found in a variety of habitats. It is most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. This species needs sufficient food, friable soils, and open, uncultivated ground. It preys on burrowing rodents and digs burrows.

American badgers were not observed during the 2023 surveys. The BSA contains suitable shrub habitat for American badger. The Desert Connectivity Project mapped this species as having potential core and move-through habitats throughout the linkage. CNDDDB listed an observation of roadkill recorded over 4 miles from the BSA in 1987. American badger may be found in the BSA.

The proposed project has the potential to directly impact American badgers and their habitats by the removal of suitable habitat for construction. Temporary impacts may occur due to staging areas, construction access points, and temporary access ways. Permanent impacts are associated with road widening, road realignment, and shoulder backing.

Indirect temporary impacts may result to the American badger through increased human and vehicular activity, noise, and dust; ground vibrations; and habitat degradation. Indirect permanent impacts may result from habitat loss. Additionally, supplemental water and trash may attract predators to the project area during construction that could lead to loss of individuals and habitat degradation. These indirect impacts have the potential to degrade habitat, alter adult behavior, and result in lower fitness, and/or result in abandonment of young.

Caltrans does not anticipate the proposed project to cause the American badger to trend towards becoming listed.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-4, BIO-General-6, BIO-General-7, BIO-General-8, BIO-General-12, and BIO-General-14 would be implemented to avoid and minimize impacts to American badger during construction.

Mountain Lion

Mountain lions (*Puma concolor*) are a State Candidate Threatened species. The California Essential Connectivity Project identified essential connectivity areas within the BSA and PIA which may be used by mountain lions for movement. The Desert Connectivity Project has modeled suitable move-through habitat in the linkage that could be used for mountain lion movement. No mountain lions or signs of mountain lions were observed during the 2023 surveys.

The proposed project has the potential to directly impact mountain lions and their habitats by the removal of suitable habitat. Temporary impacts may occur due to

staging areas, construction access points, and temporary access ways. Permanent impacts are associated with road widening, road realignment, and shoulder backing.

This project may be within potential movement corridors. Very little is known about the movement patterns of mountain lion within this area. It is known that mountain lions will follow prey across landscapes. The eastern project limits of SR-138 and further east have incorporated three wildlife undercrossing bridges (Hog Ranch Creek, Miner's Shack Creek, and Double Drain Creek) with fencing to facilitate wildlife movement within the BSA. Thus, the highway is not a barrier to the mountain lion and the new road realignment will not cause a new movement barrier.

Caltrans has determined the project will have No Take to mountain lion.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measure BIO-General-7 would be implemented to avoid and minimize impacts to mountain lion during construction.

Determinations

Caltrans has determined that the proposed project will have No Effect to the federally listed species below, as identified on the USFWS Official Species List. Species below are listed as Federally Endangered (FE), Federal Candidate (FC), Federally Proposed Endangered (FPE), and Federally Proposed Threatened (FPT).

- Slender-horned spineflower (*Dodecahema leptoceras*) FE
- Monarch butterfly (*Danaus plexippus*) FC
- Arroyo toad (*Anaxyrus californicus*) FE
- Mohave tui chub (*Siphateles bicolor mohavensis*) FE
- Western spadefoot (*Spea hammondi*) FPT
- Southwestern pond turtle (*Actinemys pallida*) FPT
- Santa Ana speckled dace (*Rhinichthys gabrielino*) FPT
- California condor (*Gymnogyps californicus*) FE
- California spotted owl (*Strix occidentalis occidentalis*) FPE
- Least Bell's vireo (*Vireo bellii pusillus*) FE

- Southwestern willow flycatcher (*Empidonax traillii extimus*) FE
- San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) FE
- Nevin's barberry (*Berberis nevinii*) FE

Caltrans has determined that the proposed project will have No Effect on Endangered Species Act (ESA) listed fish population species, designated critical habitat, essential fish habitat (EFH), anadromous fish species, marine mammals, or their corresponding habitats. This project is located within National Oceanic and Atmospheric Administration (NOAA) Fisheries jurisdiction. However, there are no ESA listed fish population species, designated critical habitat, essential fish habitat (EFH), anadromous fish species, marine mammals or their corresponding habitats listed as present in *Cajon, California 7.5-minute quadrangles*.

The proposed project is anticipated to result in No Take of the California Endangered Species Act (CESA) listed species below, which are listed as State Endangered (SE), State Candidate Endangered (SCE), and State Candidate Threatened (SCT). Mohave tui chub is also a Fully Protected (FP) species under the Fully Protected Species Status (California Fish and Game Code Section 4700).

- Joshua tree (*Yucca brevifolia*) Sct
- Crotch bumblebee (*Bombus crotchii*) SCE
- Mohave tui chub (*Siphateles bicolor mohavensis*) SE, FP
- Least Bell's vireo (*Vireo bellii pusillus*) SE
- Southwestern willow flycatcher (*Empidonax traillii extimus*) SE
- Mountain lion (*Puma concolor*) SCT
- San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*) SE
- Lassics lupine (*Lupinus constancei*) SE

No impacts to Migratory Bird Treaty Act species or their respective habitats are anticipated.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1 through BIO-Avian-1 would be implemented to avoid and minimize impacts on any species identified as a candidate, sensitive, or special status species in local or

regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries.

b) Less Than Significant with Mitigation Incorporated

A Jurisdictional Delineation Report (JDR) was prepared for the project June 23, 2023 for a preliminary Jurisdictional Delineation (JD), in support of the Natural Environment Study (NES) for the project, which was approved May 29, 2024 and updated with an NES Addendum November 6, 2024. The project is not anticipated to require a Standard (Individual) Permit from USACE, therefore an approved JD is not required. The JDR study area for wetlands and other waters included the project limits plus a 100-foot buffer. The JDR identified two riparian aquatic resources in the JDR study area. California Sycamore Riparian Woodlands (*Platanus racemosa* Woodland Alliance), and Sandbar Willow Thickets (*Salix exigua* Shrubland Alliance). These two riparian aquatic resources were also identified as sensitive natural communities.

California Sycamore Riparian Woodlands (*Platanus racemosa* Woodland Alliance) is considered sensitive by the California Department of Fish and Wildlife (CDFW) as a CDFW Riparian Aquatic Resource. This vegetation community was observed within the BSA near Drainage System 1 (PM 17.1). Within the JDR study area, species observed in this community included California sycamore, willow species, mulefat (*Baccharis salicifolia*), and various herbaceous grasses and forbs. A total of 11 California sycamore trees and 0.086 acres of this vegetation community were observed in the JDR study area. The JDR anticipates 0.005045 acres of permanent impacts to California Sycamore Riparian Woodlands.

Sandbar Willow Thickets (*Salix exigua* Shrubland Alliance) is considered sensitive by CDFW as a CDFW Riparian Aquatic Resource. This vegetation community was observed within the JDR study area about 350 feet west of Driveway 1 near PM T16.2, and between about 150 feet east of Driveway 1 to about 210 feet east of Driveway 2 (PM T16.3/R16.8). Within the JDR study area, species observed in this community included sandbar willow, arroyo willow, red willow (*Salix laevigata*), mulefat, California sycamore, and Fremont's cottonwood. A total of approximately 3.258 acres of this vegetation community were observed in the JDR study area. The JDR anticipates 0.1173 acres of permanent impacts and 0.443801 acres of temporary impacts to Sandbar willow thickets.

The acreages of impacts are subject to verification by the agencies with jurisdiction and may change with the final project design. The project will implement measures BIO-General-1, BIO-General-4, BIO-General-8, BIO-General-9, BIO-General 16, BIO-Plant-PSM-3, Caltrans Standard Best Management Practices (BMPs), the projects' Stormwater Pollution Prevention Plan (SWPPP), and 2024 Caltrans Standard Specification (or most recent) to prevent the importation of invasive plant materials and further degradation of the vegetation. Caltrans will pursue a 1600 permit and will coordinate with CDFW to

review areas where 1600 resources occur within the project area. With implementation of Measure BIO-Mitigation-1, impacts will be less than significant.

c) Less Than Significant with Mitigation Incorporated

The JDR identified aquatic resources in the JDR study area which are preliminarily determined to be regulated under the Clean Water Act (CWA) Section 401 and 404, and the California Fish and Game Code Section 1600 et seq. The project is not anticipated to require a Standard (Individual) Permit from the U.S. Army Corps of Engineers (USACE), therefore an Approved Jurisdictional Delineation (AJD) is not required.

A Jurisdictional Delineation Report (JDR) was prepared for the project June 23, 2023 for a preliminary Jurisdictional Delineation (JD), in support of the Natural Environment Study (NES) for the project, which was approved May 29, 2024 and updated with an NES Addendum November 6, 2024. The project is not anticipated to require a Standard (Individual) Permit from USACE, therefore an approved JD is not required. The JDR study area for wetlands and other waters included the project limits plus a 100-foot buffer.

The project is located within a primarily undeveloped area within the northeastern San Gabriel Mountains foothills. Elevations within the JDR study area range from 3,216-3,405 feet above mean sea level, with the highest elevation occurring at the northeastern end of the project alignment and the lowest elevation towards the southwestern end of the project alignment. The topography throughout the JDR study area consists of relatively flat terrain along the existing paved road, surrounded by more hilly terrain on both sides of the road. The average annual precipitation recorded as rain is approximately 9.61 inches at the closest reporting station, which is Mormon Rock, California located 1.63 miles away (CDEC 2023b).

The JDR study area is within the Upper Cajon Wash (HUC-12 180702030301) sub-watershed, which is within the northwestern portion of the Santa Ana Watershed. The Upper Cajon Wash collects water from the surrounding San Gabriel Mountains which drains through several small drainages to the larger Cajon Wash. Surface hydrology of this area is influenced by the amounts of storm water runoff and storm groundwater runoff. Some groundwater infiltration during storm events is captured within small groundwater bodies which form springs that can continue to seep or flow through the summer and into fall. No agriculture or developed residential communities producing artificial runoff are located within the JDR study area.

Vegetation communities recorded within the JDR study area included California buckwheat scrub (*Eriogonum fasciculatum* Shrubland Alliance), California sycamore riparian woodlands (*Platanus racemosa* Woodland Alliance), chamise chaparral (*Adenostoma fasciculatum* Shrubland Alliance), rubber rabbitbrush scrub (*Ericameria nauseosa* Shrubland Alliance), sandbar willow thickets (*Salix*

exigua Shrubland Alliance), upland mustard field (*Brassica nigra* Herbaceous Semi-Natural Alliance), and yerba santa scrub (*Eriodictyon* spp. Shrubland Alliance). Land cover types also identified within the BSA include developed/disturbed areas.

The Natural Resources Conservation Science (NRCS) Web Soil Survey (WSS) does not show soil units with a hydric rating in the JDR study area, which was generally consistent with observations during field site visits. Hydric soils are those formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper parts (NRCS 2023a). The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) shows the presence of riverine features in and near the JDR study area as shown in Figure 3.1.4-1 USFWS National Wetlands Inventory.

Aquatic resources potentially subject to USACE, RWQCB, and/or CDFW jurisdiction were mapped within the BSA and are depicted in Figure 3.1.4-2 and Figure 3.1.4-3. Jurisdictional limits of potential Waters of the US (WOTUS) and Waters of the State of California (WSC) were mapped based on the observed high-water mark (OHWM). CDFW jurisdictional limits were mapped based on top of bank (TOB) width measures and associated riparian vegetation.

A total of 28.5 acres (3,084 linear feet) of potential WOTUS, WSC, and CDFW jurisdiction have been mapped within the JDR study area. 1.049 acres of USACE and RWQCB jurisdiction habitat and 4.05 acres of CDFW jurisdiction habitat were mapped within the project limits.

Figure 2.1.4-1 USFWS National Wetlands Inventory

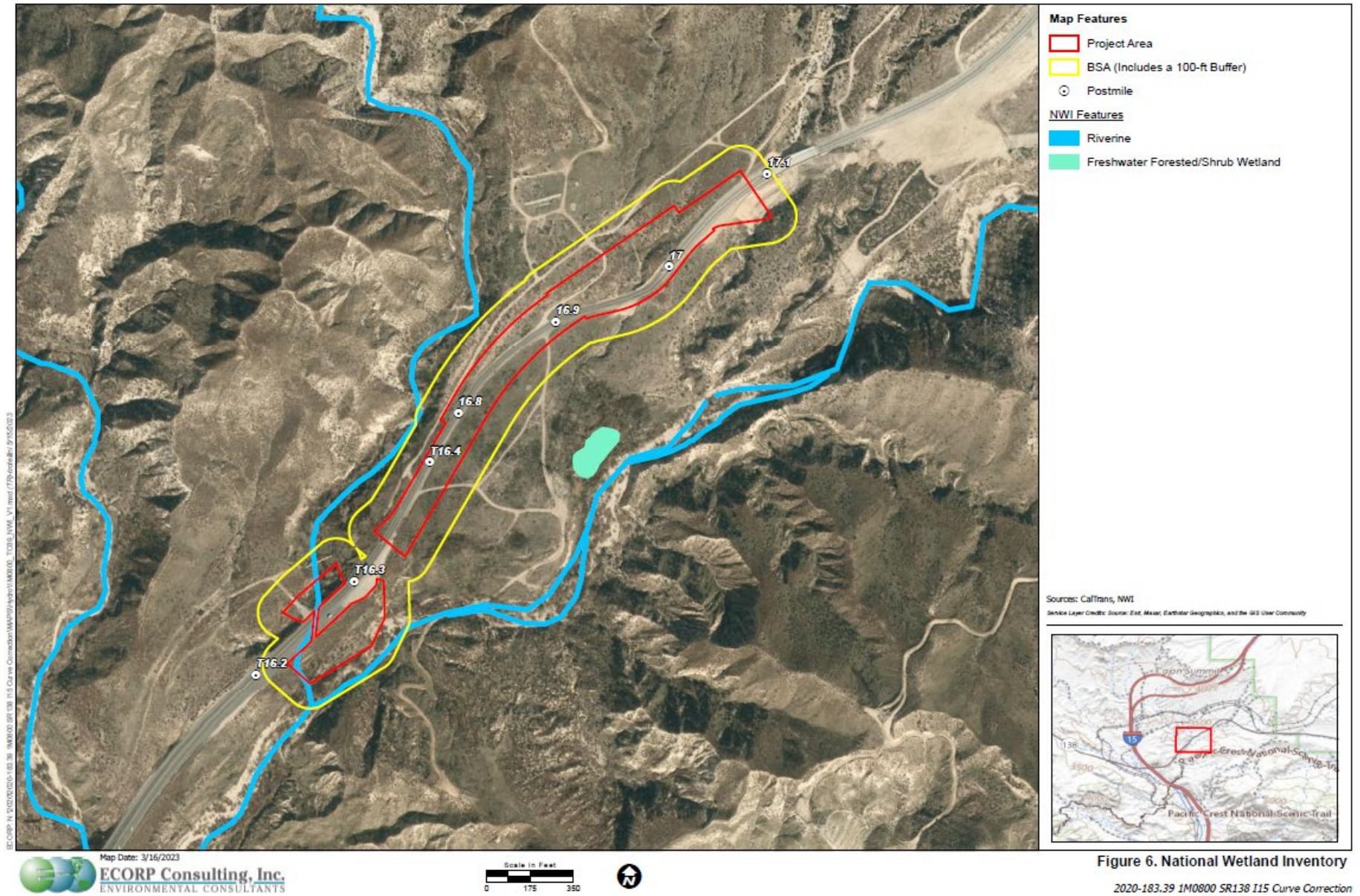


Figure 6. National Wetland Inventory
 2020-183.39 1M0800 5R138 I15 Curve Correction

Figure 2.1.4-2 Federal Aquatic Resources Delineation

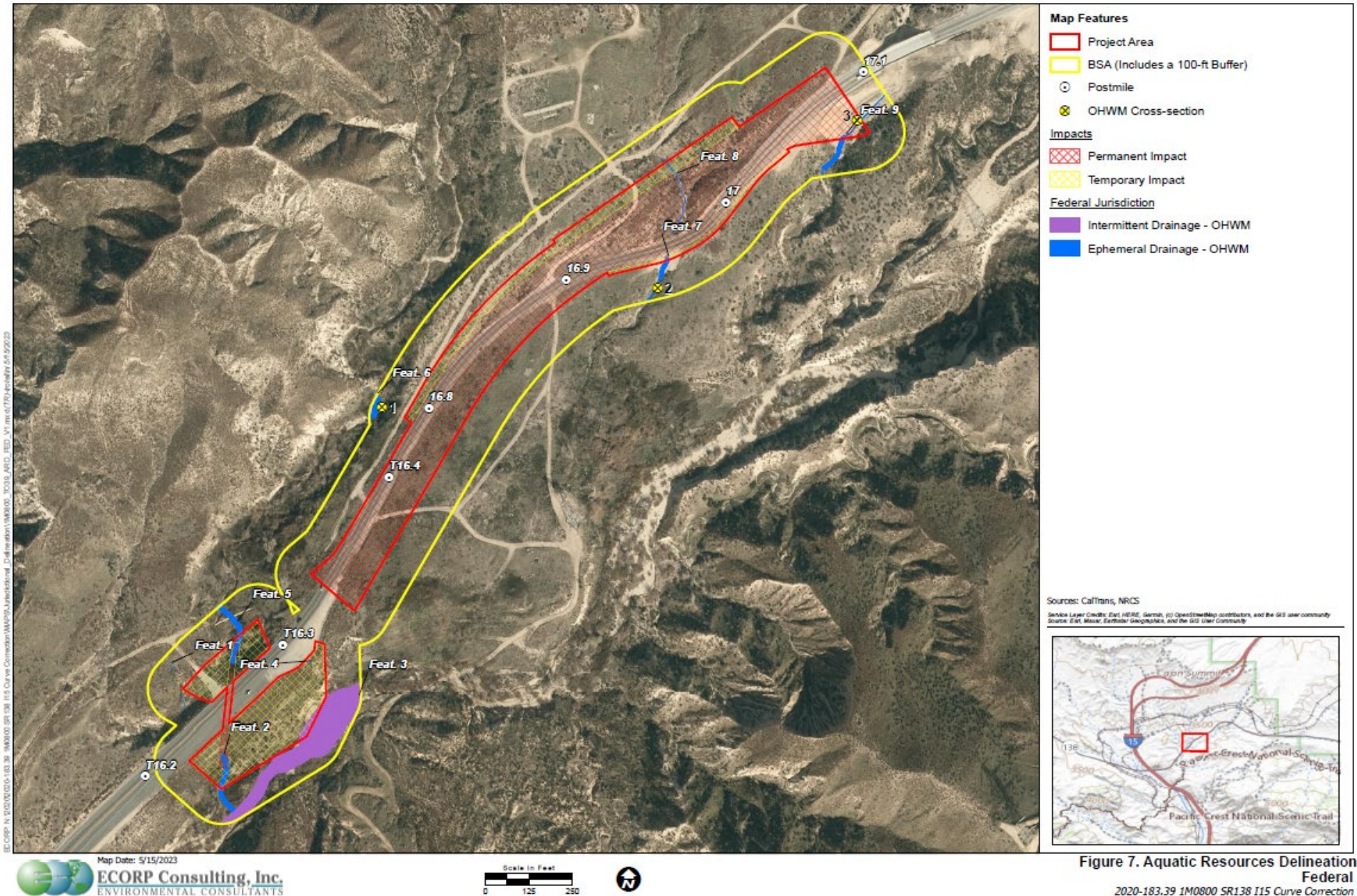


Figure 7. Aquatic Resources Delineation
 Federal
 2020-183.39 1M0800 SR138 I15 Curve Correction

Figure 2.1.4-3 CDFW Aquatic Resources Delineation

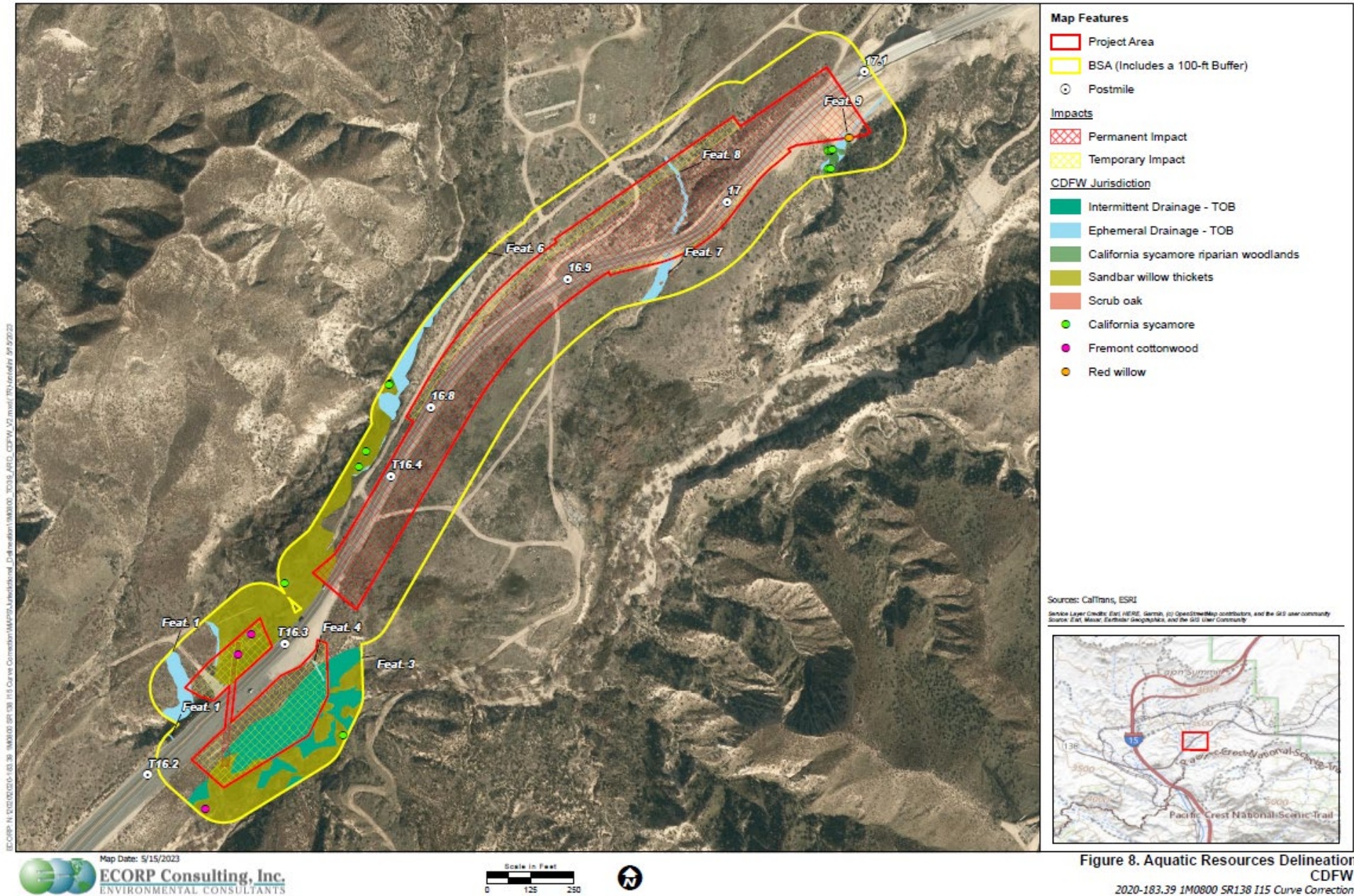


Figure 8. Aquatic Resources Delineation
CDFW
2020-183.39 1M0800 SR138 I15 Curve Correction

Most of the drainage features (Features 1, 2, and 4-9) recorded within the JDR study area consist of linear natural ephemeral drainages. Ephemeral drainages only convey stormwater runoff for short periods of time during and immediately after rain events. They are not influenced by groundwater sources at any time during the year. Most of the ephemeral drainages were associated with small canyons or gullies and had a flat bottom with gently sloped banks.

Feature 3 was determined to be an intermittent drainage, which is different from an ephemeral drainage because it flows seasonally and is influenced by groundwater or snowmelt. This results in intermittent drainages having more water flowing for longer periods of time. Feature 3 consists of a large, flat bottom with complex topography due to falling vegetation, presence of larger rocks and boulders, and large amounts of debris and sediment carried by the water.

CDFW-jurisdictional features within the BSA include the entirety of the potential WoUS features described above, and beyond those features extending to the TOB. They also include mapped riparian habitats associated with the streambed.

The JDR estimate approximately: 0.05 acres of permanent impacts and 0.08 acres of temporary impacts to Waters of the U.S. (WOTUS) which are subject to the jurisdiction of USACE; 0.05 acres of permanent impacts and 0.08 acres of temporary impacts to Waters of the State of California, which are subject to the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB); and 0.19 acres of permanent impact and 0.51 acres of temporary impact to CDFW jurisdiction habitat. The jurisdictional limits mapped within the JDR study area are listed by feature in Table 3.1.4-1 Impacts to WOTUS, WSC, and CDFW (acres).

Table 2.1.4-1 Impacts to WOTUS, WSC, and CDFW (acres)

Feature ID	Permanent WOTUS	Temporary WOTUS	Permanent WSC	Temporary WSC	Permanent CDFW	Temporary CDFW
1	0	0.000002	0	0.000002	0	0.007267
2	0.010098	0.024076	0.010098	0.024076	0	0
3	0	0.034339	0	0.034339	0.005795	0.027574
3 (Sandbar willow thickets)	-	-	-	-	0.011692	0.136152
4	0	0.001541	0	0.001541	0	0.008057
5	0.020557	0.009987	0.020557	0.009987	0	0
6	0	0	0	0	0	0.003949
6 (Sandbar willow thickets)	-	-	-	-	0.105610	0.307649
7	0.000296	0.003632	0.000296	0.002623	0.004396	0.007562
8	0.013688	0.002445	0.013688	0.002445	0.046231	0.008148
9	0.010095	0	0.010095	0	0.006332	0

9 (California sycamore riparian woodlands)	-	-	-	-	0.005045	0
Total	0.054734	0.076022	0.054734	0.076022	0.185012	0.506359

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and measures BIO-General-1, BIO-General-8, and BIO-General-16 would be implemented to avoid and minimize effects to wetlands during construction. With implementation of Measure BIO-Mitigation-2, impacts will be less than significant.

d) Less than Significant Impact

The project is not within natural landscape blocks but is within the California Essential Habitat Connectivity Project and the California Desert Connectivity Project. The project is within the National Marine Fisheries Service (NMFS) jurisdiction. No protected fish species or fish habitat is present in the project limits. No US Fish and Wildlife Service (USFWS) Critical Habitat is found within the project limits or BSA.

In the California Essential Habitat Connectivity Project, the BSA is within the Sugarloaf Mountain/Keller Peak – San Gabriel/Cucamonga Essential Connectivity Area (ECA) of the California Essential Habitat Connectivity Project. This ECA’s EcoRegion Classification is within the Mojave Desert Section, High Desert Plains and Hills SubSection, South Interior Zone. The Amargosa River to the north and the Mojave River to the south are the two major riparian corridors in the ECA. No Landscape Blocks are present within the BSA.

The project area is within the California Desert Connectivity Project’s Twentynine Palms and Newberry Rodman – San Bernardino Mountains corridor, which was identified as a priority linkage area. The PIA is within desert scrub and sagebrush habitat. The American badger (*Taxidea taxus*) also has a least cost corridor within the PIA. A least cost corridor is the most efficient route for wildlife movement between patches of their habitat, and allows animals to migrate, feed and reproduce effectively, which also supports genetic diversity.

The project is shown as an Areas of Conservation Emphasis (ACE) Connectivity Rank 4 out of 5 on the CDFW ACE Terrestrial Connectivity map. The ACE database showed rare vegetation and riparian areas in the project area, and did not show oak communities, oak woodlands, oak shrub, monarch overwintering habitat, meadows and emergent wetlands, ponds, seeps and springs, vernal pools, saline wetlands, or estuarine and tidal habitats. Species observed within the project hexagon include Palmer’s mariposa-lily (*Calochortus palmeri* var.

palmeri), short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), and coast horned lizard (*Phrynosoma blainvillii*).

The proposed project will realign the existing SR-138 and maintain the size and path of flow of Culverts A and B. Temporary interruptions to wildlife movement across the project area may occur during construction activities such as culvert work. However, no permanent impacts to the movement of any native resident or migratory fish or wildlife species or established native resident or migratory wildlife corridors or native wildlife nursery sites are anticipated.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and BIO-General-1, BIO-General-9, and BIO-General-16 will be implemented to avoid and minimize impacts to wildlife movement and corridors.

e) No Impact

San Bernardino County Development Code Chapter 88.01 regulates the removal of trees and plants as part of its land use and development authority. All work for the proposed project, including vegetation and tree removals, would occur within existing Caltrans Right of Way and would not be subject to the San Bernardino County Development Code Chapter 88.01. The project is consistent with the SBNF Land Management Plan as discussed in Section 3.1.11 Land Use and Planning. The project would not conflict with any local policies or ordinances protecting biological resources.

f) No Impact

The project is not within an applicable Habitat Conservation Plan or Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to biological resources.

BIO-General-1: Equipment Staging, Storing, and Borrow Sites: All staging, storing, and borrow sites require the approval of the Caltrans Biologist.

BIO-General-4: Preconstruction Surveys: Within the appropriate identification periods for special-status plants and Sensitive Natural Communities, surveys shall be conducted up to the limits of the Caltrans Right of Way. In addition, three days prior to construction, a preconstruction survey must be conducted by an approved qualified biologist with professional experience surveying for special-status plant species and Sensitive Natural Communities in Californian desert environments. Surveys shall be conducted within the PIA and up to the limits of the Caltrans Right of Way. Sensitive

Natural Communities and special status plant species must be flagged for visual identification to construction personnel for work avoidance. Sensitive Natural Communities detected shall be flagged or fenced off with ESA high visibility fencing. Furthermore, preconstruction arroyo toad surveys must be conducted by a qualified biologist in April, May, and June prior to project activities up to the limits of the Caltrans Right of Way and following USFWS arroyo toad survey protocols (<https://www.fws.gov/sites/default/files/documents/survey-protocolfor-arroyo-toad.pdf>). If an arroyo toad is located, the Resident Engineer and Caltrans Biologist must be contacted and additional measures and/or agency coordination may be required. Preconstruction American badger surveys must be conducted by a qualified biologist 3 days prior to project activities up to the limits of the Caltrans Right of Way. If an American badger or arroyo toad is located, the Resident engineer and Caltrans Biologist must be contacted and additional measures and/or agency coordination may be required.

BIO-General-6: Species Avoidance: If during project activities, a special-status plant species, special-status animal species, or nesting bird is discovered within the project site, all construction activities must stop within 10 feet for rare and insect host plants, 50 feet for arroyo toads, 50 feet for special-status reptile species 100 feet for non-passerine nesting birds, 300 feet for passerine nesting birds, 500 feet for raptors and federal/State-listed bird species, 16 to 25 feet around single American badger burrows, and 65 feet around clusters of American badger burrows, and the Caltrans Biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be required prior to restarting activities.

BIO-General-7: Worker Environmental Awareness Program (WEAP): A qualified biologist must present a biological resource information program/WEAP for special-status and insect host plant species, protected natural communities, special-status reptile species, special-status mammal species, arroyo toads, and nesting birds prior to project activities to all personnel that will be present within the project limits for longer than 30 minutes at any given time.

BIO-General-8: Biological Monitoring: The Qualified Biologist must monitor project activities weekly to ensure that measures are being implemented and documented, and daily for any nesting birds observed during preconstruction surveys until the young have fledged or the nest is deemed inactive.

BIO-General-9: Environmentally Sensitive Area (ESA): To address impacts to sandbar willow thickets and California sycamore riparian woodland, delineate this area as an ESA as shown on the plans and/or described in the specifications.

BIO-General-12: Animal Entrapment: To prevent inadvertent entrapment of arroyo and special-status mammal species during project activities, all excavated steep-walled holes, bores, excavations, or trenches more than 6 inches deep must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks, sloped at a 3:1 ratio. At the beginning of each working day, all such holes or trenches must be inspected to ensure

no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the qualified biologist.

BIO-General-13: Animal Sheltering: To prevent inadvertent harm of arroyo toad and special-status reptile species during project activities, all construction materials, including but not limited to culverts and sections of pipe, must be inspected for the presence of wildlife sheltering in them prior to the use or movement of those materials. Sheltering animals must be released by the qualified biologist.

BIO-General-14: Predator Prevention: Project personnel are prohibited from feeding wildlife or bringing pets on the job site.

BIO-General-16: Invasive Weed Control: To address impacts to natural communities of concern, a Qualified Biologist must identify invasive species within the Project Impact Area during shoulder backing, road realignment, and road widening. Treatment and disposal methods must be approved by the Caltrans Biologist prior to vegetation removal.

BIO-Plant-PSM-3: Top Soil Conservation: Prior to any ground breaking activities, the top soil, or duff, of a project must be scraped and stored to be redistributed on the project site after construction activities are completed.

BIO-Arthropod-1: Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing: No more than 3 days prior to project activities, a qualified biologist must perform a preconstruction survey for rare insect host plants within the PIA and up to the limits of the Caltrans Right of Way. Should any rare insect host plants be found, the Resident Engineer and Caltrans Biologist must be contacted, and host plants must be flagged by the qualified biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the groupings must be fenced with Environmentally Sensitive Area (ESA) temporary high visibility fencing.

BIO-Arthropod-PSM-2: Plant Seed Mix: Seed mixes must contain a diverse array of pollinator plant species native to California including but not limited to California native *Asclepias*, *Antirrhinum*, *Phacelia*, *Clarkia*, *Dendromecon*, *Eschscholzia*, and *Eriogonum*.

BIO-Reptile-1: Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for coastal whiptail and coast horned lizard before operating equipment at any time.

BIO-Reptile-2: Pre-Construction Surveys: To assess the number of coastal whiptails and coast horned lizards that may be potentially impacted, pre-project surveys for these species must be conducted up to the limits of the Caltrans Right of Way. Surveys shall be presence/absence surveys based on visible sign of coastal whiptails.

BIO-Reptile-4: Authorized Biologist Clearance Surveys: Clearance coastal whiptail and coast horned lizard surveys must be conducted by a qualified biologist 3 days prior to project activities up to the limits of the Caltrans Right of Way within the project footprint. If a coastal whiptail or coast horned lizard is located, the Resident Engineer and Caltrans Biologist must be contacted and additional measures and/or agency coordination may be required. Coastal whiptail and coast horned lizard removed from work areas may be moved from harm's way to the nearest suitable habitat or translocated, following the most recent CDFW guidelines.

BIO-Mitigation-1: Habitat Compensation: Compensatory mitigation for permanent impacts to California sycamore riparian woodland and Sandbar willow will be provided at a 1:1 ratio, through on-site restoration activities, suitable mitigation/conservation bank credits, and/or suitable in-lieu fee program credits.

BIO-Mitigation-2: Aquatic Resources: Compensatory mitigation for permanent impacts to jurisdictional aquatic will be provided at a 1:1 ratio, through on-site restoration activities, suitable mitigation/conservation bank credits, and/or suitable in-lieu fee program credits.

2.1.5 Cultural Resources

Would the project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	Less Than Significant Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant Impact
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant Impact

CEQA Significance Determinations for Cultural Resources

a),b) Less Than Significant Impact

The proposed project is located within an area that Caltrans has studied extensively since 1974 to the present. Recent subsurface investigations have taken place for previous projects directly east of the proposed project to realign SR-138 (0Q300 in 2017) and perform culvert work (0Q302 in 2022). Studies for the proposed project consisted of an in-house records search, a formal records search, Native American consultation, and field surveys.

The following sites were identified within the project's Area of Potential Effects (APE):

- CA-SBR-113/H (P-36-000113): a multi-component site; however only the Prehistoric Habitation component is listed on the National Register of Historic Places as a contributing site to the Crowder Canyon Archaeological District.
- CA-SBR-15614H (P-36-024573): Exempted Gravel Road. Property Type 1: minor, ubiquitous, or fragmentary infrastructure elements.

Previous studies have determined that the project is located within a travel corridor that is highly sensitive with a high potential to encounter buried archaeological material outside the Caltrans Right of Way. The previous testing throughout the Caltrans Right of Way, particularly through the ADI, has determined a low to moderate likelihood of encountering intact cultural resources that contribute to the significance of the Crowder Canyon Archaeological District (CCAD) within the ADI.

Caltrans, pursuant to the Section 106 Programmatic Agreement, has determined a Finding of No Adverse Effect (without Standard Conditions) is appropriate for this undertaking. The Finding of Effect (FOE) prepared for the project assessed the effect of the undertaking to CA SBR-113/H (P-36-000113), and the CCAD as a whole, by applying the Criteria of Adverse Effects provided in 36 Code of Federal Regulations (CFR) 800.5(a)(b). The State Historic Preservation Officer

(SHPO) reviewed the HPSR and supporting documents and concurred with Caltrans' determination on December 12, 2024.

A Post Review Discovery Plan (PRD Plan) was produced for the project and requires the implementation of CR-1 through CR-5 as conditions of the Finding of No Adverse Effects. The PRD Plan contains the procedures to be followed in the event of a new discovery or inadvertent impact to a known NRHP-eligible site, as well as the roles and responsibilities of those involved.

c) Less Than Significant Impact

The proposed project is located entirely within the Crowder Canyon Archaeological District, and previous testing throughout the Caltrans Right of Way, particularly through the ADI, has determined a low to moderate likelihood of encountering intact cultural resources. Special procedures were included in the Post Review Discovery Plan for the post-review discovery of human remains. CR-1 through CR-5 will be implemented as listed below.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to cultural resources.

CR-1: If cultural materials are encountered during construction, it is Caltrans Policy that ALL construction work activities within 60 feet of the discovery shall stop until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: In the event that human remains are discovered, the county coroner shall be notified immediately and ALL construction work activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Most Likely Descendent (MLD). The person who discovered will contact the District 8 Native American Coordinator (DNAC) Julie Scrivner at (909)260-8265. Further provisions of PRC 5097.98 are to be followed as applicable.

CR-3: The portions of the Crowder Canyon Archaeological District (CCAD) outside the ADI including the boundaries of CA SBR-113/H (P-36-000113) shall be designated as Environmentally Sensitive Areas (ESAs), where all project-related activities or inadvertent disturbances shall be prohibited. The designation of ESAs will protect the CA SBR-113/H (P-36-000113) and the CCAD as a whole.

CR-4: Archaeological and/or Tribal monitors approved by the Yuhaaviatam of San Manuel Nation shall be present during any ground disturbing preconstruction or construction-related activities in all areas designated as Archaeological Monitoring Areas (AMAs). In the event that cultural deposits are uncovered, the archaeological monitor shall be empowered to implement protective measures outlined above in CR-1.

CR-5: Cultural Resources Sensitivity Training shall be required for all personnel working on the project during construction. The Archaeological Monitor assigned by Caltrans will deliver this training. A Native American Monitor may also present this training. Materials for the training will be provided by Caltrans or the associated Tribe, in the event the Archaeological Monitor is not available to deliver training.

2.1.6 Energy

Would the project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

CEQA Significance Determinations for Energy

a) No Impact

The proposed project would realign the existing SR-138 without increasing capacity, and therefore would not result in an increase of energy consumption during operation. The curve realignment scope of the proposed project may even result in a decrease in operational energy consumption by reducing the need for harsh braking and acceleration. Caltrans Standard Best Management Practices (BMPs) will be implemented to prevent any wasteful, inefficient, or unnecessary consumption of energy resources during project construction.

b) No Impact

The project limits are entirely within the existing Caltrans Right of Way and would not impede the development of renewable energy sites or conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for energy.

2.1.7 Geology and Soils

Would the project:

Question	CEQA Determination
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.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	Less Than Significant Impact
iv) Landslides?	Less Than Significant Impact
b) Result in substantial soil erosion or the loss of topsoil?	Less Than Significant Impact
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?	Less Than Significant Impact
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?	No Impact
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?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Less Than Significant with Mitigation Incorporated

CEQA Significance Determinations for Geology and Soils

A Preliminary Geotechnical Design Report was approved March 29, 2024, which includes site reconnaissance and review of As-built Logs of Test Borings (LOTBs), previous Caltrans Material Reports and Geotechnical Design Reports, a geophysical investigation, geologic maps, LIDAR elevation data, and historical groundwater data. A Combined Paleontological Identification Report/Paleontological Evaluation Report (PIR/PER) was approved July 2024.

a)

i) No Impact

The proposed project limits are not within an Alquist-Priolo Earthquake Fault Zone (EFZ) as established by the California Geologic Survey or within 1,000 feet from any documented Holocene or younger aged faults.

ii) No Impact

The proposed project's design horizontal seismic coefficient for the seismic slope stability analysis, which represents the horizontal force on the proposed slopes during an earthquake, is 0.31g, roughly 1/3 of the recommended maximum. No potential substantial adverse effects from strong seismic ground shaking are anticipated.

iii) Less than Significant Impact

The standard penetration test (SPT) blow counts from previous project Hog Ranch Creek Bridge LOTBs showed higher than Medium density subsurface soils. The subsurface soils are Pleistocene age or older. Less dense sandy materials were documented in boring logs from the 1996 Materials Report prepared for the construction of SR-138 Phase II. Liquefaction is not expected to pose a significant design risk at this time. However, the variability of subsurface materials at the project site, the possibility of shallow groundwater, and the design ground motion parameters for the project warrant further analysis of liquefaction susceptibility during the design phase, as stated in GEO-1. Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), and 2024 Caltrans Standard Specifications (or most recent) will also be implemented to avoid and minimize any potential impacts from liquefaction.

iv) Less than Significant Impact

The proposed project cut and fill slopes and retaining wall will be within mapped Pleistocene-age old alluvial-fan deposits (Qof) and very old alluvial-fan deposits (Qvof). Regionally, the Qof and Qvof alluvial-fan deposit materials range from silts and sands with varying amounts of gravels, cobbles, and boulders. Deposits are often moderately to well-consolidated, poorly bedded, massive, and susceptible to erosion. Similarly, the older Crowder Formation deposits in the area are predominantly arkosic sandstone with varying degrees of gravels, cobbles, and small boulders. The Crowder Formation deposits are generally moderately consolidated to slightly indurated and are susceptible to erosion. Some deposits notably form badlands topography and are prone to landslides. It should be noted that multiple landslides within Crowder Formation deposits were observed in the vicinity of the project during the

site reconnaissance. No observations of landslides were noted in the immediate project footprint.

The proposed project would revise the horizontal and vertical curves of the existing SR-138 within the project limits and would involve cut and fill slopes. The Preliminary GDR anticipates that the proposed cut slopes would likely be appropriate for the project and considered stable if constructed at a 2:1 inclination or flatter, and could likely be stable at 1.5:1 if slopes were less than 15 feet in height. Proposed fill slopes were anticipated to be appropriate for the project and considered stable at a 2:1 inclination. Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and GEO-1, GEO-2, and VIS-2 would be implemented to avoid and minimize any potential impacts to risk of landslides.

b) Less Than Significant Impact

The project proposes ground disturbance through roadway and structure excavation, cut and fill slopes, and realigning the roadway. Soil erosion prevention would be considered for all temporarily and permanently disturbed soil areas. All proposed cut and fill slopes would be designed to a 2:1 inclination or flatter and are considered stable at those inclinations. A retaining wall would be constructed along the westbound direction of traffic. For both Culvert A and Culvert B, end treatments such as bulkheads and/or rock slope protection at the inlet and/or outlet would be applied if necessary to prevent embankment erosion.

The proposed project will be designed in conformance with the National Pollutant Discharge Elimination System (NPDES) requirements.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and GEO-2, VIS-2, BIO-Plant-PSM-2, and WQ-1 would be implemented to avoid and minimize any potential impacts to soil erosion or loss of topsoil.

c) Less Than Significant Impact

Subsurface geological conditions vary within the project area. In the area of the realignment scope, the soils consist of medium dense to very dense silty sand with a mixture of gravel, sand, and cobbles in the different deposit layers overlaying very dense sandstone and claystone. Past the western end of the project limits, the soils consist of undocumented fill for the SR-138 roadway embankment overlaying a mix of loose to very dense silty sand with variable amounts of gravel. The project cut and fill slopes are designed to a 2:1 slope or flatter and are considered stable at those inclinations. The proposed project

would not result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Caltrans standard Best Management Practices (BMPs), the BMPs in the anticipated stormwater pollution prevention plan (SWPPP), 2024 Caltrans Standard Specifications (or most recent), and GEO-1, GEO-2, VIS-2, and BIO-Plant-PSM-2 would be implemented to avoid and minimize any potential impacts related to instability in the soil.

d) No Impact

The GDR determined that the project was on mostly silty sand with various sand, gravel, and cobbles mixed in, and fill overlaying silty sand. Expansive soils are high in mineral clay content, so the project is not anticipated to be located on expansive soil and would not create substantial direct or indirect risks to life or property related to expansive soils.

e) No Impact

The project does not require the disposal of wastewater during operation. Caltrans 2024 Standard Specifications (or most recent) prohibit the discharge of wastewater from septic or sanitary systems in the highway, storm drains, receiving waters, or flowlines during construction. The project would not require an increase in wastewater facility capacity.

f) Less than Significant with Mitigation Incorporated

A joint Paleontological Identification Report and Paleontological Evaluation Report (PIR/PER) was prepared July 2024 and determined that the project area has a High Potential paleontological sensitivity. The PIR/PER reviewed published and unpublished literature and museum collections records maintained by the Natural History Museum of Los Angeles County, the San Bernardino County Museum, and the University of California Museum of Paleontology to identify the geologic units and previous paleontological localities in the project area. A paleontological reconnaissance site visit was conducted July 23, 2024, to visually inspect the ground surface for exposed fossils and evaluate the exposed rock formations for their potential to contain preserved fossil material.

The project site lies within the Cajon Pass along the southwest margin of the Mojave Desert geomorphic province of California. The Project area is mapped at a scale of 1:24,000 by Dibblee (1965) and Dibblee and Minch (2003); and at a scale of 1:100,000 by Morton and Miller (2006), among others. According to these published maps, the Project area lies on top of sedimentary rock formations of late Cenozoic age which include the Crowder Formation and other quaternary alluvial deposits.

The Crowder Formation is approximately 3,000 feet thick and was formed in the Miocene (23 Ma to 5.3 Ma). It has yielded an abundant and diverse range of

animal fossils that includes 40 mammalian species, two of which were the best representation of their species at the time the species were named, as well as reptiles, birds, mollusks, and trace fossils. In all, more than 12,000 fossils have been recovered from this formation. Three new local faunas, which are clusters of all the animals from a particular place and time, have been described from within the Crowder Formation, the Wye Local Fauna (LF), Squaw Peak LF, and the Sulfur Spring LF. A fourth unnamed LF has also been recognized in the Crowder Formation (Reynolds 1984, Reynolds et al. 2008).

The approximate western half of the Project area as well as the far eastern end is underlain by Quaternary surficial alluvial sediments of canyon areas and drainages. Quaternary alluvium generally consists of gravel, sand, and clay and was deposited in the Pleistocene (2.6 Ma to 10,000 years before present [B.P.]) and Holocene (10,000 B.P. to Recent). Quaternary alluvial, fluvial, and lacustrine deposits of Pleistocene age have proven to yield significant vertebrate fossil localities throughout California (UCMP collections data) and in the vicinity of the Project area (Scott 2012). However, the Pleistocene-age deposit within the Project area is composed of coarse-grained material which is not conducive to the preservation of fossils. Holocene-age alluvial deposits, particularly those younger than 5,000 years old, are generally too young to contain fossilized material (SVP 2010), but they may overlie sensitive older (Pleistocene or Tertiary age) deposits at an unknown depth.

A records search of the LACM, SBCM Regional Palaeontologic Locality Inventory (RPLI), and online museum collections records maintained by the UCMP show no previously recorded paleontological localities within the project limits. However, there were at least 29 paleontological localities nearby in the Crowder Formation. No paleontological localities were found in the Quaternary-age deposits near the project area.

A paleontological reconnaissance site visit was conducted July 23, 2024. The survey consisted of a windshield survey with intensive pedestrian inspection of open ground surface areas of high sensitivity formations and lithologies. Potentially sensitive units mapped in the 2-mile Project Study Area included Pleistocene older alluvium located throughout the flat-lying portion of alignment, as well as late Holocene and active wash sediments of the Mojave River located in the present-day Mojave River drainage. Of these, only the Pleistocene older alluvium has potential to contain significant nonrenewable paleontological resources. No fossils were observed during the survey in any of the formations examined. This is typical as most fossils are subsurface.

The project area was determined to have a High Potential paleontological sensitivity, and there is a high likelihood of encountering scientifically significant vertebrate fossils. Earthwork is proposed both in the Crowder Formation and in quaternary alluvial deposits.

Grading, excavation, and other surface and subsurface excavation in defined areas of the proposed project have the potential to impact significant nonrenewable fossil resources of Pleistocene age. A Paleontological Mitigation Plan (PMP) will be prepared and implemented as a mitigation measure to reduce the level of impact to less-than-significant as listed in PAL-1.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to geology and soils.

GEO-1: Design Phase Geotechnical Investigation: During the design phase, a geotechnical investigation will be completed to update the preliminary GDR. The investigation would include geotechnical drilling, laboratory testing for soil engineering properties, slope stability analysis, and liquefaction analysis as needed.

GEO-2: Rolled Erosion Control Product: All slopes would be stabilized with Rolled Erosion Control Product (RECP) such as erosion control netting or erosion control blanket.

VIS-2: Slope Stabilization: Native seed will be applied to all disturbed soil areas and cut/fill slopes.

BIO-Plant-PSM-2: Top Soil Conservation: Prior to any ground breaking activities, the top soil, or duff, of a project must be scraped and stored to be redistributed on the project site after construction activities are completed.

PAL-1: Paleontological Mitigation Plan: A PMP must be prepared by a qualified paleontologist and must include the following elements:

- Required preconstruction paleontological sensitivity training for earthmoving personnel to include documentation of training (sign-in sheets, hard hat stickers)
- A signed repository agreement
- Field and laboratory methods proposed (must be consistent with repository requirements)
- All elements under reporting: PMP Format (Caltrans 2003)
- Required Paleontological Mitigation Report (PMR) upon completion of project earthmoving.

2.1.8 Greenhouse Gas Emissions

Would the project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

CEQA Significance Determinations for Greenhouse Gas Emissions

a) Less Than Significant Impact

The project proposes to realign the highway only and would not add capacity to the existing facility. Operational Greenhouse Gas (GHG) emissions are not anticipated to increase. The project is estimated to emit 3.41 tons of CO₂ Equivalent (CO₂e) per day for a period of 100 working days (WD). The total estimated construction emissions for the project are estimated at 341 tons CO₂e.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7 1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions. GHG-1 through GHG-3 would also be implemented to reduce GHG emissions and potential climate change impacts from the project.

b) No Impact

The proposed project would bring the existing SR-138 facility up to current standards within the project limits and would not conflict with SCAG Connect SoCal 2024's goals of Complete Streets, Transit and Multimodal Integration, Transportation System management, Transportation Demand Management, Priority Development Areas, Sustainable Development, Air Quality, Clean Transportation, and Goods Movement. The proposed project is consistent with SCAG Connect SoCal 2024.

The proposed project is entirely within Caltrans Right of Way and would not conflict with the USFS SBNF Land Management Plan's goal to foster the development of renewable energy.

The San Bernardino Countywide Policy Plan contains goals to reduce Vehicle Miles Traveled (VMT) and to improve Complete Streets, transit, and active

transportation. The proposed project does not propose capacity increases and would enhance safety for all users of SR-138, including those not traveling in single-occupancy vehicles. The proposed project is consistent with the San Bernardino Countywide Policy Plan.

The project is not anticipated to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to greenhouse gas emissions.

GHG-1: Renewable Diesel Use Required: Use only renewable diesel fuel for in-use off-road diesel-fueled vehicles and equipment subject to 13 CFR § 2449. Renewable diesel fuel must contain a minimum of 95% renewable diesel in its blend. Submit a renewable diesel report (RDR) form quarterly within 10 days after each quarter's end and a final RDR within 10 days after contract acceptance.

GHG-2: Reused Fill: Reduce the need for transport of earthen materials by reusing excavated material as fill on-site.

GHG-3: Limit Diesel Idling: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

2.1.9 Hazards and Hazardous Materials

Would the project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	No Impact
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?	No Impact
c) 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
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical 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
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	No Impact

CEQA Significance Determinations for Hazards and Hazardous Materials

An Initial Site Assessment Checklist (ISA Checklist) was conducted January 18, 2024. It determined that the project was Low Risk for hazardous waste involvement. The GeoTracker and EnviroStor tools were used to determine that the project area contained no Leaking Underground Storage Tanks (LUSTs), Cleanup Program Sites, Military Cleanup Sites, Military Privatized Sites, or Military Underground Storage Tank (UST) Sites.

a) No Impact

The ISA Checklist used soil testing data from a previous project in the same area to determine that the project area may contain very low nonhazardous concentrations (between 2.9-33 mg/kg total lead, and 0.34 mg/L soluble lead at a pH of 5.9) of Aerially Deposited Lead (ADL) in or near the surface soils. Previous

testing of paint chip samples along State Route 138 (SR-138) detected potentially hazardous Lead-Based Paint (LBP) roughly 6.5 miles west of the project area, but not within or to the east of the project area.

The project proposes to realign the existing SR-138 facility. Operation of the realigned facility would not require or encourage the routine transport, use, or disposal of hazardous materials.

b) No Impact

The project proposes to realign State Route 138 (SR-138) from 1.0 mile east of Interstate 15 (I-15) to Hog Ranch Creek Bridge, near the City of Hesperia, in San Bernardino County. The project would revise the vertical and horizontal alignments within the segment and improve the drainage systems within the project limits. This work would involve excavation along the proposed alignment at an average width of 50 feet, demolition of the existing alignment, excavation around the existing culvert within the realigned section, and the proposed new culvert and proposed driveway reconstruction at the westernmost end of the project. Metal-beam guardrail (MBGR) would also be removed and replaced with Midwest Guardrail System (MGS) at the westernmost end of the project on either side of the driveway. Signs and other posts along the existing alignment would be removed and replaced as needed.

The ISA Checklist determined that removal of treated wood waste, potentially hazardous yellow traffic stripe and/or pavement marking, and soil with nonhazardous concentrations of ADL would be required for the project. The project does not propose to release hazardous materials into the environment. Caltrans Standard Specifications would be implemented to manage the handling, treatment and disposal of these items as per HAZ-1 through HAZ-5.

c) No Impact

No schools exist near the project limits. The project area is designated as a combination of Very Low Density Residential and Open Space. The project is not located within one-quarter mile of an existing or proposed school.

d) No Impact

The ISA Checklist used GeoTracker and EnviroStor tools to determine that the project area contains no hazardous materials sites on a list compiled pursuant to Government Code Section 65962.5. The project would therefore not create a significant hazard to the public related to such sites.

e) No Impact

The project is not located within an airport land use plan or within two nautical miles of a public airport or public use airport.

f) No Impact

The project would not impair an emergency response or emergency evacuation plan and may have the potential to improve emergency response times and emergency evacuation plans once built. The project proposes to widen the shoulders and realign the roadway to correct vertical and horizontal curves, which would help emergency response vehicles to pass motorists and pass through the project limits in case of an emergency. During construction, the Traffic Management Plan (TMP) will be implemented to maintain the safe and efficient flow of traffic. Access to and through the project site for emergency vehicles would be maintained throughout the duration of construction.

g) No Impact

The project is located within a Very High Fire Hazard Severity Zone (VHFHSZ), as shown in Figure 3.2-5 CalFIRE Fire Hazard Severity Zone Map. The only manmade structures in the area consist of a high-pressure gas line, overhead electric lines, and the SR-138. No utility relocations are anticipated. The project does not propose to build new structures in a VHFHSZ, and would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to hazards and hazardous materials.

HAZ-1: Earth Material Containing Lead: Caltrans Standard Special Provision (SSP) 7-1.02K(6)(j)(iii) will be implemented to manage the handling, removal, and disposing of unregulated earth material containing lead. A Lead Compliance Plan (LCP) is required.

HAZ-2: Treated Wood Waste: Caltrans SSP 14-11.14 will be implemented to manage the handling, storing, transporting, and disposing of treated wood waste.

HAZ-3: Yellow Paint/Thermoplastic: Caltrans SSP 14-11.12 will be implemented to manage the removal and handling of yellow painted or thermoplastic traffic stripe or pavement markings which contain levels of lead that are anticipated to be a hazardous waste. An LCP is required.

HAZ-4: Nonhazardous Striping/Pavement Marker: Caltrans SSP 84-9.03B will be implemented to manage the removal and handling of painted or thermoplastic traffic stripe or pavement markings which may contain lead, but not at levels that are anticipated to be a hazardous waste. An LCP is required.

HAZ-5: Residue Containing Lead: Caltrans SSP 36-4 will be implemented to manage work involving residue from grinding and/or cold planing that contains lead from paint and thermoplastic at nonhazardous levels. An LCP is required.

2.1.10 Hydrology and Water Quality

Would the project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	Less Than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;	Less Than Significant Impact
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	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	No Impact
(iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

CEQA Significance Determinations for Hydrology and Water Quality

A Water Quality Scoping Questionnaire was prepared on November 30, 2021, during the scoping phase, and updated June 25, 2024. Additionally, a Preliminary Drainage Report was prepared June 25, 2024.

a) Less Than Significant Impact

The project will be designed to conform to the requirements of the Department's Statewide National Pollutant Discharge Elimination System (NPDES) Storm Water Permit, Order No. 2022-0033-DWQ, NPDES No. CAS 000003, in addition to the requirements specified in the Department's Statewide Storm Water Management Plan (SWMP). The project must also conform to the requirement of the Statewide General Permit for Construction Activities (Order WQ 2022-0057-DWQ), CAS000002, and subsequent amendments to the permit. Under the

NPDES permit and as a requirement of the Caltrans SWMP, a site-specific Storm Water Pollution Prevention Plan (SWPPP) and Design Compliance Monitoring will be required for the project as per WQ-1.

b) No Impact

The project would not require the use of groundwater. The project would not propose a significant increase in impervious surface area.

c) (i) Less Than Significant Impact

The project proposes to realign SR-138 within the project limits, relocate the existing culvert and its associated headwalls at PM 17.0, and rehabilitate another existing culvert at PM T16.38. The project will tie into the existing channel and grade the channel at PM 17.0 where the culvert will be removed to match the surrounding area and allow water to flow unimpeded through its original path. The culvert rehabilitation at PM T 16.38 is anticipated to consist of invert paving and steel plating for invert deterioration, as well as grouting disjointed pipes.

Per WQ-1, the SWPPP will identify project specific Temporary BMPs that would minimize soil erosion and subsequent storm water discharges, protect the transportation facility, and meet water quality discharge requirements. These BMPs, approved by the State Water Resources Control Board (SWRCB), will be further developed, and incorporated into the project design. The disturbed slopes will be stabilized as part of this project with a permanent erosion control application. Concentrated flows due to surface water runoff will be conveyed via dikes, swales, overside drains, drainage ditches, culverts, and flared end systems.

The project will implement Caltrans standard design criteria for drainage systems as set forth in the Caltrans Highway Design Manual 7th Edition, Hydraulic Engineer Circular No. 22, 4th Edition, and Caltrans Project Planning and Design Guide, or most recent versions. Caltrans Standard Best Management Practices, GEO-2, and VIS-2 will also be implemented during construction to avoid or minimize any potential impacts to erosion or siltation.

(ii), (iii), (iv) No Impact

A SWPPP will be developed for the project per WQ-1. Concentrated flows due to surface water runoff will be conveyed via dikes, swales, overside drains, drainage ditches, culverts, and flared end systems.

Rainfall intensity was obtained from the NOAA Atlas 14 Precipitation Frequency Data Server and is estimated for both culvert locations in depth (inches), duration (minutes, hours, or days), and recurrence interval (frequency in years). The Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) shows that the project is located within a Group B soil type, which has a moderate infiltration rate when thoroughly wet. Further to the north of the project area, I-15

intersects the same Group B soil and an area of Group A soil, which has even higher infiltration rate, therefore lower runoff potential. The offsite hydrology analysis included the 25-, 50-, and 100-year rain events with 3-, 6-, 12-, and 24-hour durations, for both clearwater and bulked events. The Preliminary Drainage Report determined that the proposed culvert sizes are appropriate for the bulked 100-year rain event. The drainage analysis will continue to be updated in the Design phase to ensure that drainage system capacity is appropriate for the project.

The project proposes to maintain the path of the existing drainages on site and would place the new Culvert A in line with the existing flowline and regrade the removed Culvert A to match the same flowline. The project would not impede or redirect flood flows.

d) No Impact

The project is located within a Zone D Area of Undetermined Flood Hazard as shown in Federal Emergency Management Agency (FEMA) Floodplain Insurance Rate Map (FIRM) number 06071C7180. Therefore, the project is not located within a 100-year base floodplain. The project proposes to realign the existing SR-138 facility and would not risk release of pollutants due to inundation.

e) No Impact

The project would comply with the NPDES, General Permit, and Caltrans' Stormwater Management Plan. The project does not propose to deplete or impede recharging of groundwater.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to hydrology and water quality.

WQ-1: SWPPP: A site-specific Storm Water Pollution Prevention Plan (SWPPP) and Design Compliance Monitoring are required for this project. The SWPPP must identify project-specific temporary Best Management Practices (BMPs) that would minimize soil erosion and subsequent storm water discharges, protect the transportation facility, and meet water quality discharge requirements. The BMPs, approved by the State Water Resources Control Board (SWRCB), will be further developed and incorporated into the plans, specifications, and estimates package.

GEO-2: Rolled Erosion Control Product: All slopes would be stabilized with Rolled Erosion Control Product (RECP) such as erosion control netting or erosion control blanket.

VIS-2: Slope Stabilization: Native seed will be applied to all disturbed soil areas and cut/fill slopes.

2.1.11 Land Use and Planning

Would the project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
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?	No Impact

CEQA Significance Determinations for Land Use and Planning

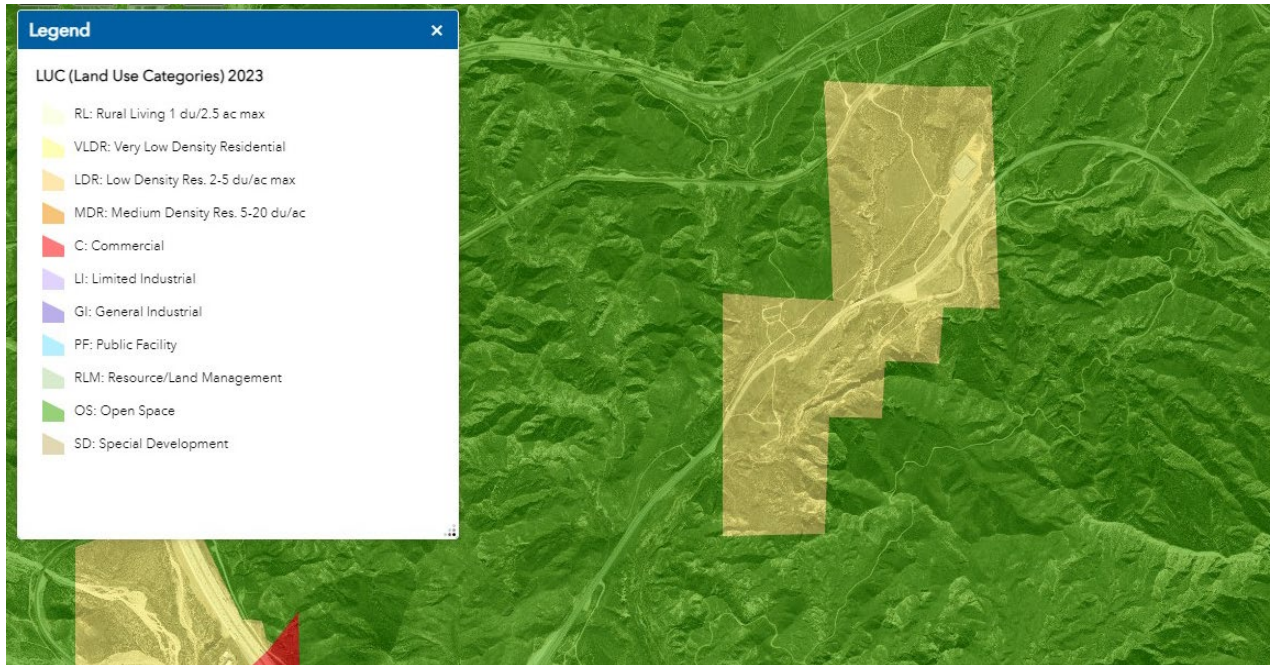
a) No Impact

The project is located in a rural open-space area with no development within or adjacent to the project limits aside from a high-pressure gas line and overhead electric lines. The project would take place entirely within existing Caltrans Right of Way and would not remove access from I-15 to the mountain communities east of the project limits. The project is not anticipated to physically divide an established community.

b) No Impact

The project is located on State Route 138 (SR-138) in an unincorporated area of San Bernardino County, within the US Forest Service (USFS) San Bernardino National Forest (SBNF). The project limits are shown in the San Bernardino County Countywide Plan Land Use Map and fall mostly within an area designated as Very Low Density Residential, which allows for a maximum of 0-2 dwelling units per acre. There is also a segment of the project limits shown as Open Space at the western side of the project limits from approximately Post Mile (PM) T16.25 to T16.37. Outside of the project limits, the Very Low Density Residential area is surrounded by larger areas of Open Space as shown in Figure 2.2-1 LU-1 (A-E) San Bernardino Countywide Plan Land Use Categories 2023. The project area does not currently appear to contain housing despite having some areas designated as residential. A high-pressure gas line runs outside of the project limits to the north, roughly parallel to SR-138.

Figure 2.1.11-1 LU-1 (A-E) San Bernardino Countywide Plan Land Use Categories 2023



The proposed project would not be increasing or altering the capacity of the existing facility. The project does not propose to change the use of land not currently zoned for transportation use, nor does the project propose to interfere with the current designated use of adjacent lands. Temporary construction easements (TCEs) are not required for the project. No impacts to land use are anticipated. Right-of-way in the portion of the highway to be realigned is primarily through prescriptive rights and a United States Department of Transportation (USDOT) Highway Easement Deed. The project is included in the 2025 Federal Transportation Improvement Program (FTIP) and Southern California Association of Governments (SCAG) 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy under the 2024 State Highway Operation and Protection Program (SHOPP) 201.010/HB1.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are required for land use and planning.

2.1.12 Mineral Resources

Would the project:

Question	CEQA Determination
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	No Impact
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?	No Impact

CEQA Significance Determinations for Mineral Resources

a) No Impact

The proposed project is not located on land with a known mineral resource that would be a value to the region and the residents of the state.

b) No Impact

The proposed project limits are not within a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for mineral resources.

2.1.13 Noise

Would the project result in:

Question	CEQA Determination
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?	No Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	No Impact
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 nautical 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

CEQA Significance Determinations for Noise

a), b) No Impact

A Noise Review Memorandum was approved May 13, 2024 and determined that the project is not a Type I project as defined by 23 CFR 772, therefore no Noise Study is required. Caltrans 2024 Standard Specifications Section 14-8.02, Noise Control, requires all projects to control and monitor noise resulting from work activities and limits construction noise to 86 dBA at 50 feet from the job site activities from 9:00 pm to 6:00 am unless otherwise adjusted. The project area is not near sensitive receptors such as residences, schools, businesses with outdoor seating areas, or places of worship. The proposed project would be replacing the existing SR-138 facility only and would not generate a permanent increase in ambient noise levels, groundborne vibration, or groundborne noise levels. The project is not a Type I project under 23 CFR 772.7, therefore no noise analysis or abatement measures are required.

a) No Impact

The proposed project is not located within the vicinity of a private airstrip, airport land use plan, or within two nautical miles of a public airport or public use airport.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for noise.

2.1.14 Population and Housing

Would the project:

Question	CEQA Determination
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)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

CEQA Significance Determinations for Population and Housing

a) No Impact

The proposed project does not propose to add capacity or remove barriers to growth in the project area. The project does not propose to increase the operational capacity of the facility. The project does not propose to create new or modify existing access and would not directly or indirectly influence growth in the region. No growth impacts are anticipated.

b) No Impact

No relocations or real property acquisitions are anticipated for the project. The project limits are entirely within existing Caltrans Right of Way. The project does not require temporary construction easements. No displacement impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for population and housing.

2.1.15 Public Services

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 following public services:

Question	CEQA Determination
a) Fire protection?	No Impact
b) Police protection?	No Impact
c) Schools?	No Impact
d) Parks?	No Impact
e) Other public facilities?	No Impact

CEQA Significance Determinations for Public Services

a-e) No Impact

The project is in a rural area. No hospitals, police departments, sheriff's departments, or fire stations are located within 1 mile of the project limits, nor are there any of the above only accessible by using this segment of SR-138. The project does not propose to construct new or physically altered government facilities.

The proposed alignment avoids any utility conflicts. Four total utility verifications are expected for the project during design phase, which are not anticipated to result in involvements or utility relocation. Notice to Owners and Utility Agreements are anticipated. The project also would not induce growth or travel that would necessitate a need for new or physically altered governmental facilities. No conflicts with or increased demands on or for fire protection, police protection, schools, parks, or other public facilities except SR-138 are anticipated.

A Transportation Management Plan (TMP) was developed on February 28, 2024, for the project to manage the safe and efficient flow of traffic. Emergency access to and through the site will be maintained at all times.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to public services.

TRAF-1: TMP: A Traffic Management Plan (TMP) has been developed for the project, which will be implemented during construction to manage the safe and efficient flow of traffic. The TMP includes constructing a detour to maintain continuous traffic flow, a Public Awareness Campaign (PAC), Motorist Information Strategies, Incident Management, and flagging throughout the duration of construction.

2.1.16 Recreation

Question	CEQA Determination
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?	No Impact
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

CEQA Significance Determinations for Recreation

a) No Impact

The existing SR-138 connects I-15 to mountain communities and other recreational areas such as Silverwood Lake. The proposed project would not increase the capacity of or induce travel on SR-138 and would therefore not increase the use of existing parks or recreational facilities.

b) No Impact

The proposed project does not include the construction of new or expansion of existing recreational facilities.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for recreation.

2.1.17 Transportation

Would the project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	No Impact

CEQA Significance Determinations for Transportation

a) No Impact

The project is consistent with the Caltrans District 8 Transportation Concept Report for SR-138, which planned to realign but maintain the existing lane configuration of the SR-138 in the project area. Bicycle and pedestrian access are not prohibited on SR-138, however no designated bicycle facilities or sidewalks are present. Cyclists must ride along the shoulder or can utilize the full lane as they see fit. Pedestrians are expected to walk along the shoulder. The route traverses rural, mountainous terrain where pedestrian activity is minimal. Transit facilities along SR-138 are limited to the mountain communities at the east end of SR-138 and are outside of the project limits. The project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

b) No Impact

The project does not propose to increase the capacity of the existing SR-138 and is not anticipated to induce travel or increase Vehicle Miles Travelled (VMT). The project is not anticipated to conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

c) No Impact

The proposed project will revise the existing horizontal and vertical curves to be gentler and would bring SR-138 and its associated features up to current standards within the project limits. The project limits are entirely within Caltrans Right of Way. No land use changes are anticipated, and the project limits would remain for transportation use. The project would not increase hazards due to geometric design features or incompatible uses.

d) No Impact

The project does not propose any barrier or removal of access which would result in inadequate emergency access. During construction, a Traffic Management Plan (TMP) would be implemented as stated in TRAF-1 in order to safely and efficiently manage the flow of traffic and would maintain continuous access for first responder vehicles.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to transportation.

TRAF-1: TMP: A Traffic Management Plan (TMP) has been developed for the project, which will be implemented during construction to manage the safe and efficient flow of traffic. The TMP includes constructing a detour to maintain continuous traffic flow, a Public Awareness Campaign (PAC), Motorist Information Strategies, Incident Management, and flagging throughout the duration of construction.

2.1.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Question	CEQA Determination
a) 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	Less Than Significant Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact

CEQA Significance Determinations for Tribal Cultural Resources

a),b) Less Than Significant Impact

The proposed project is located within an area that Caltrans has studied extensively since 1974 to the present. Recent subsurface investigations have taken place for previous projects directly east of the proposed project to realign SR-138 (0Q300 in 2017) and perform culvert work (0Q302 in 2022). Studies for the proposed project consisted of an in-house records search, a formal records search, Native American consultation, and field surveys.

The California Native American Heritage Commission (NAHC) was contacted, and a request was made to perform a Sacred Lands File (SLF) search on November 2, 2022. The NAHC responded the same day explaining that the wait time for the request to be processed would be approximately 8 weeks. Caltrans therefore assumed the project area was positive for SLF and treated the area as such. The Caltrans District 8 Native American Coordinator provided the contact information of Native American contacts for this project.

An initial letter was sent to Yuhaaviatam of San Manuel Nation, Jessica Mauck, Director, Cultural Resources. A response was received December 6, 2022 from Ryan Nordness, Cultural Resources Analyst, requesting consultation. Caltrans sent the initial ASR and XP1 proposal to the tribe September 11, 2023, and the documents underwent a round of comments and revisions between December 6, 2023 and June 20, 2024. On October 16, 2024, Caltrans sent a notification to the tribe that the project scope had decreased, which resulted in the elimination of

XP1 and proposal, revisions to the ASR, and a proposed study finding of No Historic Properties affected. Caltrans has received no further response to date.

Due to the previous comprehensive studies and ongoing consultation with the Tribes associated with this specific travel corridor, in addition to the proposed work being entirely within the Caltrans Right of Way, additional consultation with local governments, historic societies, and public information meetings were not warranted.

A Post Review Discovery Plan (PRD Plan) was produced for the project and requires the implementation of CR-1 through CR-5 as conditions of the Finding of No Adverse Effects. The PRD Plan contains the procedures to be followed in the event of a new discovery or inadvertent impact to a known NRHP-eligible site, as well as the roles and responsibilities of those involved.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to tribal cultural resources.

CR-1: If cultural materials are encountered during construction, it is Caltrans Policy that ALL construction work activities within 60 feet of the discovery shall stop until a qualified archaeologist can evaluate the nature and significance of the find.

CR-2: In the event that human remains are discovered, the county coroner shall be notified immediately and ALL construction work activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Most Likely Descendent (MLD). The person who discovered will contact the District 8 Native American Coordinator (DNAC) Julie Scrivner at (909)260-8265. Further provisions of PRC 5097.98 are to be followed as applicable.

CR-3: The portions of the Crowder Canyon Archaeological District (CCAD) outside the ADI including the boundaries of CA SBR-113/H (P-36-000113) shall be designated as Environmentally Sensitive Areas (ESAs), where all project-related activities or inadvertent disturbances shall be prohibited. The designation of ESAs will protect the CA SBR-113/H (P-36-000113) and the CCAD as a whole.

CR-4: Archaeological and/or Tribal monitors approved by the Yuhaaviatam of San Manuel Nation shall be present during any ground disturbing preconstruction or construction-related activities in all areas designated as Archaeological Monitoring Areas (AMAs). In the event that cultural deposits are uncovered, the archaeological monitor shall be empowered to implement protective measures outlined above in CR-1.

CR-5: Cultural Resources Sensitivity Training shall be required for all personnel working on the project during construction. The Archaeological Monitor assigned by Caltrans will deliver this training. A Native American Monitor may also present this training. Materials

for the training will be provided by Caltrans or the associated Tribe, in the event the Archaeological Monitor is not available to deliver training.

2.1.19 Utilities and Service Systems

Would the project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	No Impact
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?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

CEQA Significance Determinations for Utilities and Service Systems

a) No Impact

The project does not propose and does not anticipate any utility relocations or conflicts. The project area contains utilities owned by SoCalGas Transmission Victorville and Utilquest for Southern California Edison District – Desert Region. The two SoCalGas utilities are 36-inch diameter high-pressure gas lines, running almost parallel to SR-138 on the north side, right outside of existing Caltrans Right of Way, and are considered a high priority facility. The Southern California Edison utilities are overhead power lines. The project also would not require the installation or expansion of utilities for its operation.

b) No Impact

The project would not induce growth or result an increase in demand on water supplies in the area. Water would be used for construction, which is anticipated to last 100 working days.

c) No Impact

The proposed project would not generate significant wastewater in construction and would generate any wastewater during operation. The project is not anticipated to strain the capacity of existing wastewater treatment providers.

d,e) No Impact

The project is expected to generate solid waste during construction which would be handled according to Caltrans 2024 Standard Specifications (or most recent). Fill would be reused on site to the extent possible in an effort to minimize solid waste generated. The project would not generate solid waste during operation.

Avoidance, Minimization, and/or Mitigation Measures

Avoidance, minimization, and/or mitigation measures are not required for utilities.

2.1.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	No Impact
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?	No Impact
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?	No Impact
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?	No Impact

CEQA Significance Determinations for Wildfire

The project limits are located almost entirely within a State Responsibility Area (SRA) Very High Fire Hazard Severity Zone (VHFHSZ) as shown in the CAL FIRE Fire Hazard Severity Zone Maps, updated September 29, 2023.

a) No Impact

The project would not impair an emergency response or emergency evacuation plan and may have the potential to improve emergency response times and emergency evacuation plans once built. The project proposes to widen the shoulders and realign the roadway to correct vertical and horizontal curves, which would help emergency response vehicles to pass motorists and pass through the project limits in case of an emergency. During construction, the Traffic Management Plan (TMP) will be implemented to maintain the safe and efficient flow of traffic. Access to and through the project site for emergency vehicles would be maintained throughout the duration of construction.

b) No Impact

The project would not have the potential to exacerbate wildfire risks. The project will widen the roadway, which helps to serve as a firebreak within the VHFHSZ. The project does not increase capacity or change access to the project area and would not facilitate an increase in human presence to the project area. Disturbed soil areas would be revegetated with native plants.

c) No Impact

The project would not require the installation of associated infrastructure that could exacerbate wildfire risks. No utility conflicts or relocations are expected.

d) No Impact

The Preliminary GDR anticipates that the proposed cut slopes and fill slopes, which are all designed at a 2:1 inclination or flatter, would likely be appropriate for the project and considered stable. The project proposes to maintain the flowline of the existing drainages, and the Preliminary Drainage Report determined that the diameters for Culverts A and B were sufficient to handle the bulked 100-year storm event. The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Avoidance, Minimization, and/or Mitigation Measures

If the proposed project is approved, the following measures would be implemented to avoid, minimize, and/or mitigate impacts to wildfire. Caltrans standard Best Management Practices and 2024 Standard Specifications or most recent would be implemented to prevent and protect from fire. WIL-1 and WIL-2 would also be implemented to prevent risk of fire during elevated fire danger conditions and within Very High Fire Hazard Severity Zones.

WIL-1: Fire Danger Rating: The Resident Engineer (RE) and contractor will maintain awareness of the fire danger rating for every day that construction activity is occurring. The RE may suspend work wholly or in part due to hazardous fire conditions. If the fire danger rating is “Very High” or a “fire weather watch” is issued, then limitations on higher risk activities will be applied.

WIL-2: Fire Safety Job Site Management: Caltrans Standard Special Specification (SSP) 7-1.02M(2) will be implemented for fire hazard management during construction. All hydrocarbon-fueled engines must be equipped with spark arresters unless they fall under the exceptions listed in SSP 7-1.02M(2). Each toilet must be equipped with a metal ashtray. Maintain appropriate fire breaks and locate flammable materials at least 50 feet away from equipment service, parking, and gas or oil storage areas, and at least 15 feet away from small mobile or stationary engines. Furnish a properly equipped pickup truck and driver for the sole purpose of fire control during and at least ½ hour after job site activities have ended.

2.1.21 Mandatory Findings of Significance

Question	CEQA Determination
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?	Less Than Significant Impact
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
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	No Impact

CEQA Significance Determinations for Mandatory Findings of Significance

a) Less Than Significant Impact

The project would have No Take and No Effect to California Endangered Species Act (CESA) listed and Federal Endangered Species Act (FESA) listed species, No Effect on listed fish population species, and no impact to Migratory Bird Treaty Act species or their respective habitats.

It is possible that the project may uncover previously undiscovered paleontological resources in the Crowder Formation or cultural resources in the Crowder Canyon Archaeological District through ground disturbance. The project limits of disturbance constitute a small portion of both areas. The Paleontological Mitigation Plan and Post-Review Discovery Plan would also manage the recovery and handling of any potential resources that may be uncovered.

The project is not anticipated to 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) Less Than Significant Impact

Natural communities such as California sycamore riparian woodland and Sandbar willow thickets have experienced cumulative impacts from the development of SR-138 and installation of utility lines within the project area, as well as subsequent projects to realign SR-138 and perform drainage work. The proposed project would occur within Caltrans Right of Way mostly in areas that are already developed and disturbed. The project acreage of impacts to California sycamore riparian woodland and Sandbar willow thickets is low and will be mitigated in accordance with Measure BIO-Mitigation-1, therefore the project is not anticipated to have significant adverse cumulative effects on sensitive natural communities.

Permanent impacts to potentially jurisdictional Waters of the U.S., Waters of the State, and CDFW jurisdictional areas are anticipated as part of the proposed activities within the Project Impact Area (PIA). Riparian habitat impacts will be offset through on-site restoration, suitable mitigation/conservation bank credits, and/or suitable in-lie fee program credits, in accordance with Measure BIO-Mitigation-2. The project is not anticipated to have significant adverse cumulative effects to CDFW jurisdiction, bank-to-bank plus associated riparian vegetation.

Special-status plants and animals have experienced cumulative impacts from development, habitat degradation, human and vehicular traffic, and other factors in the project area such as the development of SR-138, subsequent projects to realign and maintain the facility, and the installation of utility lines. The proposed project would occur within Caltrans Right of Way mostly in areas that are already developed and disturbed.

Cumulative impacts to the following groups are not anticipated:

- Special status plants due to the lack of recent observations in the Biological Study Area (BSA).
- Monarch butterfly due to the lack of recent sightings of milkweed in the BSA.
- Crotch bumblebee due to the lack of recent sightings of preferred plants in the BSA.
- Arroyo toad, coastal whiptail, and coast horned lizard due to the lack of recent observations in the BSA.
- Southwestern willow flycatcher and other special status bird species due to the lack of recent observations in the BSA.
- American badger and mountain lion due to the lack of recent observations in the BSA.

Crowder Canyon Archaeological District has been impacted by the development of SR-138, subsequent projects to realign and maintain SR-138, and installation of utilities in the project area. The area outside of Caltrans Right of Way remains largely undeveloped and undisturbed. The project Post Review Discovery Plan would manage the handling of any potential archaeological or other cultural resources that may be uncovered during the project. The Project is not anticipated to have adverse cumulative effects to Crowder Canyon Archaeological District or its contributing sites.

The Crowder Formation has similarly been impacted by the development of SR-138, subsequent projects to realign and maintain SR-138, and installation of utilities in the project area. The Crowder Formation spans the San Gabriel and San Bernardino Mountain Ranges and has yielded thousands of fossils. The project Paleontological Mitigation Plan would manage the handling of any potential paleontological resources that may be uncovered during the project. The Project is not anticipated to have adverse cumulative effects to the Crowder Formation.

c) No Impact

The project area is not populated, and the only development in the project area consists of SR-138 and utility lines. Standard Special Provisions for the handling of potentially hazardous waste in construction will be implemented for worker and traveler safety. The project is not anticipated to have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

2.2 CLIMATE CHANGE

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂ that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO₂.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

2.2.1 Regulatory Setting

For a full list of laws, regulations, and guidance related to climate change (GHGs and adaptation), please refer to [Caltrans' Standard Environmental Reference \(SER\), Chapter 16, Climate Change](#).

2.2.1.1 Federal

To date, no nationwide numeric mobile-source GHG reduction targets have been established; however, federal agencies are mandated to consider the effects of climate change in their environmental reviews.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) is the basic national charter for protection of the environment which establishes

policy, sets goals, and provides direction for carrying out the policy. NEPA requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project. In May 2024, the White House Council on Environmental Quality (CEQ) issued the National Environmental Policy Act Implementing Regulations Revisions Phase 2 (89 Fed. Reg. 35442). The CEQ regulations do not establish numeric thresholds of significance, but mandate that federal agencies consider the effects of climate change in their environmental reviews, including direct, indirect, and cumulative impacts. The CEQ regulations further require that agencies quantify greenhouse gas emissions, where feasible, from the proposed action and alternatives. The regulations also direct agencies to identify reasonable alternatives that reduce climate change-related effects.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level rise, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— “the triple bottom line of sustainability” (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Early efforts by the federal government to improve fuel economy and energy efficiency to address climate change and its associated effects include The Energy Policy and Conservation Act of 1975 (42 USC Section 6201); and Corporate Average Fuel Economy (CAFE) Standards. The U.S. Department of Transportation’s National Highway Traffic and Safety Administration (NHTSA) sets and enforces corporate average fuel economy (CAFÉ) standards for on-road motor vehicles sold in the United States. The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards for vehicles under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation’s energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014). These standards are periodically updated and published through the federal rulemaking process.

2.2.1.2 State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs).

In 2005, EO S-3-05 initially set a goal to reduce California’s GHG emissions to 80 percent below year 1990 levels by 2050, with interim reduction targets. Later EOs and Assembly and Senate bills refined interim targets and codified the emissions reduction goals and strategies. The California Air Resources Board (ARB) was directed to create a climate change scoping plan and implement rules to achieve “real, quantifiable, cost-

effective reductions of greenhouse gases.” Ongoing GHG emissions reduction was also mandated in Health and Safety Code (H&SC) Section 38551(b). In 2022, the California Climate Crisis Act was passed, establishing state policy to reduce statewide human-caused GHG emissions by 85 percent below 1990 levels, achieve net zero GHG emissions by 2045, and achieve and maintain negative emissions thereafter.

Beyond GHG reduction, the State maintains a climate adaptation strategy to address the full range of climate change stressors, and passed legislation requiring state agencies to consider protection and management of natural and working lands as an important strategy in meeting the state’s GHG reduction goals.

2.2.2 Environmental Setting

The proposed project is in a rural area which is primarily intended for Resource Conservation and Rural Living land use. State Route 138 (SR-138) is the main transportation route through the area for both passenger and commercial vehicles heading to and from tourist areas such as Silverwood Lake, Lake Gregory, Lake Arrowhead, Rim of the World, and Running Springs. SR-138 connects these areas to Interstate 15 (I-15), which in the project region connects the High Desert in the North to the Valley areas in the South. The nearest alternate route would be to loop over 30 miles South of SR-138 using a combination of I-15, I-215, and SR-18. The Connect SoCal 2024-2050 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) of the Southern California Association of Governments (SCAG) guides transportation development in the project area. The San Bernardino Countywide County Policy Plan Infrastructure & Utilities and Natural Resources Elements address GHGs in the project area.

2.2.2.1 GHG Inventories

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state of California, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

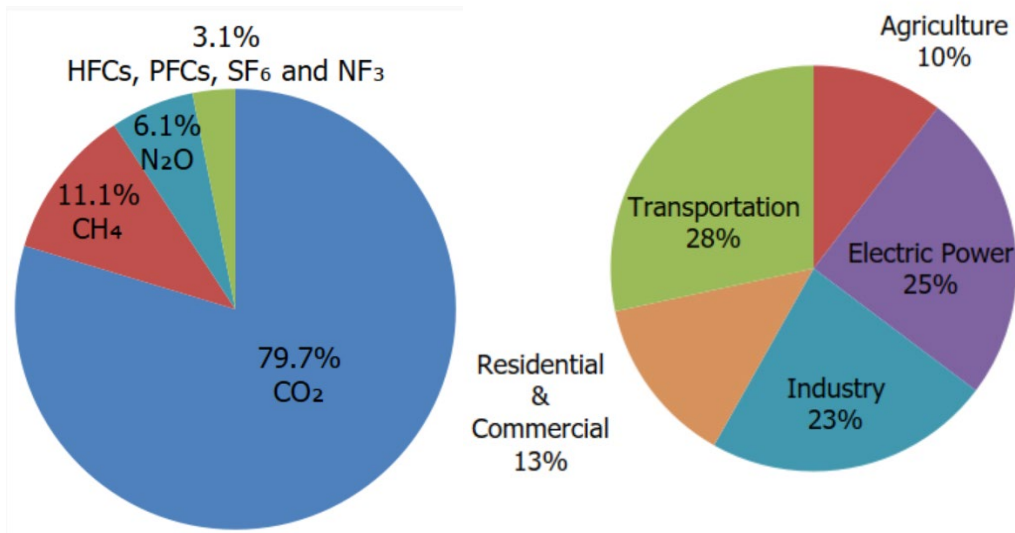
National GHG Inventory

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2022 were 5,489.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 15% of total U.S. emissions in 2022 [U.S. EPA 2024a].) While total GHG emissions in 2022 were 17% below 2005 levels, they increased by 1% over 2021 levels. Of these, 80%

were CO₂, 11% were CH₄, and 6% were N₂O; the balance consisted of fluorinated gases. From 1990 to 2022, CO₂ emissions decreased by only 2% (U.S. EPA 2024a).

The transportation sector's share of total GHG emissions remained at 28% in 2022 and continues to be the largest contributing sector (Figure 3.2-1 U.S. 2022 Greenhouse Gas Emissions). Transportation activities accounted for 37% of U.S. CO₂ emissions from fossil fuel combustion in 2022. This is a decrease of 0.5% from 2021 (U.S. EPA 2024a, 2024b)).

Figure 2.2.2-1 U.S. 2022 Greenhouse Gas Emissions

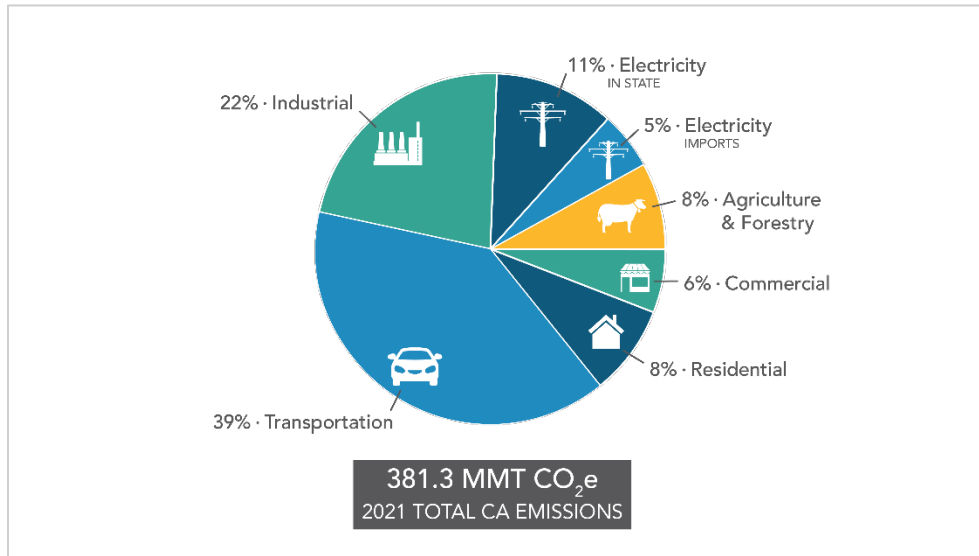


(Source: U.S. EPA 2024b)

State GHG Inventory

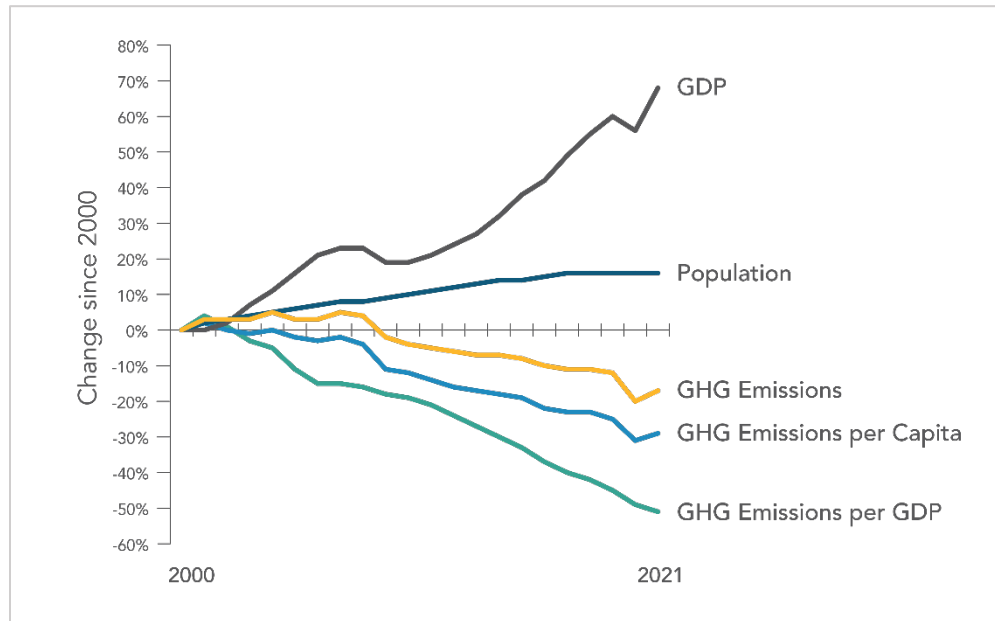
ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2021 despite growth in population and state economic output (Figure 3.2-3 Change in California GDP, Population, and GHG Emissions since 2000). Transportation emissions remain the largest contributor to GHG emissions in the state (Figure 3.2-2 California 2021 Greenhouse Gas Emissions by Economic Sector) (ARB 2023).

Figure 2.2.2-2 California 2021 Greenhouse Gas Emissions by Economic Sector



(Source: ARB 2023)

Figure 2.2.2-3 Change in California GDP, Population, and GHG Emissions since 2000



(Source: ARB 2023)

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions. ARB adopted the first scoping plan in 2008. The second updated plan, California’s 2017 Climate Change

Scoping Plan, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The *2022 Scoping Plan for Achieving Carbon Neutrality*, adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (ARB 2022a).

2.2.2.2 Regional Plans

As required by *The Sustainable Communities and Climate Protection Act of 2008*, ARB sets regional GHG reduction targets for California’s 18 metropolitan planning organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals, and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the RTP/SCS for Southern California Association of Governments (SCAG). The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021).

Table 2.2.2-1 Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
<i>Southern California Association of Governments (SCAG) 2024-2050 Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy (adopted September 2024)</i>	<ul style="list-style-type: none"> • Complete Streets 03-06 • Transit and Multimodal Integration 07, 09 • Transportation System Management 12 • Transportation Demand Management 14, 15 • Priority Development Areas 33, 34 • Sustainable Development 48 • Air Quality 51, 52 • Clean Transportation 54, 55 • Goods Movement 70, 71
<i>U.S. Forest Service (USFS) San Bernardino National Forest (SBNF) Land Management Plan</i>	<ul style="list-style-type: none"> • Goal 4.1b Administer Renewable Energy Resource developments while protecting ecosystem health
<i>San Bernardino County Countywide Policy Plan</i>	<ul style="list-style-type: none"> • Transportation and Mobility Element TM-3, TM-4 • Renewable Energy and Conservation RE-1 through RE-6 • Natural Resources NR-1.7

2.2.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of burning gasoline

or diesel fuel in internal combustion engines, along with relatively small amounts of CH₄ and N₂O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO₂ is the most important GHG, so amounts of other gases are expressed relative to CO₂, using a metric called “carbon dioxide equivalent”, or CO₂e. The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂.)

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

2.2.3.1 Operational Emissions

The purpose of the proposed project is to enhance traffic safety by reducing the frequency and severity of collisions on this segment of SR-138, and to increase climate resiliency of the roadway, drainage systems, and associated features within the project limits. The project does not propose to increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR-138, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected. It is likely that the project area will experience some minor reductions to operational GHG emissions from the improved operations and curves.

2.2.3.2 Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered “temporary” in the same way as criteria pollutants that subside after construction is completed.

Use of long-life pavement, improved traffic management plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

GHG emissions for construction activities were estimated using preliminary design data and the Caltrans Construction Emissions Tool (Cal-CET) on July 31, 2024. The project is estimated to emit 3.41 tons of CO₂ Equivalent (CO_{2e}) per day for a period of 100 working days (WD). The total estimated construction emissions for the project are estimated at 341 tons CO_{2e}.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7 1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

2.2.3.3 CEQA Conclusion

The proposed project is not capacity increasing and is therefore not anticipated to increase operational GHG emissions compared to the existing environmental setting. Construction emissions would be limited to an estimated 341 tons CO_{2e} over 100 working days. The project is not anticipated to generate an amount of greenhouse gases that may have a significant impact on the environment.

SCAG Connect SoCal 2024 contains a variety of strategies that contribute to or are related to GHG reductions. The proposed project would not conflict with the use of SR-138 for pedestrians, bicyclists, or transit, and may enhance safety for these modes of travel through widening shoulders, installing rumble strips, and bringing horizontal and vertical curves up to standard. Realigning the existing SR-138 is consistent with the goal of Transportation System Management to make operational improvements without adding capacity. The proposed project would have no impact on growth and would not conflict with the goals of Priority Development Areas or Sustainable Development. The project does not propose to increase capacity, and operational emissions are expected to remain the same or experience minor reductions, so the project would not conflict with the goals of Air Quality and Clean Transportation. The project would not conflict with the adoption of zero-emission technologies for Goods Movement. The proposed project is consistent with SCAG Connect SoCal 2024.

The USFS SBNF Land Management Plan contains a goal to administer renewable energy resource developments while protecting ecosystem health. The proposed project is entirely within Caltrans Right of Way and would not conflict with SBNF's goal to foster the development of renewable energy.

The San Bernardino Countywide Policy Plan contains goals to reduce Vehicle Miles Traveled (VMT) and to improve Complete Streets, transit, and active transportation. The

proposed project does not propose capacity increases and would enhance safety for all users of SR-138, including those not traveling in single-occupancy vehicles. The proposed project is consistent with the San Bernardino Countywide Policy Plan.

The project is not anticipated to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

2.2.4 Greenhouse Gas Reduction Strategies

2.2.4.1 Statewide Efforts

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (ARB 2022b).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report: (1) Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030; (2) Reducing petroleum use by up to 50 percent by 2030; (3) Increasing the energy efficiency of existing buildings by 50 percent by 2030; (4) Reducing emissions of short-lived climate pollutants; and (5) Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (OPR 2015).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart Strategy* (California Natural Resources Agency 2022).

2.2.4.2 Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan for Transportation Infrastructure

[The California Action Plan for Transportation Infrastructure \(CAPTI\)](#) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021a).

Caltrans Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and

engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021b).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a policy to ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. Other Director's policies promote energy efficiency, conservation, and climate change, and commit Caltrans to sustainability practices in all planning, maintenance, and operations. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020) provides a comprehensive overview of Caltrans' emissions and current Caltrans procedures and activities that track and reduce GHG emissions. It identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Caltrans and State goals.

2.2.4.3 Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

GHG-1: Renewable Diesel Use Required: Use only renewable diesel fuel for in-use off-road diesel-fueled vehicles and equipment subject to 13 CFR § 2449. Renewable diesel fuel must contain a minimum of 95% renewable diesel in its blend. Submit a renewable diesel report (RDR) form quarterly within 10 days after each quarter's end and a final RDR within 10 days after contract acceptance.

GHG-2: Reused Fill: Reduce the need for transport of earthen materials by reusing excavated material as fill on-site.

GHG-3: Limit Diesel Idling: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

2.2.5 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Furthermore, the combined effects of transportation projects and climate stressors can exacerbate the impacts of both on

vulnerable communities in a project area. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

2.2.5.1 Federal Efforts

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The *Fifth National Climate Assessment*, published in 2023, presents the most recent science and “analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; [It] analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years ... to support informed decision-making across the United States.” Building on previous assessments, it continues to advance “an inclusive, diverse, and sustained process for assessing and communicating scientific knowledge on the impacts, risks, and vulnerabilities associated with a changing global climate” (U.S. Global Change Research Program 2023).

The U.S. Department of Transportation recognizes the transportation sector’s major contribution of GHGs that cause climate change and has made climate action one of the department’s top priorities (U.S. DOT 2023). FHWA’s policy is to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

The National Oceanic and Atmospheric Administration provides sea level rise projections for all U.S. coastal waters to help communities and decision makers assess their risk from sea level rise. Updated projections through 2150 were released in 2022 in a report and online tool (NOAA 2022).

2.2.5.2 State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California’s Fourth Climate Change Assessment (Fourth Assessment) (2018) provides information to help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state’s people, infrastructure, natural systems, working lands, and waters. The Fourth Assessment reported that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience an up to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures; a two-thirds decline in water supply from snowpack resulting in water shortages; a 77% increase in average area burned by wildfire; and large-scale

erosion of up to 67% of Southern California beaches due to sea level rise. These effects will have profound impacts on infrastructure, agriculture, energy demand, natural systems, communities, and public health (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. This report provides guidance on assessing risk in the face of inherent uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

EO S-13-08, issued in 2008, directed state agencies to consider sea level rise scenarios for 2050 and 2100 during planning to assess project vulnerabilities, reduce risks, and increase resilience to sea level rise. It gave rise to the 2009 *California Climate Adaptation Strategy*, the Safeguarding California Plan, and a series of technical reports on statewide sea level rise projections and risks, including the *State of California Sea-Level Rise Guidance Update* in 2018. The reports addressed the full range of climate change impacts and recommended adaptation strategies. The current *California Climate Adaptation Strategy* incorporates key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy*, *Wildfire and Forest Resilience Action Plan*, *Water Resilience Portfolio*, and the CAPTI (described above). Priorities in the 2023 *California Climate Adaptation Strategy* include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, implementing nature-based climate solutions, using best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2023).

EO B-30-15 recognizes that effects of climate change threaten California's infrastructure and requires state agencies to factor climate change into all planning and investment decisions. Under this EO, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies*, to encourage a uniform and systematic approach to building resilience.

SB 1 Coastal Resources: Sea Level Rise (Atkins 2021) established statewide goals to "anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the coastal zone." As the legislation directed, the Ocean Protection Council collaborated with 17

state planning and coastal management agencies to develop the *State Agency Sea-Level Rise Action Plan for California* in February 2022. This plan promotes coordinated actions by state agencies to enhance California's resilience to the impacts of sea level rise (California Ocean Protection Council 2022).

2.2.5.3 Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Caltrans Sustainability Programs

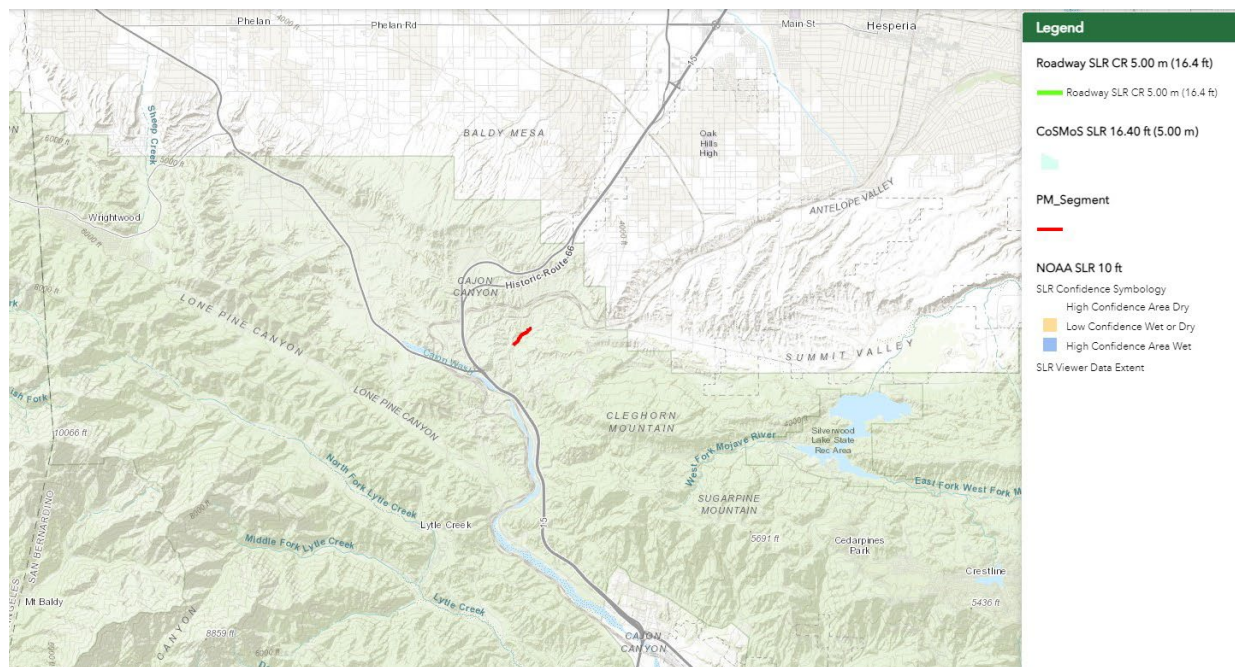
The Director's Office of Equity, Sustainability and Tribal Affairs supports implementation of sustainable practices at Caltrans. The *Sustainability Roadmap* is a periodic progress report and plan for meeting the Governor's sustainability goals related to EOs B-16-12, B-18-12, and B-30-15. The Roadmap includes designing new buildings for climate change resilience and zero-net energy, and replacing fleet vehicles with zero-emission vehicles (Caltrans 2023).

2.2.5.4 Project Adaptation Analysis

Sea Level Rise

The proposed project is outside the coastal zone and not in an area subject to sea level rise, as shown in Figure 3.2-4 NOAA 10 feet and COSMOS 16.4 feet Sea Level Rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected.

Figure 2.2.5-1 NOAA 10 feet and COSMOS 16.4 feet Sea Level Rise



Precipitation and Flooding

Preliminary drainage analyses were completed for the drainage systems within the project limits, to determine what was needed to handle precipitation levels up to the hypothetical 100-year bulked storm event, which also accounts for potential debris in the flow. The Caltrans District 8 Climate Change Vulnerability Assessment, approved June 2019, estimated that the 100-year storm event precipitation levels in the project area would increase 6.3% by 2025, 9.3% by 2055, and 8.3% by 2085 if GHG emissions continue to remain high through the end of the century. These estimates will be factored into fine-tuning the final design of the drainage systems.

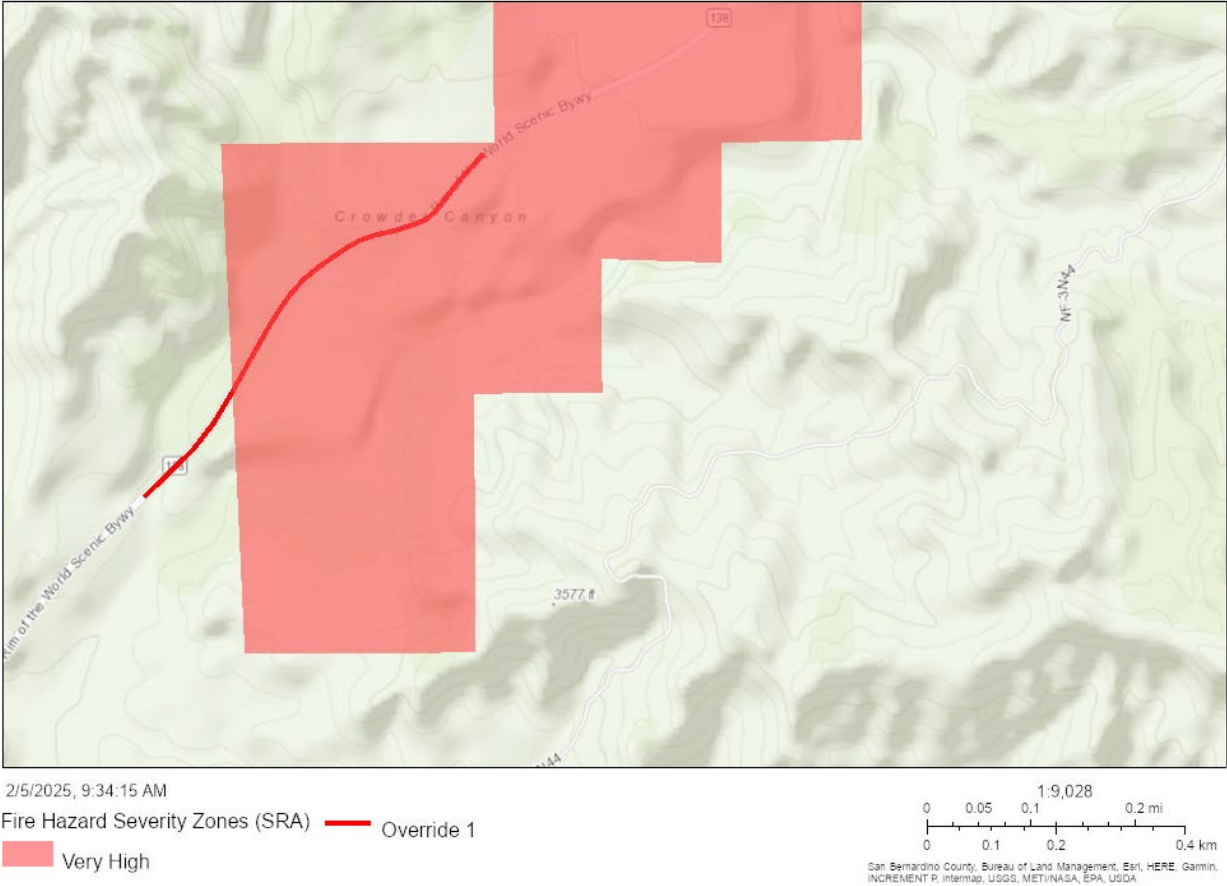
The project is located within a Zone D Area of Undetermined Flood Hazard as shown in Federal Emergency Management Agency (FEMA) Floodplain Insurance Rate Map (FIRM) number 06071C7180. Therefore, the project is not located within a 100-year base floodplain. The project area is within the Upper Cajon Wash sub-watershed of the Lytle Creek watershed as defined by CalWater and receives an average of 19.63 inches of precipitation per year.

The project proposes to rehabilitate Culvert B and remove and replace Culvert A. These improvements are anticipated to convey runoff more effectively and increase the existing facility's resilience to increased precipitation. The project is anticipated to improve the existing facility's ability to adapt to projected changes in precipitation and flooding.

Wildfire

Per California Department of Forestry and Fire Protection (CalFIRE) Fire Hazard Severity Zone Viewer as shown in Figure 3.2-5 CalFIRE Fire Hazard Severity Zone Map, a portion of the project is located within a State Responsibility Area (SRA) Very High Fire Hazard Severity Zone (VHFHSZ). The Caltrans District 8 Climate Change Vulnerability Assessment indicated that the project area has a High level of wildfire concern from 2010 to 2099.

Figure 2.2.5-2 CalFIRE Fire Hazard Severity Zone Map



Wildfire combined with heavier precipitation events can lead to flash floods and mudslides that can severely impact the highway system. The project proposes to improve the existing drainages in the project limits and to use steel instead of PVC or wood where possible for project features such as culverts and guardrail, which would increase the system’s resilience to potential wildfire impacts.

During construction, Caltrans standard Best Management Practices (BMPs) and Caltrans Standard Specifications will be implemented to prevent fires. Caltrans standards require a fire prevention plan as per Cal/OSHA requirements, posting contact information for the nearest fire suppression agencies, prohibits the setting of any open fires that are not part of the work, and requires any fires directly or indirectly caused by

job site activities to be extinguished. The following measures would also be implemented to avoid or minimize any potential fire risk during construction.

WIL-1: Fire Danger Rating: The Resident Engineer (RE) and contractor will maintain awareness of the fire danger rating for every day that construction activity is occurring. The RE may suspend work wholly or in part due to hazardous fire conditions. If the fire danger rating is “Very High” or a “fire weather watch” is issued, then limitations on higher risk activities will be applied.

WIL-2: Fire Safety Job Site Management: Caltrans Standard Special Specification (SSP) 7-1.02M(2) will be implemented for fire hazard management during construction. All hydrocarbon-fueled engines must be equipped with spark arresters unless they fall under the exceptions listed in SSP 7-1.02M(2). Each toilet must be equipped with a metal ashtray. Maintain appropriate fire breaks and locate flammable materials at least 50 feet away from equipment service, parking, and gas or oil storage areas, and at least 15 feet away from small mobile or stationary engines. Furnish a properly equipped pickup truck and driver for the sole purpose of fire control during and at least ½ hour after job site activities have ended.

Temperature

The Caltrans District 8 Climate Change Vulnerability Assessment estimated that for the RCP 8.5 scenario, the project area could experience an increase of 4.6 F in the absolute minimum temperature and 6.05 F in the average 7-day maximum temperature by 2055. By 2085 under the RCP 8.5 scenario, the project area could experience an increase of 8.0 to 9.9 F in the absolute minimum temperature and 8.0 to 9.9 in the average 7-day maximum temperature. The project will factor temperature changes due to climate change into the selection of roadway materials in order to select the materials most appropriate for the project as is required during design.

2.2.6 References

California Air Resources Board (ARB). 2008. *Climate Change Scoping Plan Appendices. Volume II: Analysis and Documentation*. Appendix I, p. I-19. December.
<https://ww3.arb.ca.gov/cc/scopingplan/document/scopingplandocument.htm>. Accessed: June 14, 2024.

California Air Resources Board (ARB). 2021. *SB 375 Regional Plan Climate Targets*.
<https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>. Accessed: June 14, 2024.

California Air Resources Board (ARB). 2022a. *2022 Scoping Plan for Achieving Carbon Neutrality*. Executive Summary. <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>. Accessed: June 14, 2024.

- California Air Resources Board (ARB). 2022b. *Climate Change*. <https://ww2.arb.ca.gov/our-work/topics/climate-change>. Accessed: June 14, 2024.
- California Air Resources Board (ARB). 2023. *California Greenhouse Gas Emissions Inventory Data—2023 Edition, 2000-2021*. <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed: June 14, 2024.
- California Department of Transportation (Caltrans). 2019. *Caltrans Climate Change Vulnerability Assessments. District 8 Technical Report*. June 2019. Prepared by WSP. <https://dot.ca.gov/programs/transportation-planning/2019-climate-change-vulnerability-assessments>.
- California Department of Transportation (Caltrans). 2020. *Caltrans Greenhouse Gas Emissions and Mitigation Report*. Final. August. Prepared by ICF, Sacramento, CA. <https://dot.ca.gov/programs/public-affairs/mile-marker/summer-2021/ghg>. Accessed: June 14, 2024.
- California Department of Transportation (Caltrans). 2021a. *California Transportation Plan 2050*. February. <https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/state-planning-equity-and-engagement/california-transportation-plan>. Accessed: June 14, 2024.
- California Department of Transportation (Caltrans). 2021b. *Caltrans 2020-2024 Strategic Plan*. <https://storymaps.arcgis.com/stories/f190b9755a184b268719dac9a11153f7>. Accessed: June 14, 2024.
- California Department of Transportation. 2023. *Sustainable Operations at Caltrans*. <https://dot.ca.gov/programs/esta/sustainable-caltrans>. Accessed: June 14, 2024.
- California Governor’s Office of Planning and Research (OPR). 2015. *A Strategy for California @ 50 Million*. November. <https://opr.ca.gov/planning/environmental-goals/>. Accessed: June 14, 2024.
- California Natural Resources Agency. 2022. *Nature-Based Climate Solutions: Natural and Working Lands Climate Smart Strategy*. <https://resources.ca.gov/Initiatives/Expanding-Nature-Based-Solutions>. Accessed: June 14, 2024.
- California Natural Resources Agency. 2023. *California Climate Adaptation Strategy*. <https://climateresilience.ca.gov/overview/index.html>. Accessed: June 14, 2024.
- California Ocean Protection Council. 2022. *State Agency Sea-Level Rise Action Plan for California*. February. <https://www.opc.ca.gov/climate-change/sea-level-rise-2/>. Accessed: June 14, 2024.
- California State Transportation Agency. 2021. *Climate Action Plan for Transportation Infrastructure (CAPTI)*. <https://calsta.ca.gov/subject-areas/climate-action-plan>. Accessed: June 14, 2024.

- Climate-Safe Infrastructure Working Group. 2018. *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. September.
https://resources.ca.gov/CNRALegacyFiles/docs/climate/ab2800/AB2800_Climate-SafeInfrastructure_FinalNoAppendices.pdf. Accessed: June 14, 2024.
- Federal Highway Administration (FHWA). 2022. *Sustainability*.
<https://www.fhwa.dot.gov/environment/sustainability/resilience/>. Last updated July 29, 2022. Accessed: June 14, 2024.
- Federal Highway Administration (FHWA). No date. *Sustainable Highways Initiative*.
<https://www.fhwa.dot.gov/environment/sustainability/initiative/>. Accessed: June 14, 2024.
- National Oceanic and Atmospheric Administration (NOAA). 2022. *2022 Sea Level Rise Technical Report*. <https://oceanservice.noaa.gov/hazards/sealevelrise/sealevelrise-tech-report.html>. Accessed: November 13, 2023.
- State of California. 2018. *California's Fourth Climate Change Assessment*.
<http://www.climateassessment.ca.gov/>. Accessed: June 14, 2024.
- U.S. Department of Transportation (U.S. DOT). 2014. *Corporate Average Fuel Economy (CAFE) Standards*.
<https://www.transportation.gov/mission/sustainability/corporate-average-fuel-economy-cafe-standards>. Accessed: June 14, 2024.
- U.S. Department of Transportation. 2023. *Climate Action*. January.
<https://www.transportation.gov/priorities/climate-and-sustainability/climate-action>. Accessed: June 14, 2024.
- U.S. Environmental Protection Agency (U.S. EPA). 2021. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. December. <https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions>. Accessed: June 14, 2024.
- U.S. Environmental Protection Agency. 2024a. *Data Highlights*. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022.
<https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>. Accessed: June 14, 2024.
- U.S. Environmental Protection Agency. 2024b. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022*. <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>. Accessed: June 14, 2024.
- U.S. Global Change Research Program. 2023. *Fifth National Climate Assessment*.
<https://nca2023.globalchange.gov/chapter/front-matter/>. Accessed: June 14, 2024.

Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, as well as the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings and interagency coordination meetings. In addition to consultation with participating agencies, the environmental document process will include public coordination by providing the public an opportunity to comment on the document during the public review period. This chapter summarizes the results of efforts to identify, address, and resolve project -related issues through early and continuing coordination.

3.1 Native American Tribes

The California Native American Heritage Commission (NAHC) was contacted, and a request was made to perform a Sacred Lands File (SLF) search on November 2, 2022. The NAHC responded the same day explaining that the wait time for the request to be processed would be approximately 8 weeks. Caltrans therefore assumed the project area was positive for SLF and treated the area as such. The Caltrans District 8 Native American Coordinator provided the contact information of Native American contacts for this project.

An initial letter was sent to Yuhaaviatam of San Manuel Nation, Jessica Mauck, Director, Cultural Resources. A response was received December 6, 2022 from Ryan Nordness, Cultural Resources Analyst, requesting consultation. Caltrans sent the initial ASR and XP1 proposal to the tribe September 11, 2023, and the documents underwent a round of comments and revisions between December 6, 2023 and June 20, 2024. On October 16, 2024, Caltrans sent a notification to the tribe that the project scope had decreased, which resulted in the elimination of XP1 and proposal, revisions to the ASR, and a proposed study finding of No Historic Properties affected. Caltrans has received no further response to date.

3.2 U.S. Fish and Wildlife Service

An official US Fish and Wildlife Service (USFWS) List of Proposed, Candidate, Threatened, and Endangered Species and Critical Habitats was obtained through the USFWS IPaC system on April 24, 2024 in support of the Natural Environment Study (NES) approved May 29, 2024. The NES was updated November 6, 2024 with a new species list obtained October 1, 2024.

3.3 Public Participation

The Draft Initial Study with Proposed Mitigated Negative Declaration is being circulated for public review. The Notice of Availability has been distributed to federal, state, regional, and local agencies and elected officials, as well as interested groups, organizations, and individuals. The comment period is from February 18, 2025 through March 20, 2025.

Chapter 4 List of Preparers

The following Caltrans personnel participated in the preparation of this Initial Study (IS):

Vivian Ho, Acting Senior Environmental Planner

Bahram Karimi, Associate Environmental Planner, Paleontology

Shawn Oriaz, Senior Environmental Planner

Antonia Toledo, Acting Supervising Environmental Planner

Tyrha Delger, Associate Environmental Planner, Biological Studies and Surveys

Chun-Sheng Wang, Senior Environmental Scientist, Biological Studies and Surveys

Sarah Bailey, Associate Environmental Planner, Regulatory Permits

Adam Compton, Senior Environmental Scientist, Regulatory Permits

Shannon Clarendon, Associate Environmental Planner, Archaeology

Gabrielle Duff, Senior Environmental Scientist, Cultural Studies

Fatima Islam, Transportation Engineer, Environmental Engineering

Donald Cheng Transportation Engineer, Environmental Engineering

Farhana Islam Transportation Engineer, Environmental Engineering

Olufemi Odufalu, Senior Transportation Engineer, Environmental Engineering

Crystal Almada, Associate Landscape Architect

Steven Magallanes, Senior Landscape Architect

Chapter 5 Distribution List

A public notice of this IS and a Notice of Intent to adopt a Mitigated Negative Declaration was publicly circulated and distributed to federal, state, regional, and local agencies, elected officials, and utilities and service providers. In addition, all property owners and occupants within a 500-foot radius of the project limits were provided a copy of the public notice. The distribution list of public agencies

5.1 Public Agencies, Elected Officials, and Service Providers

Supervisor Dawn Rowe San Bernardino County 385 N. Arrowhead Avenue Fifth Floor San Bernardino, CA 92415-0110	Captain Steven Allen San Bernardino County Sherriff's Department 15840 Smoketree Street Hesperia, California 92345	Environmental Management Division County of San Bernardino Department of Public Works 825 East Third Street San Bernardino, CA 92415-0835
Kelly Anderson Assistant Chief San Bernardino County Fire Protection District Division 5 598 S Tippecanoe Avenue San Bernardino, CA 92408	Hesperia Station #305 San Bernardino County Fire Protection District 8331 Caliente Road Hesperia, CA 92344	San Bernardino County Department of Public Works- Transportation 825 East Third Street San Bernardino, CA 92415
Mayor Allison Lee City of Hesperia 9700 Seventh Avenue Hesperia, CA 92345	Rachel Molina City Manager 9700 Seventh Avenue Hesperia, CA 92345	San Bernardino County County Administrative Office 385 N. Arrowhead Avenue San Bernardino, CA 92415
Lyanna Monell San Bernardino County Clerk of the Board 385 N. Arrowhead Avenue San Bernardino, CA 92415	San Bernardino National Forest 602 S. Tippecanoe Ave. San Bernardino, CA 92408	Southern California Edison 7951 Redwood Avenue Fontana, CA 92336
SoCalGas 488 8TH AVE SAN DIEGO CA 92101-7123	San Bernardino County Department of Public Works- Water and Sanitation 222 W. Hospitality Lane San Bernardino, CA 92415	

5.2 Interested Parties, Property Owners, and Members of the Public

Kim, Sun Bong
0351-141-36-0000
9910 Ponderosa Road
Pinion Hills CA 92372-9810

Current Occupant
0351-141-36-0000
138 University Parkway
San Bernardino CA 92411

Kim, Sun Bong
0351-141-37-0000
9910 Ponderosa Road
Pinion Hills CA 92372-9810

Parker, Wendy J
0351-131-17-0000
PO Box 2878
Newport Beach, CA 92659

Current Occupant
0351-131-17-0000
138 University Parkway
San Bernardino, CA 92411

Amezcuca, Francisco M
0351-141-14-0000
4042 N F ST
San Bernardino, CA 92407-3410

Current Occupant
0351-141-14-0000
HWY 138
San Bernardino, CA 92407

Nguyen, Thai D
0351-141-13-0000
13666 Eastbridge Street
Westminster, CA 92683-2985

Current Occupant
0351-141-13-0000
9555 HWY 138
San Bernardino, CA 92407

Southern California Gas
Company
0351-151-03-0000
488 8th Avenue
San Diego CA 92101-7123

Current Occupant
0351-151-03-0000
138 University Parkway
San Bernardino, CA 92411

Appendix A Title VI/Non-Discrimination Policy Statement

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, GOVERNOR

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, 7/13-49 | SACRAMENTO, CA 94273-0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov



September 2024

TITLE VI/NON-DISCRIMINATION POLICY STATEMENT

It is the policy of the California Department of Transportation (Caltrans), in accordance with Title VI of the Civil Rights Act of 1964 and the assurances set forth in the Caltrans' Title VI Program Plan, to ensure that no person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Related non-discrimination authorities, remedies, and state law further those protections, including sex, disability, religion, sexual orientation, age, low income, and Limited English Proficiency (LEP).

Caltrans is committed to complying with 23 C.F.R. Part 200, 49 C.F.R. Part 21, 49 C.F.R. Part 303, and the Federal Transit Administration Circular 4702.1B. Caltrans will make every effort to ensure nondiscrimination in all of its services, programs, and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin (including LEP). In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

The overall responsibility for this policy is assigned to the Caltrans Director. The Caltrans Title VI Coordinator is assigned to the Caltrans Office of Civil Rights Deputy Director, who then delegates sufficient responsibility and authority to the Office of Civil Rights' managers, including the Title VI Branch Manager, to effectively implement the Caltrans Title VI Program. Individuals with questions or requiring additional information relating to the policy or the implementation of the Caltrans Title VI Program should contact the Title VI Branch Manager at title.vi@dot.ca.gov or at (916) 639-6392, or visit the following web page: <https://dot.ca.gov/programs/civil-rights/title-vi>.



TONY TAVARES
Director

"Provide a safe and reliable transportation network that serves all people and respects the environment"

Appendix B Avoidance, Minimization and/or Mitigation Summary

The mitigation program for the proposed project is outlined in the following Environmental Commitments Record (ECR), which also includes avoidance and minimization measures to be implemented and the anticipated permits required for the project.

Permit Type	Agency	Date Received	Expiration	Notes
1600	California Department of Fish & Wildlife	TBD		
401	Santa Ana Regional Water Quality Control Board	TBD		
404	U.S. Army Corps of Engineers	TBD		Non-Reporting

Date of ECR: February 2024
Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
PN 0812000070
Generalist: Vivian Ho
ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
CULTURAL RESOURCES										
CR-1: If cultural materials are encountered during construction, it is Caltrans Policy that ALL construction work activities within 60 feet of the discovery shall stop until a qualified archaeologist can evaluate the nature and significance of the find.	38	HPSR (October 28, 2024)	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/ Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<p>CR-2: In the event that human remains are discovered, the county coroner shall be notified immediately and ALL construction work activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Most Likely Descendent (MLD). The person who discovered will contact the District 8 Native American Coordinator (DNAC) Julie Scrivner at (909)260-8265. Further provisions of PRC 5097.98 are to be followed as applicable.</p>	38	HPSR (October 28, 2024)	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
CR-3: The portions of the Crowder Canyon Archaeological District (CCAD) outside the ADI including the boundaries of CA SBR-113/H (P-36-000113) shall be designated as Environmentally Sensitive Areas (ESAs), where all project-related activities or inadvertent disturbances shall be prohibited. The designation of ESAs will protect the CA SBR-113/H (P-36-000113) and the CCAD as a whole.	38	HPSR (October 28, 2024)	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/ Construction						
CR-4: Archaeological and/or Tribal monitors approved by the Yuhaaviatam of San Manuel Nation shall be present during any ground disturbing preconstruction or construction-related activities in all areas designated as	38	HPSR (October 28, 2024)	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/ Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Archaeological Monitoring Areas (AMAs). In the event that cultural deposits are uncovered, the archaeological monitor shall be empowered to implement protective measures outlined above in CR-1.										
CR-5: Cultural Resources Sensitivity Training shall be required for all personnel working on the project during construction. The Archaeological Monitor assigned by Caltrans will deliver this training. A Native American Monitor may also present this training. Materials for the training will be provided by Caltrans or the associated Tribe, in the event the Archaeological Monitor is not available to deliver training.	39	HPSR (October 28, 2024)	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/ Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementati on of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<u>BIOLOGICAL RESOURCES</u>										
BIO-General-1: Equipment Staging, Storing, and Borrow Sites: All staging, storing, and borrow sites require the approval of the Caltrans Biologist.	33	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
BIO-General-4: Preconstruction Surveys: Within the appropriate identification periods for special-status plants and Sensitive Natural Communities, surveys shall be conducted up to the limits of the Caltrans Right of Way. In addition, three days prior to construction, a preconstruction survey must be conducted by an approved qualified biologist with	33	NES Addendum (11/6/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
contacted and additional measures and/or agency coordination may be required.										
BIO-General-6: Species Avoidance: If during project activities, a special-status plant species, special-status animal species, or nesting bird is discovered within the project site, all construction activities must stop within 10 feet for rare and insect host plants, 50 feet for arroyo toads, 50 feet for special-status reptile species 100 feet for non-passerine nesting birds, 300 feet for passerine nesting birds, 500 feet for raptors and federal/State-listed bird species, 16 to 25 feet around single American badger burrows, and 65 feet	34	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
around clusters of American badger burrows, and the Caltrans Biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be required prior to restarting activities.										
BIO-General-7: Worker Environmental Awareness Program (WEAP): A qualified biologist must present a biological resource information program/WEAP for special-status and insect host plant species, protected natural communities, special-status reptile species, special-status mammal species, arroyo toads, and nesting birds prior to project activities to all personnel that will be	34	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
present within the project limits for longer than 30 minutes at any given time.										
BIO-General-8: Biological Monitoring: The Qualified Biologist must monitor project activities weekly to ensure that measures are being implemented and documents, and daily for any nesting birds observed during preconstruction surveys until the young have fledged or the nest is deemed inactive.	34	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
BIO-General-9: Environmentally Sensitive Area (ESA): To address impacts to sandbar willow thickets and California sycamore riparian woodland, delineate this area as an ESA	34	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
as shown on the plans and/or described in the specifications.										
BIO-General-12: Animal Entrapment: To prevent inadvertent entrapment of arroyo and special-status mammal species during project activities, all excavated steep-walled holes, bores, excavations, or trenches more than 6 inches deep must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks, sloped at a 3:1 ratio. At the beginning of each working day, all such holes or trenches must be inspected to	34	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the qualified biologist.										
BIO-General-13: Animal Sheltering: To prevent inadvertent harm of arroyo toad and special-status reptile species during project activities, all construction materials, including but not limited to culverts and sections of pipe, must be inspected for the presence of wildlife sheltering in them prior to the use or movement of those materials. Sheltering	35	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
animals must be released by the qualified biologist.										
BIO-General-14: Predator Prevention: Project personnel are prohibited from feeding wildlife or bringing pets on the job site.	35	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
BIO-General-16: Invasive Weed Control: To address impacts to natural communities of concern, a Qualified Biologist must identify invasive species within the Project Impact Area during shoulder backing, road realignment, and road widening. Treatment and disposal methods must be approved by the Caltrans	35	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Biologist prior to vegetation removal.										
BIO-Plant-PSM-3: Top Soil Conservation: Prior to any ground breaking activities, the top soil, or duff, of a project must be scraped and stored to be redistributed on the project site after construction activities are completed.	35	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
BIO-Arthropod-1: Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing: No more than 3 days prior to project activities, a qualified biologist must perform a preconstruction survey for rare insect host plants within the PIA and up to the limits of the Caltrans	35	NES Addendum (11/6/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (*DED/FED*)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
Right of Way. Should any rare insect host plants be found, the Resident Engineer and Caltrans Biologist must be contacted, and host plants must be flagged by the qualified biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the groupings must be fenced with Environmentally Sensitive Area (ESA) temporary high visibility fencing.										
BIO-Arthropod-PSM-2: Plant Seed Mix: Seed mixes must contain a diverse array of pollinator plant species native to California including but not limited to California	35	NES (5/29/2024)	District Design / District Environmental Planning / Resident	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
native <i>Asclepias</i> , <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .			Engineer / Contractor							
BIO-Reptile-1: Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for coastal whiptail and coast horned lizard before operating equipment at any time.	35	NES (5/29/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
BIO-Reptile-2: Pre-Construction Surveys: To assess the number of coastal whiptails and coast horned lizards that may be potentially impacted, pre-project surveys for these species must be	35	NES Addendum (11/6/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
conducted up to the limits of the Caltrans Right of Way. Surveys shall be presence/absence surveys based on visible sign of coastal whiptails.										
BIO-Reptile-4: Authorized Biologist Clearance Surveys: Clearance coastal whiptail and coast horned lizard surveys must be conducted by a qualified biologist 3 days prior to project activities up to the limits of the Caltrans Right of Way within the project footprint. If a coastal whiptail or coast horned lizard is located, the Resident Engineer and Caltrans Biologist must be contacted and additional measures	36	NES Addendum (11/6/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
and/or agency coordination may be required. Coastal whiptail and coast horned lizard removed from work areas may be moved from harm's way to the nearest suitable habitat or translocated, following the most recent CDFW guidelines.										
BIO-Mitigation-1: Habitat Compensation: Compensatory mitigation for permanent impacts to California sycamore riparian woodland and Sandbar willow will be provided at a 1:1 ratio, through on-site restoration activities, suitable mitigation/conservation bank	36	NES Addendum (11/6/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
credits, and/or suitable in-lieu fee program credits.										
BIO-Mitigation-2: Aquatic Resources: Compensatory mitigation for permanent impacts to jurisdictional aquatic will be provided at a 1:1 ratio, through on-site restoration activities, suitable mitigation/conservation bank credits, and/or suitable in-lieu fee program credits.	36	NES Addendum (11/6/2024)	District Design / District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
<u>VISUAL/AESTHETICS</u>										
VIS-1: Revegetation: Existing trees and vegetation within disturbed slopes will be revegetated with replacement trees and non-irrigated hydroseed containing native seed. Removal of trees within	8	VIAM (10/11/24)	District Design / District Landscape Architecture / District Environmental Planning /	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
portions of the project's riparian areas and along hillsides will be replaced at a 3:1 tree replacement-to-removal ratio, with a 1–5-year PE period.			Resident Engineer / Contractor							
VIS-2: Slope Stabilization: Native seed will be applied to all disturbed soil areas and cut/fill slopes.	8	VIAM (10/11/24)	District Design / District Landscape Architecture /District Environmental Planning / Resident Engineer / Contractor	Final Design, Construction						
VIS-3: MGS Enhancement: Apply natural finish to MGS to blend in with natural landscape and to match the	8	VIAM (10/11/24)	District Design / District Landscape Architecture /District Environmental	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
geotechnical drilling, laboratory testing for soil engineering properties, slope stability analysis, and liquefaction analysis as needed.										
GEO-2: Rolled Erosion Control Product: All slopes would be stabilized with Rolled Erosion Control Product (RECP) such as erosion control netting or erosion control blanket.	46	Prelim GDR (3/19/2024)								
PAL-1: Paleontological Mitigation Plan: A PMP must be prepared by a qualified paleontologist and must include the following elements: <ul style="list-style-type: none"> Required preconstruction paleontological sensitivity 	46	PIR/PER (July 2024)	District Design / District Paleontologica l Studies / Resident Engineer / Contractor	Final Design, Constru ction	SSP or NSSP					

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (*DED/FED*)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
training for earthmoving personnel to include documentation of training (sign-in sheets, hard hat stickers) <ul style="list-style-type: none"> • A signed repository agreement • Field and laboratory methods proposed (must be consistent with repository requirements) • All elements under reporting: PMP Format (Caltrans 2003) • Required Paleontological Mitigation Report (PMR) upon completion of project earthmoving. 										
<u>GREENHOUSE GAS EMISSIONS</u>										

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
GHG-3: Limit Diesel Idling: Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.	48	IS/CE								
HAZARDOUS WASTE / MATERIALS										
HAZ-1: Earth Material Containing Lead: Caltrans SSP 7-1.02K(6)(j)(iii) will be implemented to manage the handling, removal, and disposing of unregulated earth material containing lead. A Lead Compliance Plan (LCP) is required.	51	ISA Checklist (1/18/2024)	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 7-1.02K(6)(j)(iii)					
HAZ-2: Treated Wood Waste: Caltrans SSP 14-11.14 will be implemented to manage the handling, storing,	51	ISA Checklist (1/18/2024)	District Design / District Environmental Engineering / Resident	Final Design, Construction	SSP 14-11.14					

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
transporting, and disposing of treated wood waste.			Engineer / Contractor							
HAZ-3: Yellow Paint/Thermoplastic: Caltrans SSP 14-11.12 will be implemented to manage the removal and handling of yellow painted or thermoplastic traffic stripe or pavement markings which contain levels of lead that are anticipated to be a hazardous waste. An LCP is required.	51	ISA Checklist (1/18/2024)	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 14-11.12					
HAZ-4: Nonhazardous Striping/Pavement Marker: Caltrans SSP 84-9.03B will be implemented to manage the removal and handling of painted or thermoplastic traffic stripe or pavement markings which may contain lead, but	51	ISA Checklist (1/18/2024)	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 84-9.03B					

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
not at levels that are anticipated to be a hazardous waste. An LCP is required.										
HAZ-5: Residue Containing Lead: Caltrans SSP 36-4 will be implemented to manage work involving residue from grinding and/or cold planing that contains lead from paint and thermoplastic at nonhazardous levels. An LCP is required.	51	ISA Checklist (1/18/2024)	District Design / District Environmental Engineering / Resident Engineer / Contractor	Final Design, Construction	SSP 36-4					
TRANSPORTATION										
TRAF-1: TMP: A Traffic Management Plan (TMP) has been developed for the project, which will be implemented during construction to manage the safe and efficient flow of	63	IS/CE	District Design / District Biological Studies / Resident Engineer / Contractor	Final Design, Construction						

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environment al Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
traffic. The TMP includes constructing a detour to maintain continuous traffic flow, a Public Awareness Campaign (PAC), Motorist Information Strategies, Incident Management, and flagging throughout the duration of construction.										
<u>WILDFIRE</u>										
WIL-1: Fire Danger Rating: The Resident Engineer (RE) and contractor will maintain awareness of the fire danger rating for every day that construction activity is occurring. The RE may suspend work wholly or in part due to hazardous fire conditions. If the fire danger rating is "Very High" or a "fire	70	IS/CE			SSP 7-1.02M (2)					

Date of ECR: February 2024
 Date: February 2024

ENVIRONMENTAL COMMITMENTS RECORD

SBD 138 Curve Revision

08-SBd-138
 PM T16.20/R17.35

Project Phase:
 PA/ED (DED/FED)
 PS&E Submittal _____ %
 Construction

EA 08-1M080
 PN 0812000070
 Generalist: Vivian Ho
 ECL: TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSP or NSSP :	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
weather watch” is issued, then limitations on higher risk activities will be applied.										
WIL-2: Fire Safety Job Site Management: Caltrans SSP 7-1.02M(2) will be implemented for fire hazard management during construction. All hydrocarbon-fueled engines must be equipped with spark arresters unless they fall under the exceptions listed in SSP 7-1.02M(2). Each toilet must be equipped with a metal ashtray. Maintain appropriate fire breaks and locate flammable materials at least 50 feet away from equipment service, parking, and gas or oil storage areas, and at least 15 feet away from small	70	IS/CE			SSP 7-1.02M(2)					

Appendix C List of Technical Studies

The following studies and/or technical analyses have been prepared and are incorporated by reference into this Initial Study/Environmental Assessment. To request a copy of one or more of these technical studies/reports or the Initial Study, please send your request to:

Gita Tokhmafshan
464 West 4th Street, MS 827
San Bernardino, CA 92401
Gita.Tokhmafshan@dot.ca.gov

Air Quality Review Memorandum and Transportation Air Quality Conformity Checklist (July 21, 2024)

Natural Environment Study (May 29, 2024) and NES Addendum (November 6, 2024)

Western Joshua Tree Habitat Assessment (March 16, 2023)

Small Mammal Habitat Assessment (March 23, 2023)

Jurisdictional Delineation Report (June 23, 2023)

Preliminary Drainage Report (June 25, 2024)

Preliminary Geotechnical Design Report (March 29, 2024)

Paleontological Identification Report and Paleontological Evaluation Report (July 2024)

Noise Review Memorandum (May 13, 2024)

Visual Impact Assessment Memorandum (October 11, 2024)

Initial Site Assessment Checklist (January 18, 2024)

Historical Property Survey Report (October 28, 2024)

Please note, many state and federal laws limit the disclosure of sensitive cultural and tribal resource information to the public. Additional information regarding confidentiality of these resources can be found in the [Standard Environmental Reference Volume 2](#) in Section 3.4.13 and Section 5.3.6.