SBD-18 Baldwin Lake Pavement Rehabilitation

SAN BERNARDINO COUNTY, CALIFORNIA
DISTRICT 8–SBD–18 (PM 56.2/66.90)
EA 08-1L420 / PN 0820000076

Initial Study [with Proposed] Mitigated Negative Declaration

Prepared by the
State of California, Department of Transportation

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May 2024

General Information about This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in San Bernardino County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives we have 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:

- We welcome your comments. If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comment via U.S. mail or email to Caltrans at the following address:
  Malisa Lieng, Senior Environmental Planner
  California Department of Transportation 464 W. 4th Street, MS 823
  San Bernardino, CA 92401-1400
  Email: SR-18BaldwinLakePavementRehab@dot.ca.gov

- Submit comments by the deadline: June 24, 2024

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 Department of Transportation, Attn: Malisa Lieng, Senior Environmental Planner, 464 W. 4th Street (MS 823), San Bernardino, CA 92401; (909) 261-3955 (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-18-PM 56.2/66.9
EA-08-1L420
PN 08190000159

Rehabilitate State Route 18 (SR-18) at Baldwin Lake, from 2.0 miles south of Holcomb Valley Road (PM 56.2) to Camp Rock Road (PM 66.9) in San Bernardino County.

Initial Study with (Proposed) Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

Kurt Heidelberg _____ 5/8/2024

Kurt Heidelberg
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

Date

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

Malisa Lieng
464 W. 4th Street, MS 823
San Bernardino, CA 92401-1400
(909)261-3955

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) is proposing to rehabilitate a section of State Route 18 (SR-18) at Baldwin Lake, from 2.0 miles south of Holcomb Valley Road (PM 56.2) to Camp Rock Road (PM 66.9) in San Bernardino County. The work includes cold plane and overlay, repair of distressed pavement areas with digouts, construction of eight-foot-wide shoulders at PM 60.5 to 62.4 and PM 64.9 to 66.8, replace existing signage, enhance guardrail systems, remove existing Rock Slope Protection (RSP) and construct concrete channel lining at Cushenbury Creek bridge, construct median and shoulder rumble strips, and repair and upgrade culverts within the project limits.

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the Department's intent to adopt a MND for this project. This does not mean that the Department's 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 Aesthetics, Agriculture and Forest Resources, Air Quality, Energy, Hydrology and Water Quality, Geology and Soils, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Wildfire and Utilities and Service Systems

In addition, the proposed project would have less than significant effects to Biological Resources, Cultural Resources, Greenhouse Gas Emissions, Hazards and Hazardous Materials, and Tribal Cultural Resources.

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

- **BIO-26: CDFW Individual Take Permit – Western Joshua Tree (Compensatory Mitigation)**

  In addition to the above measures, to address impacts to western Joshua Tree, Caltrans would comply with the Western Joshua Tree Conservation Act. During

Plans, Specifications, and Estimates Phase, Caltrans would coordinate with CDFW and apply for an Individual Take Permit for the take of western Joshua tree. The ITP would include corresponding application fees and compensatory mitigation based on the current CDFW fee schedule number of affected individuals.

- **BIO-27: USFWS Coordination for Cushenbury Milk-vetch and its Critical Habitat**

  The project includes work within federally designated critical habitat unit for: Ash-grey paintbrush, Bear Valley sandwort, Cushenbury buckwheat, Cushenbury milk-vetch, Cushenbury oxytheca, Parish's daisy, San Bernardino bluegrass and southern mountain buckwheat. Therefore, to address potential impacts within a federal critical habitat Caltrans would initiate consultation with USFWS pursuant to Section 7(a)(2) of the Federal Endangered Species Act.

- **BIO-28: Compensatory Mitigation**

  The project is expected to impact jurisdictional aquatic resources through the repair/upgrade of culverts and the installation of concrete lining within Cushenbury Creek. Therefore, coordination with CDFW and RWQCB would be necessary and compensatory mitigation would be developed. Compensatory mitigation has not been determined at this time and would be determined through coordination between Caltrans and the appropriate regulatory agencies in the form of permit application fees for CDFW 1600 and RWQCB Report of Waste Discharge.

  If impacts to federally and/or state-listed or candidate state species occur as result of the proposed Project, take authorization permits are required from USFWS and/or CDFW, then compensatory mitigation to offset impacts to those species will be outlined in those permit documents.

_____ _____

Kurt Heidelberg
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

Date

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

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_____ _____

Kurt Heidelberg
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation

Date

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Chapter 1 Proposed Project

1.1 INTRODUCTION

The Department of Transportation (Caltrans) proposes to preserve and extend the service life of the existing pavement, as well as other roadway deficiencies on a two-lane to four-lane undivided highway. The proposed project is on State Route (SR)-18, located in San Bernardino County, at Baldwin Lake, 2.0 miles south of Holcomb Valley to Camp Rock Road at Postmile (PM) 56.2 to 66.9. The work includes pavement rehabilitation using Partial Depth Recycling (PDR), construction of 8-foot shoulders, replacement of sign panels, guardrail upgrade, Transportation Management System (TMS) elements upgrade, extension of culverts within the project limits, construction of median and shoulder rumble strips, remove existing Rock Slope Protection (RSP) and construct channel lining under Cushenbury Creek bridge and construction of pavement edge treatment.

This project is included in the 2023 Federal Transportation Improvement Program (FTIP) and is proposed for funding from the State Highway Operation Protection Program (SHOPP) Roadway Preservation Program under 201.121 (HA22) for delivery in the 2026 Fiscal Year.

1.2 PURPOSE AND NEED

1.2.1 Purpose

The purpose of this project is to preserve and extend the service life of the existing pavement and improve ride quality by performing localized digouts and milling and overlaying. In addition, the project would enhance safety for motorists by constructing 8’ shoulders, upgrade guardrails and end treatments, and installation of delineators at the edge of pavement.

1.2.2 Need

This segment of SR-18 has a variety of deficiencies. These include nonstandard shoulder widths, sign panels, and guardrails, which are in poor condition, and distressed pavement. The project is needed to address these deficiencies.

1.3 PROPOSED BUILD ALTERNATIVES

The proposed Minor Pavement Rehabilitation project would include cold plane and overlay and localized digouts from PM 56.2 to PM 66.9. Additionally, it proposes widening to facilitate 8’ outside shoulders at various locations from PM 56.2 to PM 66.9, drainage enhancements at twelve locations, and upgrades to various highway components to align with current standards. The proposed engineering features are as follows:

- 0.25’ of cold plane and overlay with Hot Mix Asphalt-Type A (HMA-A)

- Construction of 8’ outside shoulders with tapered edges and shoulder backing at PM 60.5 to 62.4 and PM 64.9 to 66.8 on both highway sides using a pavement structural section of 0.5’ HMA-A over 0.5’ Class 2 Aggregate Base

- Localized Digouts of 0.4‘- 0.5’ ft depth where required

- Install median rumble strips and bicyclist-friendly shoulder rumble strip

- Replacement of sign panels at PM 59.96 and PM 66.99

- Replacement of existing Metal Beam Guardrail (MBGR) with Midwest Guardrail System (MGS)

- Replace End Treatments

- Remove existing RSP and construct channel lining under Cushenbury Creek Bridge

- Upsize 3 culverts at PM 60.91, 62.04, and 63.75

- Repair 9 Culverts

- Install Delineators at Edge of Pavement

The construction of standard shoulders and graded slopes would result in the widening of the existing roadway and the creation of new right of way limits. In total, acquisition of two private parcels are being proposed (*APN 031458124* and *APN 044709101*) and one Temporary Construction Easement (TCE) (*APN 04471110*) for United States Forest Service (USFS). Caltrans currently has a Perfection of Title (POT) on file that allows the state to operate and maintain SR-18. All work would be within the current Caltrans right-of-way and existing easement / Perfection of Title. No displacement of any person or businesses would result from the right of way acquisition.

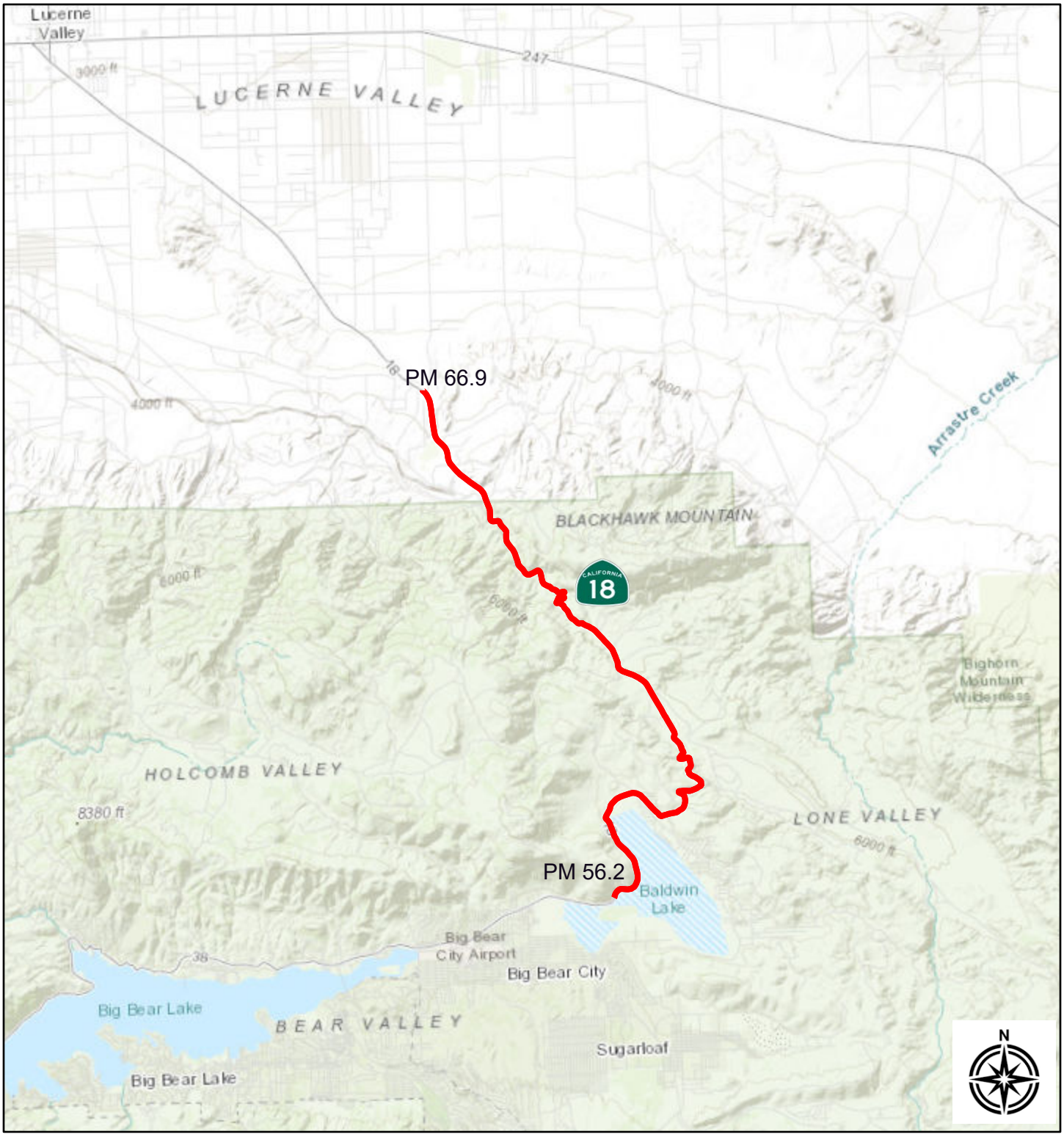
A Traffic Management Plan (TMP) would be implemented during construction. Stage construction would be required to maintain traffic flow during construction. Construction strategies to be implemented include reversing traffic control, flaggers, and steel plates during non-working hours. Detours would also be implemented to ensure safety of pedestrians, bicyclists, and motorists.

The capital cost for this alternative is estimated at $22,337,000. The estimated number of working days is 205. If there are any changes to the project design, or if regulatory agency findings necessitate compensatory mitigation, the cost would be added to this estimate.

1.3.1 Alternative No-Build (No-Action) Alternative

Under the No-Build Alternative, the existing facility would remain as it exists now. No improvement to the pavement would occur and the roadway deficiencies would remain. This alternative would not satisfy the purpose and need.

SBD-18 Baldwin Lake Pavement Rehab Project



April 24, 2024

Project Area
Postmile 56.2 to 66.9

0 1 2 4 Miles

Caltrans

Division of Environmental Analysis

1.4 PERMITS AND APPROVALS NEEDED

The following permits, licenses, agreements, and certifications (PLACs) are required for project construction Table 1: Permits and Approvals

Agency	PLAC	Status
California Department of Fish and Wildlife (CDFW)	1602 Agreement for Streambed Alteration Section 2081- Incidental Take Permit Western Joshua Tree Protection Act In-Lieu Fee Program	Application for the 1602 Agreement and consultation for the Western Joshua Tree Protection Act In-Lieu Fee Program would occur during the Final Design phase of the project. The project would not proceed to construction before receiving these permits. During Final Design, Caltrans would comply with the Western Joshua Tree Protection Act In-Lieu Fee Program through payment of application fees and compensatory mitigation according to the CDFW fee schedule, and/or obtain a CDFW 2081 Individual Take Permit based on the number of affected individuals. The final amount would be determined during Final Design.
Regional Water Quality Control Board	Water Discharge Requirement (WDR)	The WDR would be determined during the Final Design phase of the project. The project would not proceed to construction before receiving the WDR
US Fish and Wildlife Service (USFWS)	Biological Opinion	Consultation with USFWS is currently ongoing for the potential impacts to federally listed Cushenbury milk-vetch and its critical habitat.

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 would 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 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 Chapter 1 for a detailed discussion of these features.

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?	No Impact
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) No Impact: According to the Visual Impact Assessment (VIA) checklist, completed on March 14, 2023, the proposed project would not have an impact on a scenic vista because there would not be a noticeable change to the existing environment. Therefore, the proposed project would have no impact.

b) No Impact: This portion of State Route-18 is not officially designated as a state scenic highway and there are no designated scenic highways within the project limits. The land within the project limits is identified as Rural Desert and Conservation Habitat. The proposed project would not damage any scenic resources or historic buildings. As such, there would be no impact.

c) No Impact: The existing visual character or quality of the site and its surroundings would remain the same as existing conditions. The new Safety Roadside Rest Area (SRRA) facility would include aesthetics that would complement and maintain consistency to the natural look of the desert. Viewer sensitivity in the area is low. Therefore, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

d) No Impact: The proposed project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Aesthetics.

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:** According to the California Department of Conservation Map, the northern portion of the proposed project limits are within Grazing Land, Urban and Built-Up Land, and Other Lands. There are no farmlands or vacant lands mapped as Prime Farmlands or Local Importance within the vicinity. The project would not convert Farmlands to non-agricultural use.

b) **No Impact:** There are no parcels under a Williamson Act contract within the project limits.

c) **No Impact**: There are forest lands, timberlands, or timberland production areas adjacent and within the project site. The project area would not conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production.

d) **No Impact:** The proposed project would not result in the loss or conversion of forest land.

e) **No Impact:** According to the US Forest Services, the project is within forest lands. However, due to the scope of work, the project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for Agricultural and Forest Resources.

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) No Impact: The proposed project is located in the Mojave Desert Air Basin (MDAB). The Mojave Desert Air Quality Management District (MDAQMD) has jurisdiction over the project area and is responsible for bringing the Basin into attainment for federal and state air quality standards. To achieve this goal, MDAQMD prepares plans for attainment of air quality standards, as well as maintenance of those standards once achieved. This project is not a capacity-increasing transportation project and would not have an impact on traffic volumes. The project is listed in Table 1 of Caltrans Carbon Monoxide (CO) Protocol or Table 2 of 40 CFR 93.126 and is exempt from all air emissions analysis. Therefore, the proposed project would not conflict with the Air Quality Management Plan (AQMP), violate any quality standard, result in a net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations.

The proposed project is included in the 2023 Federal Transportation Improvement Program (FTIP) from the *2022 Grouped Project Detailed Backup Listings* on the Southern California Associated of Governments (SCAG) website.

As such, project emissions are consistent with applicable air quality plans and would have no impact.

b) No Impact: As discussed above, project construction would generate criteria pollutants and their precursors. However, such emissions would be short term and transitory, and fugitive dust would be limited. No net increase in operational emissions would occur, traffic volumes would be the same under the Project Alternative and No-Build Alternative. The project would result in short-term generation of emissions, but no increases would occur for project operation and no impacts related to a cumulatively considerable net increase of any criteria pollutant.

c) **No Impact:** No Impacts related to exposure of sensitive receptors to substantial pollutant concentration would occur. California Air Resource Board (CARB) characterizes sensitive land uses as simply as possible by using the example of residences, playgrounds, and medical facilities. However, there are none of these sensitive receptors in the nearby vicinities. Implementation of the proposed project would not increase criteria pollutants and their precursors following the construction period. Since the construction would result in short-term generation of emissions, though no increases would occur during project operation, impacts related to exposing sensitive receptors to substantial pollutant concentration would result in no impact.

d) **No Impact:** According to the CARB, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. Because the project would not include any of these types of uses, and no sensitive land uses are located along the alignment, no impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are 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 with Mitigation Incorporated
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) Less Than Significant Impact with Mitigation Incorporated: The proposed project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?

Plant Species

The project is within San Bernardino National Forest. The Biological Study Area (BSA) overlaps with mapped critical habitat units for federal listed plant species pursuant to the Federal Endangered Species Act (FESA) Section 7(a)(2).

The following federal/State listed special status plants and their respective critical habitat (if present) occur within the BSA:

Plant Name	Scientific Name	Federal Status (FESA)	State Status (CESA)	Critical Habitat Present?	Species Absent/Present within Project Impact Area?
Ash-grey paintbrush	*Castilleja cinerea*	Threatened	None	Yes	Absent
Bear Valley Sandwort	*Eremogone ursina*	Endangered	None	Yes	Absent
Bird foot checkerbloom	*Sidalcea pedate*	Endangered	Endangered	No	Absent
California Taraxacum	*Taraxacum californicum*	Endangered	None	No	Absent
Cushenbury Buckwheat	*Eriogonum ovalifolium* var. *vineum*	Endangered	None	Yes	Absent
Cushenbury Milk-vetch	*Astragalus albens*	Endangered	None	Yes	Absent
Cushenbury Oxytheca	*Acanthoscyphus parishii v*ar. *goodmaniana*	Endangered	None	Yes	Absent
Parish's Daisy	*Erigeron parishii*	Threatened	None	Yes	Absent
Pedate Cecker-mallow		Endangered			Absent
San Bernardino Bluegrass	*Poa atropurpurea*	Endangered	None	Yes	Absent
San Bernardino Mountain Bladderpod	*Physaria kingii* ssp*. bernardina*	Endangered	None	No	Absent
Slender-petaled Mustard	*Thelypodium stenopetalum*	Endangered	Endangered	No	Absent
Southern Mountain Wild Buckwheat	*Eriogonum kennedyi* var. *austromontanum*	Endangered	None	Yes	Absent
Santa Ana River woollystar	*Eriastrum desnifolium* ssp. *Santorum*	Threatened	Endangered	No	Abesent
Western Joshua tree	*Yucca brevifolia*	None	Candidate Endangered	No	Yes

Federal Listed Plant Species/Critical Habitat

Federal listed plant species and their respective critical habitats present within the BSA are identified in the table above. Botanical surveys conducted in 2022 and 2023 for the project limits resulted in a negative finding for individuals of the above federal- listed special status plants species within the project impact area. Caltrans would implement pre-construction botanical clearance surveys to ensure avoidance of federal plant species. Accordingly, the project would result in no impact to federal plant species.

The Biological Study Area (BSA) for this project also overlaps federally designated critical habitat for federal listed plant species. These critical habitats include Ash-grey paintbrush, Bear Valley sandwort, Cushenbury buckwheat, Cushenbury milk-vetch, Cushenbury Oxytheca, Parish's daisy, San Bernardino bluegrass and southern mountain buckwheat.

Although work would occur within mapped critical habitat units for federal listed plant species, the project carries minimal potential to impact any of the above critical habitat. Work activities would remain confined within previously disturbed areas which do not feature or comprise suitable habitat, physical or biological features to support the above-listed plant species or their respective habitat. Therefore, the pursuant to FESA Section 7(a)(2), the project would result in *No Effect* to federal listed plant species identified above. Additionally, based on a negative finding resulting from botanical surveys, and due to minimally invasive work within previously disturbed areas of mapped federal critical habitat units, the project would not result in permanent impacts to federal critical habitat. However, due to work occurring adjacent to and in proximity to potential areas of critical habitat, and pursuant to FESA Section 7(a)(2), Caltrans determined the project *May Likely, and is Not Likely to Adversely Affect* critical habitat for federal critical habitats within the BSA. Therefore, Caltrans would consult with USFWS for potential impacts within federal critical habitat for the above listed federal plant species. Compensatory mitigation may be required for temporary or permanent impacts within federal mapped critical habitat. In addition, Caltrans would implement avoidance, minimization, and mitigation measures, listed below. Therefore, impacts for federal listed plant species would remain less than significant with mitigation incorporated.

State Listed Plant Species

State listed plant species present within the BSA are identified in the table above. Botanical surveys conducted in 2022 and 2023 for the project limits resulted in a negative finding for the above State-listed special status plants species within the project impact area. In addition, work activities would remain confined within previously disturbed areas (e.g., – graded shoulders, existing guardrail, existing paved surface, vehicle turnouts, etc.) which do not feature or comprise suitable habitat, physical or biological features to support the above-listed plant species or their respective habitat. Due to minimally invasive work within previously disturbed areas of mapped federal critical habitat units, the project would not result in permanent impacts to federal critical habitat. Temporary impacts would be determined during consultation with USFWS.

Culvert repair would occur from the roadway surface, and would require minimal work, using hand tools, near culvert inlets or outlets. Therefore, the project would affect minimal vegetation in association with culvert repair.

The project area also occurs within potential habitat for State listed species pursuant to the California Endangered Species Act (CESA). In accordance with the California Endangered Species Act (CESA), the project would result in No Take of State listed plant species. Botanical surveys conducted in 2022 and 2023 for the project limits resulted in a negative finding for the above-listed plants species within the project impact area. Although work would occur within designated critical habitat units for federal listed plant species, work activities would remain confined within previously disturbed areas which do not feature or comprise suitable habitat, physical or biological features to support the above-listed plant species or their respective habitat. Therefore, the pursuant to CESA, the project would result in no take of State listed plant species.

Potential impacts to State listed plant species would remain less than significant. Potential impacts to Western Joshua tree are discussed below.

Western Joshua Tree

Western Joshua tree, a Candidate State Endangered species, also occur within the project limits. Western Joshua tree is protected under the Western Joshua Tree Conservation Act. The project would result in removal of approximately 19 western Joshua tree in association with proposed shoulder widening. Therefore, Caltrans would apply for a CDFW Section 2081 Individual Take Permit (ITP) and pay applicable CDFW fees for removal of Western Joshua tree. The final number of trees affected by the project would be determined during Caltrans' project design phase (Phase 1), during the ITP application process, based on final design. Caltrans would implement BMPs, avoidance, minimization and mitigation measures listed below. According to compensatory mitigation through CDFW 2081 ITP application fees, impacts to Western Joshua tree would remain less than significant with mitigation incorporated.

Bat Species

Bat species have the potential to occur within the project limits (BSA). However, the PIA features roadway, shoulders, culverts, and Cushenbury Creek channel. Thus, opportunities for day- or night roosting are limited within the PIA. Suitable maternal colony roosting habitat does not occur within the PIA. In addition, Caltrans would implement pre-construction clearance surveys for bats at culvert locations and Cushenbury Creek Bridge. Thus, *take* of maternal bat colonies, or individual bat species is not anticipated. With implementation of avoidance and minimization measures, potential impacts to bat species would remain less than significant.

Birds

The project is within San Bernardino National Forest. Suitable nesting habitat for resident and migratory birds occurs throughout the project limits. The project involves vegetation clearing and removal of western Joshua trees, which may provide suitable nesting habitat. Further, construction noise carries the potential to disturb active nests within the BSA.

Potential for special-status bird species within the project limits includes golden eagle, bald eagle, southwestern would ow flycatcher, Summer tanager, yellow-breasted chat and California spotted owl.

California spotted owl requires dense mature forest and canopy for nesting. The project does not feature a suitable nesting habitat for California spotted owl. Therefore, the probability of this species occurring within the project limits during construction is very low. Caltrans thus determined the project would result in *No Effect* to federal listed California spotted owl; no impact would occur. Avoidance and minimization measures for avian species would be incorporated and are discussed below.

State and federal listed avian species are not expected to occur within the project limits due to lack of their specific habitat requirements, including riparian habitat and dense canopy, within the project limits. Caltrans would implement current BMPs. Further, the project includes pre-construction clearance surveys for nesting and special status avian species. Caltrans would implement a no-construction avoidance buffer around any active bird nests identified during construction. Therefore, Caltrans would avoid take of avian species and/or their nests and thus comply with the Migratory Bird Treaty Act. No impact would occur.

Insects

The project literature identifies monarch butterfly (federal Candidate Endangered) and Crotch bumblebee (Candidate State Endangered). as potentially occurring within the project limits. The project limits consist of paved roadway, disturbed shoulders, and previously disturbed areas, which are primarily void of vegetation, or include ruderal/invasive plant species associated with disturbed roadside areas. Therefore, these special-status insect species are not expected to occur within the project limits, due to lack of suitable host plants within the PIA. No impacts would occur. No mitigation would be required.

Reptiles

A portion of the project occurs within the Mojave Desert and is within the home range for federal and State-threatened desert tortoise (*Gopherus agassizii*). Coast horned lizard, southern rubber boa, and southern California legless lizard also occur within San Bernardino National Forest. Due to their elusiveness, and low probability of occurrence, and the absence of suitable habitat within the PIA, the project would not impact Coast horned lizard, southern rubber boa, and southern California legless lizard. There are no recent recorded sittings of desert tortoise near the PIA (CDFW 2024).

Critical habitat for desert tortoise is not located within the BSA. Due to extirpation and habitat loss over recent decades, the probability of desert tortoise occurring within the project limits (near Cushenburry Creek) are very low. Although desert tortoise is not likely to occur within the project limits, a full time qualified biological monitor would be present daily during construction activities. Accordingly, pursuant to FESA, the project would result in *No Effect* to desert tortoise. Likewise, pursuant to CESA, the project would result in *No Take* of desert tortoise. Thus, potential impacts to desert tortoise would remain less than significant; no mitigation is required.

Amphibians

The project literature review identifies two special-status amphibians with potential to occur within the BSA. These include southern mountain yellow-legged frog [federal and State Endangered] and large blotched salamander (not listed under FESA or CESA). Due to work not occurring within riparian streams or wetlands, the project would not impact potential habitat for the above listed amphibians. Culverts proposed for repair do not feature suitable riparian or wetland habitat required to support these species. Additionally, Cushenbury Creek channel does not support either of these species due to absence of their habitat requirements. Therefore, the project would result in no impacts to impact to special status amphibians. No mitigation would be required.

b) Less Than Significant Impact with Mitigation Incorporated: According to the Aquatic Resource Delineation conducted during 2022 and 2023 (ECORP, 2023), The project limits do not contain riparian habitat. No impact would occur to riparian habitat.

Potential impacts to Waters of the State and Waters of the U.S. are discussed in section 2.1.4(c), below. Potential impacts to federal critical habitats are discussed above in section 2.1.4(a).

Pebble Plains

The project limits transect regions of pebble plain habitat - flat open areas left over from when glaciers receded and are named for the quartzite pebbles that are pushed to the surface of the clay soil by frost heaving. Pebble plains support a unique plant community.

The project would not impact pebble plain habitat. Work adjacent to pebble plain habitat would remain confined to the previously disturbed/developed roadway and shoulder, where habitat is absent or severely diminished due to vehicle presence. Staging areas are proposed outside of pebble plain habitat. The project would avoid temporary or permanent impacts to pebble plain habitat.

With incorporation of compensatory mitigation for impacts to Waters of the State, impacts to riparian habitat or other sensitive natural community would remain less than significant.

c) Less Than Significant Impact with Mitigation Incorporated: The project limits do not contain State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.). Therefore, the project would have no impact to State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means. The project would not impact riparian habitat or wetlands. Riparian habitats and wetlands do not occur within the PIA. No impact would occur.

Jurisdictional Waters

The project involves repair of nine culverts and upsize of three culverts. These culverts cross under SR-18 and are connected with unnamed ephemeral washes under CDFW and RWQCB jurisdiction. No Waters of the U.S. occur within the project limits. Culvert work would take place from the roadway surface and would require minimal activity (personnel using hand tools) within the channel to access culvert inlets and outlets. Thus, permanent, and temporary impacts within Waters of the State would be minimal at each culvert location. Caltrans would implement Best Management Construction practices and avoidance,

minimization, and mitigation measures listed below, including compensatory mitigation. Caltrans would consult with CDFW to apply for a Section 1600 Lake and Streambed Alteration Agreement (LSAA); Caltrans would pay permit application fees and compensatory mitigation for permanent and temporary impacts to CDFW-jurisdictional waters. Caltrans would also consult Regional Water Quality Control Board (Lahontan District) and pay applicable RWCB fees for permanent and temporary impacts to Waters of the State.

The project also includes removal of Rock Slope Protection (RSP) and installation of concrete channel lining under Cushenbury Creek Bridge, which occurs within mapped critical habitat unit for Cushenbury milk-vetch. Although the project occurs within a critical habitat unit, the project impact area does not contain the physical and biological features to comprise critical habitat or support this species. The elevation at Cushenbury Creek Bridge is below the typical elevation range for Cushenbury milk vetch. Further, the PIA consists of the RSP-lined bridge channel and access road. These areas are considered developed/disturbed due to their proximity to artificial structures, and thus, the affected area does not constitute critical habitat.

The project also overlaps federal critical habitat for Ash-grey paintbrush, Bear Valley sandwort, Cushenbury buckwheat, Cushenbury oxytheca, Parish's daisy, San Bernardino bluegrass and southern mountain buckwheat.

Construction activities would remain confined to areas of existing guardrail, paved or dirt shoulders, turnouts, and previously developed areas. Areas of proposed shoulder widening would not occur within mapped critical habitat units for the above-listed federal plant species.

Work within Cushenbury Creek channel would occur within previously developed areas, with existing RSP. These areas do not feature suitable physical or biological features to constitute critical habitat.

Due to minimally invasive work activities, confined to the roadway and previously disturbed habitat, and due to absence of suitable critical habitat within the PIA, the project would not impact mapped critical habitat for the above-listed federal plant species.

Caltrans will implement BMPs and avoidance and minimization measures listed below. Additionally, Caltrans will consult with USFWS, pursuant to Section 7(a)(2) of FESA for potential temporary or permanent impacts within mapped critical habitat units for federal plant species. Mitigation may be required, based on USFWS consultation pursuant to FESA.

With implementation of BMPs, avoidance, minimization and mitigation measures, potential impacts to federal mapped critical habitat units would remain less than significant.

d) Less Than Significant Impact: The proposed project alignment is within heavily forested area of the San Bernardino National Forest. Therefore, the project area is likely heavily utilized by native or migratory wildlife. However, the project site consists predominantly of paved roadways and adjacent dirt shoulders, and construction activities would be confined to existing Caltrans ROWs and TCEs.

Approximately 19 Western Joshua Trees (*Yucca brevifolia*) in associate with shoulder widening. Project implementation would not increase human encroachment on established wildlife movement corridors within the project vicinity, and the project would not interfere substantially with the movement of any native resident or migratory wildlife species, with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site. As such, no impacts would occur in this regard.

No migratory fish or wildlife were identified in the project area. Caltrans would conduct nesting bird clearance surveys prior to construction. If active nests are identified within the project limits, Caltrans would implement a no-construction buffer around the nest. Caltrans would also contact USFS, CDFW and the USFWS, as necessary, regarding appropriate action in order to comply with the Migratory Bird Treaty Act, California Endangered Species Act and Federal Endangered Species Act.

Therefore, the proposed project would have less than significant impact on migratory bird nests. No mitigation would be required.

e) No Impact: With respect to local policies or ordinances, including protection of biological resources and tree preservation, no impact would occur; Caltrans serves as the federal designated and State lead agency, pursuant to NEPA and CEQA, respectively. Further, the State is not subject to local ordinances as described in Section 2.1.4(e). Therefore, no impact would result from the project. No mitigation is required.

f) No Impact: A Natural Community Conservation Plan identifies and provides for the regional protection of plants, animals, and their habitats, while allowing compatible and appropriate economic activity. Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan is applicable to within the Project limits. Prior to construction, Caltrans would obtain temporary construction easements (TCE) or Right-of-Way (ROW) acquisition for work occurring outside Caltrans ROW.

No Habitat Conservation Plans, Natural Community Conservation Plans, or other local habitat conservation plans are established within the project limits. Thus, the proposed project does not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other local/regional habitat conservation plan; no impact would occur. The proposed project does not conflict with any local polices or ordinances protecting biological resources. No mitigation would be required.

Caltrans would implement current BMPs during construction. Additionally, Caltrans would implement the following avoidance, minimization, and mitigation measures to address impacts to Waters of the State to address potential impacts to State or federal listed species.

Avoidance, Minimization and Mitigation Measures:

- **BIO-1: Bio-General-1: Equipment Staging, Storing & Borrow Sites:**

  Caltrans would confine all equipment maintenance, storage, and parking during construction activities to the designated construction area or to previously disturbed graded or paved areas, or level areas where grading and vegetation clearing are not required and that are not habitat for listed species, as determined in coordination with the approved

biologist, BIO-7: Approved Biologist. Because fuels, lubricants, and solvents would be stored in staging areas, all staging areas would be located at least 150 feet from sensitive habitat areas, including streams/drainages and other aquatic habitat.

- **BIO-2: BIO-7: Approved Biologist**

  A Service- and CDFW (if appropriate)-approved biologist(s) would conduct activities as specified in this NESMI. After the start of each calendar year, and at least 7 days prior to initiating project activities, Caltrans would submit to the Service and CDFW, in writing, the name(s), resumes, and statement of qualifications for all proposed approved biologists. Proposed activities would not begin until an approved biologist has been authorized by the Service and CDFW. Approvals of biologists would be valid throughout each calendar year, up to one year, or longer if indicated by the Service and CDFW. The approved biologist(s) would have the authority to work with the Resident Engineer to halt construction activities that do not comply with the construction-related conservation.

- **BIO-3: BIO-GENERAL-8: Biological Monitor**

  An approved biologist (BIO-7: Approved Biologist) would be onsite during all vegetation management or ground-disturbing activities and would monitor active nests and/or suitable nesting habitat buffers for potential disturbance. The Qualified Biologist must monitor project activities daily to ensure that measures are being implemented and documented.

- **BIO-4: BIO-General-9: Environmentally Sensitive Area (ESA)**

  To address impacts to Joshua tree woodland, jurisdictional waters, and plant critical habitats, delineate this area as an ESA as shown on the plan and/or described in the specifications.

- **BIO-5-PEBBLE-1: Avoid Impacts to pebble Plain Plant Species on SR 18-**

  To protect plant species occurring in pebble plain soil types when working on SR 18 at PM 57.5 to 58.6, all work would occur within the pavement or on the opposite side of the roadway from occurrences of all pebble plain species.

- **BIO-6: BIO-General-12: Animal Entrapment**

  To prevent inadvertent entrapment of desert tortoise 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 Caltrans Approved Biologist.

- **BIO-7: BIO-13: Water Quality, Aquatic Features, and Vegetation Protection Measures.**

  To minimize the potential for degradation of water quality, aquatic features, and vegetation, Caltrans would implement construction site BMPs Appropriate BMPs, such as the use of

temporary silt fences or fiber rolls, would be selected to prevent runoff from leaving the project site. Caltrans would also implement the following measures:

a) Prior to the onset of work, Caltrans would develop a plan for prompt and effective response to any accidental spills. The plan would include informing all workers of the importance of preventing spills and of the appropriate measures to implement should a spill occur.

b) Refueling or maintenance of vehicles or equipment would occur at least 150 feet from sensitive habitat areas, including streams/drainages and other aquatic habitat.

c) Vehicles and equipment would be checked daily for leaks, and all vehicular fluid spills would be contained and cleaned up immediately.

d) Spill containment kits would be maintained onsite at all times during construction operations and/or staging or fueling of equipment.

e) Dust control would be implemented and may include the use of water trucks and non-toxic tackifiers (binding agents) to control dust in graded areas. Dust control spray would avoid overspray into any Environmentally Sensitive Areas (ESAs) or areas outside the defined project areas.

- **BIO-8: BIO-General-PSM-17: Sensitive Vegetation Communities Restoration Plan**

  For temporary impact areas containing sensitive vegetation communities, a restoration plan would be developed and implemented by Caltrans to ensure that these areas can be restored to pre-project conditions.

- **BIO-9: BIO-General-PSM-19: Environmentally Sensitive Areas and Ground Disturbance**

  No ground disturbing or fill activity of any type would be permitted within environmentally sensitive areas outside the project footprint. All construction equipment should be operated in a manner so as to prevent accidental damage to nearby preserved areas outside the PIA. No structure of any kind, or incidental storage of equipment or supplies, would be allowed within these protected zones. Where appropriate, silt fence barriers may be installed at the environmentally sensitive area boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned ground disturbing activities.

- **BIO-10: BIO-General-21: Fuel and Oil Dispensing Activities**

  All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities would occur in developed or designated non-sensitive upland habitat areas. The designated upland areas would be located in such a manner as to prevent any spill runoff from entering Waters of the U.S. The Residential Engineer and Caltrans Biologist shall coordinate on all sites prior to their approval and use.

- **BIO-11: PLANT-1: Pre-Construction Plant Surveys during Blooming Period**

  An approved biologist would conduct surveys for covered plant species in areas identified as habitat for covered plants during the BIO-PLANT-PSM-1: Assessment for Covered

Species Habitats and Designated Critical Habitat. Surveys would be conducted during the appropriate blooming period(s) and within suitable soils for all covered plants with potential to occur in the action area.

- **BIO-12: PLANT-2: Avoidance Buffer of Covered Plants and their Habitats**

  If surveys confirm the presence of covered plants, or if a survey is not conducted and presence of covered plants is assumed based on suitable habitat, then an approved biologist (BIO-7: Approved Biologist) would establish a minimum 50-feet avoidance buffer around all covered plant occurrences or their suitable habitat (when presence is assumed). The avoidance buffer would be clearly established by an approved biologist. A larger avoidance buffer may be established if determined by the approved biologist to be necessary for the protection of the plant populations, individuals, or suitable habitat. Activities that have the potential to reduce habitat quality, including soil disturbance, would be avoided. For annual forbs, work may occur after plants have set seed and senesced and associated habitat would not be permanently impacted. For perennial species, disturbance to underground portions of the plant such as roots, bulbs and tubers would be avoided. The approved biologist would advise Caltrans of any additional appropriate methods to limit disturbance of covered plants within these buffers. Caltrans would implement Category 2 conservation measures if work within these buffers cannot be limited to insignificant or discountable effects, or the buffers cannot be implemented.

- **BIO-13: BIO-PSM-8: Worker Environmental Awareness Training (WEAT)**

  Caltrans would require all construction personnel to participate in WEAT prior to participating in work activities. The training would be led by an approved biologist and delivered to all construction personnel and new field-based personnel before engaging in construction activities. The WEAT would:

  a) Include descriptions of all covered species that have a reasonable likelihood of occurring in the project footprint, their habitats, and methods of identification, including visual aids as appropriate.

  b) Inform staff regarding invasive plant biology, identification, and any prevention measures to avoid spreading invasive plants.

  c) Describe activity-specific measures that would be implemented to avoid and minimize effects to covered species and their habitats. The measures would be provided to the Caltrans Resident Engineer and any contractors participating in construction activities.

  d) Review procedures to follow in the event covered species are observed in the construction area.

  e) WEAT would occur within the first week of every month. As covered activities move, WEAT would be updated to focus on relevant species expected to be encountered by activities occurring in that month.

  f) Provide additional WEAT to inform crews entering sensitive habitat or other protected resource areas for the first time to remind them of pertinent conservation measures.

g) Implement a system for documenting WEAT attendance and field identification of trained workers (e.g., hardhat stickers) so that all workers performing covered activities are verified as having completed WEAT.

- **BIO-14: BIO-General-PSM-17: Sensitive Vegetation Communities Restoration Plan**

  For temporary impact areas containing sensitive vegetation communities, a restoration plan would be developed and implemented by Caltrans to ensure that these areas can be restored to pre-project conditions.

- **BIO-15: BIO-PSM-19: Environmentally Sensitive Areas and Ground Disturbance**

  No ground disturbing or fill activity of any type would be permitted within environmentally sensitive areas outside the project footprint. All construction equipment shall be operated in a manner to prevent accidental damage to nearby preserved areas outside the PIA. No structure of any kind, or incidental storage of equipment or supplies, would be allowed within these protected zones. Where appropriate, silt fence barriers may be installed at the environmentally sensitive area boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned ground disturbing activities.

- **BIO-16: BIRD-1: Seasonal Avian Work Windows**

  Caltrans would limit all project activities, including BIO-10: Nesting Bird Surveys to the work windows in areas identified as suitable habitat for covered bird species identified during pre-construction nesting bird surveys. Caltrans would implement additional conservation measures if these seasonal work windows cannot be implemented.

- **BIO-17: BIRD-2: Pre-construction Nest and Suitable Habitat Surveys.**

  An approved biologist (BIO-7: Approved Biologist) would conduct nest and suitable nesting habitat surveys no more than 7 days prior to the date of initial ground disturbance and vegetation clearing. These surveys may occur concurrently with BIO-10: Nesting Birds Surveys. During the surveys, the approved biologist would look for active nests and nesting habitat along the project alignment, as well as a 50-foot radius for non-owl species and a 0.25-mile radius for owl species, as accessible.

- **BIO-18: BIRD-3: Nesting Habitat and Nest Exclusion Buffers.**

  If potentially active nests or nesting habitat are located during BIRD-2: Pre-construction Nest and Suitable Habitat Surveys, an approved biologist (BIO-7: Approved Biologist) will establish an exclusion buffer. Caltrans will not allow project activities within potential active nest or nesting habitat buffers. Work may proceed once an approved biologist has confirmed that the nest is inactive, or the Service authorizes activities within suitable buffers.

- **BIO-19: BIO-Reptile-4: Authorized Biologist Clearance Surveys**

  Clearance desert tortoise surveys must be conducted by a Qualified USFWS-authorized Desert Tortoise Biologist 3 days prior to project activities within suitable and critical desert tortoise habitat. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.

Desert tortoise removed from work areas may be moved from harm's way to the nearest suitable habitat or translocated, following the most recent USFWS and CDFW guidelines. If a desert tortoise must be handled, then a CDFW 2081 permit must be acquired.

- **BIO-20: BIO-DT-1: Agency Notification and Reporting Requirements**

  Any desert tortoises within or near the job site found alive, injured, or dead during the implementation of the project must provide immediate notification to the Resident Engineer and Caltrans biologist. Caltrans biologist must then notify CDFW and USFWS. Veterinary treatment and/or final deposition must follow CDFW and USFWS approval.

- **BIO- 21: BIO-Bat-PSM-2: Bat Preconstruction Surveys**

  Prior to work activities, a pre-construction survey within suitable areas and an appropriate survey buffer shall be surveyed for the presence of bat roosts by a qualified bat biologist. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of work on, under, or adjacent to bridges, ideally during the maternity season (typically March 1 to August 31), to allow time to prepare mitigation, and/or exclusion plans if needed in accordance with CDFW guidelines. If the pre-construction survey determines that no active roosts are present, then work activities shall commence within two weeks following the pre-construction survey.

- **BIO-22: BIO-Bat-PSM-3: Work Restriction Hours**

  Work activities should be restricted to daylight hours. This would reduce the potential of direct or indirect impacts to bat species that may be foraging in the vicinity of the BSA. Should work activities be required at night, night lighting should be focused on the direct area of work. Mature trees were identified in the vicinity of the BSA, and these may provide suitable roosting habitat for foliage-roosting bats. Tree removal is not an anticipated activity for the project, but if this changes, each affected tree would need to be assessed individually and additional measures may be required.

- **BIO-23: BIO-Bat-PSM-4: Bat Species and Roost Determination**

  If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special status species and the roost is not being used as a maternity roost, then the bat biologist would determine appropriate measures to minimize and avoid potential impacts to bats. Appropriate measures may include evicting bats from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans.

- **BIO-24: BIO-Bat-PSM-5: Active Roost Buffer**

  If special-status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts would occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost.

- **BIO-25: BIO-Bat-PSM-6: Bat Mitigation and Exclusion Plan**

If special-status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) would occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the mitigation plan has been approved by CDFW and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the CDFW for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.

- **BIO -26: CDFW Individual Take Permit – Western Joshua Tree (Compensatory Mitigation)**

  In addition to the above measures, to address impacts to western Joshua Tree, Caltrans would comply with the Western Joshua Tree Conservation Act. During Plans, Specifications, and Estimates Phase, Caltrans would coordinate with CDFW and apply for an Individual Take Permit for the take of western Joshua tree. The ITP would include corresponding application fees and compensatory mitigation based on the current CDFW fee schedule number of affected individuals.

- **BIO -27: USFWS Coordination for Cushenbury Milk-vetch and its Critical Habitat**

  The project includes work within federally designated critical habitat unit for: Ash-grey paintbrush, Bear Valley sandwort, Cushenbury buckwheat, Cushenbury milk-vetch, Cushenbury oxytheca, Parish's daisy, San Bernardino bluegrass and southern mountain buckwheat. Therefore, to address potential impacts within a federal critical habitat Caltrans would initiate consultation with USFWS pursuant to Section 7(a)(2) of the Federal Endangered Species Act.

- **BIO -28: Compensatory Mitigation**

  The project is expected to impact jurisdictional aquatic resources through the repair/upgrade of culverts and the installation of concrete lining within Cushenbury Creek. Therefore, coordination with CDFW and RWQCB would be necessary and compensatory mitigation would be developed. Compensatory mitigation has not been determined at this time and would be determined through coordination between Caltrans and the appropriate regulatory agencies in the form of permit application fees for CDFW 1600 and RWQCB Report of Waste Discharge.

  If impacts to federally and/or state-listed or candidate state species occur as result of the proposed Project, take authorization permits are required from USFWS and/or CDFW, then compensatory mitigation to offset impacts to those species will be outlined in those permit documents.

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?	No Impact

CEQA Significance Determinations for Cultural Resources

a), b) Less Than Significant Impact: According to the Historical Property Survey Report (HPSR) for the proposed project approved on March 5, 2024. The Area of Potential Effect (APE) includes the areas of direct impact, temporary construction easements, staging and storage areas, plus a buffer to include potential indirect effects that may develop as a result of this undertaking. The vertical APE is limited to less than three feet above and below the surface for pavement work and minor post holes for guard rail installation.

Caltrans determined the cultural resources within the APE that were previously determined not eligible for inclusion in the National Register of Historic Places (NRHP) with State Historic Preservation Office (SHPO) concurrence, and those determinations remain valid. Caltrans identified 32 previously recorded cultural resources in the Study Area for this undertaking, plus two bridges listed in the Caltrans Historic Bridge Inventory. The two bridges located on Cushenbury Creek (Bridge No.54-0392 at PM 64.6 and No.54-1283 at PM 66.8) are listed as Category 5, Not Eligible for the NRHP.

Caltrans identified the following properties within the APE that are considered eligible for inclusion in the NRHP for the purposes of this project only because evaluation was not possible, in accordance with Section 106 PA Stipulation VIII.C.4:

- P36-000931 / CA-SBR-931 Prehistoric Habitation Site
- P36-000933 / CA-SBR-933/H Mixed Component Habitation Site
- P36-012800 / (No Trinomial) Prehistoric Lithic Scatter

Pursuant to Section 106 PA Stipulation X.B.2 and PRC 5024 MOU Stipulation X.B.2, Caltrans has determined a Findings of **No Adverse Effect without Standard Conditions** is appropriate for the project. Caltrans is in the process with consulting with SHPO. CR-3 and CR-4 would be implemented for the project to have a Less Than Significant Impact.

Therefore, the project is not expected to cause a substantial adverse change and would result in no impact.

c) No Impact: On November 15, 2022, the Native American Heritage Commission (NAHC) provided Sacred Lands File (SLF) Search Results. The results identified 32 previously recorded cultural resources were in the Study Area for this undertaking, plus two bridges listed in the Caltrans Historic Bridge Inventory. The two bridges are listed as Category 5, and not eligible for the National Registry of Historical Property. None of the other cultural

resources identified in the APE have been previously evaluated for NRHP eligibility. Therefore, Human remains are not expected to be encountered. However, Caltrans standard specifications would be implemented in the event human remains are found during construction activities.

Avoidance, Minimization, and/or Mitigation Measures:

- **CR-1:** If cultural materials are discovered during construction, all earth-moving activity within sixty feet (60') around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find.
- **CR-2:** In the event that human remains are found, the county coroner should be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to California PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendant (MLD). The person who discovered the remains will contact District 8 Division of Architecture: Steven Holm, Cultural Studies, Environmental Planner, DEBC [(909) 292-3856] or Gary Jones, District Native American Coordinator (DNAC) [(909) 261-8157]. Further provisions of PRC 5097.98 are to be followed as applicable.
- **CR-3:** ESAs exist for this project between Post Miles 58.1 -58.4; 62.1 62.3; and 58.0 – 58.1. The ESA boundary is shown on the APE Map, in the Project Plans, and in the ESA / AMA Monitoring and Discovery Plan. The ESA is closed and may not be entered.
- **CR-4:** AMAs exists for this project between Post Miles 58.1 -58.4; 62.1 62.3; and 58.0 – 58.1. The AMA boundary is a buffer area around the ESAs as shown on the APE Map, in the Project Plans, and in the ESA / AMA Monitoring and Discovery Plan. Construction activity within the limits of the AMA may not commence without the presence of the archaeological monitor.

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

Regulatory Setting

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

CEQA Significance Determinations for Energy

a) No Impact: The proposed project would rehabilitate the pavement and enhance the road quality of State Route-18 and would not result in wasteful, inefficient, or unnecessary consumption of energy. Caltrans implements best management practices (BMP's) to prevent wasteful consumption of resources during construction or operation. The proposed project would have no impact.

b) No Impact: The proposed project does not conflict with any known state or local plan for renewable energy or energy efficiency. Therefore, there would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are 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?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No 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?	No 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?	No Impact

CEQA Significance Determinations for Geology and Soils

a i) No Impact: According to the California Department of Conservation Earthquake Zones of Required Investigation Maps, the proposed project location is near Fault Zone and Helendale Fault in Holcomb Valley. The A-P Fault Zone is adjacent to PM 66.9 and continues for approximately 1.3 miles north of the project location. The purpose and need of the project are to preserve and extend the service life of the existing pavement and improve ride quality, as well as other roadway deficiencies along SR-18 which would not directly or indirectly cause potential adverse effects. No impacts would occur.

a) ii) No Impact: According to the Southern California Earthquake Data Center, there have been no ruptures near the project location. All Caltrans projects follow the Standard procedures

regarding seismic design to avoid or minimize any significant impacts related to seismic ground shaking. Due to the scope of the proposed project, there would be no impact because project construction and operation would have no opportunity to rupture a known earthquake fault or cause seismic shaking.

a) iii) No Impact: The San Bernardino County Liquefaction Susceptibility Seismic Hazardous Zone Map identified liquefaction areas within the proposed project site. However, due to the scope of work, there would be no impact.

a) iv) No Impact: Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. Based on the San Bernardino County Slope Instability Map in the General Plan, the project area is classified as a low to high susceptibility to landslides and rockfalls. The proposed project would implement Caltrans' current highway and structure seismic design standards. Therefore, there would be no impact.

b) No Impact: The proposed project does not anticipate any substantial loss of soil erosion or topsoil. No impacts would occur.

c) No Impact: The Department of Conservation Geologic Hazards Map does not identify any geologic hazards for the project. The scope of the project would not cause the soil to become unstable or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, there would be no impacts.

d) No Impact: The San Bernardino County Land Use Plan General Plan Geologic Hazard Overlay Map does identify geologic hazards within the project limits. It also identifies land within the project limits as susceptible to landslides and liquefaction, which implies the absence of expansive soil. Therefore, there would be no impacts.

e) No Impact: The proposed project would not have soils incapable of adequately supporting the use of the septic tanks or alternative wastewater disposal systems.

f) No Impact: The proposed project is occurring on the roadway along SR-18 and would not destroy a unique paleontological resource or site or unique geologic feature. Therefore, there would be no impacts.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Geology and Soils.

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 would result in 684.4 Tons of CO2e (CO2 equivalent) during the 205 days of construction. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere. In addition, as the project is not a capacity increasing project, it is anticipated that it would not result in an increase in operational GHG emissions. With implementation of construction GHG- reduction measures (GHG-1 through GHG-5), the impact would be less than significant.

b) **No Impact**: The project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases. Therefore, there would be no impact.

Avoidance, Minimization, and/or Mitigation Measures
The following measures would be implemented for Greenhouse Gases:

- **GHG-1:** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- **GHG-2:** Use of Long-Life Pavement and material to offset GHG emissions products during construction.
- **GHG-3:** Recycle existing project features on-site.
- **GHG-4:** Reduce emission by using Hot Mix Asphalt (HMA) pavement to extend the pavement service life and recycle natural resources.
- **GHG-5:** Replace lighting with ultra-reflective sign material.

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?	Less Than Significant 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

a) **Less Than Significant Impact:** A survey for Asbestos-Containing Materials (ACM) and Lead-Based Paint (LBP) was conducted for this project to identify any potential contamination. ACM were not identified in any of the samples collected from the Cushenbury Creek Bridge (Bridge #54-1283). As a result, no recommendations for special handling or disposal of ACMs are necessary with respect to the materials sampled and analyzed during this investigation. LBP concentrations are well below California and Federal hazardous waste thresholds. Therefore, the paint and stripping media may be managed as non-hazardous waste. Implementation of the project is not expected to create a significant hazard to the public or environment and the project site is not on a list of hazardous materials sites, according to recent testing.

b) No Impact: The proposed project has the potential to release hazardous materials into the environment. Standard construction practices would be implemented to ensure that any material released are appropriately contained as required by local and state law. The project is expected to have no impact.

c) No Impact: The project would not emit hazardous emissions or handle hazardous waste within one- quarter mile of a school. The proposed project would have no impact.

d) No Impacts: There are no schools within a one quarter-mile radius of the project site. The project site is also not included on a list of hazardous material sites, as the project is in an area of open space impacts in this regard are not anticipated.

e) No Impact: The Big Bear Airport is located 2.4 miles south of the project area in San Bernardino County. Due to the proposed scope of work, the project would not result in any safety hazards for people residing and working in the project vicinity.

f) No Impacts: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project is expected to result in no impact.

g) No Impact: The proposed project is located within a high fire zone. Due to the scope of work, the project has low potential of exposing 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
The following measures would be implemented for Hazardous Waste and Hazardous Material:

- **HAZ- 1** SSP 6-1.03: Conditions for use of local material from non-commercial source.
- **HAZ- 2** SSP-7-1.03K(6)(j)(iii): Earth material containing lead. Requires a lead compliance plan (LCP) and item 070030 for LCP.
- **HAZ- 3** SSP 14-11.14: Management of treated wood waste; required # 141122.
- **HAZ-4** SSP 84-9.03B: Remove traffic stripes and pavement marking containing lead
- **HAZ-5** SSP 36-4: Residue from grinding or cold planning containing lead from paint and thermoplastic
- **HAZ-6** SSP 14-9.02 National Emission Standards for Hazardous Air Pollutants (NESHAP) notification**.**

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?	No 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;	No 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) No Impact: The proposed project would not violate any water quality standards or waste discharge requirements. The project anticipates no impacts would occur during construction.

b) No Impact: Implementation of the project would not deplete groundwater supplies or interfere substantially with groundwater recharge that would result in a net deficit in aquifer volume or a lowering of the groundwater table level. The proposed project is not anticipated to affect the amount of water consumed regionally through increased withdrawals from ground water sources. As such, the proposed project is expected to result in no impacts.

c) i) No Impact: The purpose of the project is to preserve and extend the service life of the

existing pavement. Project activity would result in erosion or siltation on or off site and a Net New Impervious (NNI) area of 5292 square feet or 0.1215 acres. BMPs are not required because the NNI does not exceed the threshold. Therefore, the project would result in no impact.

c) ii) No Impact: The project would result in an increase of rate or surface runoff on or off site. However, since the Office of Storm Water Quality estimated the NIS to be 5292 square feet it does not exceed the threshold of the New Impervious Surface rate of more than 10,000 sq ft. Therefore, the project would not result in any impacts.

c) iii) No Impact: The project would not create or contribute runoff water into the drainage systems.

c) iv) No Impact: The proposed project would not impede or redirect flood flows. Therefore, no impacts are expected**.**

d) No Impact: The project is not within a flood hazard, tsunami, or seiche zone. As a result, there would be no impact.

e) No Impact: The project would not conflict with or obstruct implementation of water quality control plan or sustainable groundwater management plan. Although the project area side slopes are highly erodible, there would be no impacts to water quality or sustainable groundwater.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for Hydrology and Water Quality.

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: Implementation of the proposed project location would not divide an established community, as the work would be done on the existing pavement along SR-18. Therefore, the project would have no impact.

b) No Impact: According to the San Bernardino County Land Use Plan, and Land use Zoning Map, the project is mapped as Resource Conservation and Unincorporated. The proposed project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation. The project would have no impacts.

Avoidance, Minimization, and/or Mitigation Measures.

No avoidance, minimization, 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 City of Big Bake Lake/Bear Valley General Plan identifies the city and surrounding areas as Mineral Resource Zones (MRZ)-2. These are areas containing known mineral deposits that may qualify as mineral resources. The mineral deposits that are significant in value are located around Sugarloaf, and the deposits that have undermined value are located at Van Duesen Canyon, Gold Mountain, and Smarts Ranch. An MRZ-2 area would contain discovered mineral deposits that are either measured or indicated reserves as determined by drilling records, sample analysis, surface exposure and mine information. Since the proposed project is in a previously disturbed area and identified as MRZ-3; containing known or inferred mineral occurrences of undetermined mineral. There would be no impact to the mineral resources, and it would not result in the loss of availability to the region or the residents of the state.

b) No Impact: The proposed project would not result in the loss of available mineral resources of value to the region, residents of the state, or locally important sites. As such, the proposed project would have no impacts.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are 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) No Impact: The project would not expose people to or generate noise levels more than standards established in a general plan or noise ordinance, or applicable standards of other agencies. The project is a Type III project; therefore, Caltrans Engineering determined that a noise study report was not required for the project. There would be no noise impact.

b) No Impact: Any groundborne noise or vibration would be limited to the construction period and would be short in duration. There is no noise- or vibration- sensitive uses located in the immediate project vicinity and because the proposed project would comply with Caltrans' Standard Specification, no impacts would occur.

c) No Impact: The Big Bear Airport is located 2.4 miles south of the project area in San Bernardino County. However, due to the scope of work, the project would not result in any safety hazard for people residing and working in the project vicinity, therefore resulting in no impact**.**

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are 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 purpose of the project is to preserve and extend the service life of the existing pavement, as well as other roadway deficiencies along SR-18. The proposed project would not induce substantial population growth in the area, either directly or indirectly. Therefore, there would be no impact.

b) No Impact: Right of way may be acquired for the proposed project improvements but would not necessitate the relocation of any developments and/or people. Therefore, no impacts on population and housing would occur as a result of the proposed project.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are 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) **Response to Fire protection: No Impact.** The Big Bear Fire Department, Station 284 and CalFire BDU are located near the project vicinity. The proposed project would not result in an increase in population, and therefore would not increase the demand for community services. No fire stations would be acquired or displaced. In addition, the proposed project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. As a result, there are no impacts.

b) **Response to Police Protection: No Impact.** The San Bernardino County Sherriff's Department is 5.9 miles from the project limits and provides police protection to the project vicinity. The proposed project would not induce growth or increase population in the study area or the greater community beyond what is previously planned for and would not result in the need for additional police protection. No impacts on police protection from operation of the proposed project would occur.

c) **Response to Schools: No Impact.** The proposed project area does not encompass any schools within the improvement areas. Therefore, no direct impact on school facilities or services as a result of this project. As such, there are no impacts.

d) **Response to Parks: No Impact.** The Eye of God, Baldwin Lake Ecological Reserve, Baldwin Summit Vista, and Cactus Flat Trailhead are all within 0.5-mile radius of the project vicinity. Access may be delayed due to construction activities. However, the proposed project would not result in adverse physical impacts and would have no impact on the park.

e) **Response to Other Public Facilities: No Impact.** Big Bear Transfer Station and Baldwin Lake Stables are within 1.5 miles from the nearest public facilities. Access may be delayed due to construction activities. However, the proposed project would not result in adverse physical impacts and would have no impact on public facilities.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for Public Services.

2.1.16 Recreation

Would the project:

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 proposed project does not have the capacity to generate a substantial increase to use of any existing neighborhood parks, regional parks, or other recreational facilities such that physical deterioration would occur. Therefore, there are no impacts.

b) No Impact: The project would not require the construction or expansion of recreational facilities. As such, no impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are 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 proposes to rehabilitate SR-18 at near Baldwin Lake (PM 56.2) to Lucerne Valley (PM 66.9). The project would not increase traffic because additional lanes are not proposed. The project would accommodate existing traffic demand and would not create new demand as it's not a capacity-increasing project. Although the project is not adding new bike lanes, the construction of the 8' outside shoulder widening from PM 60.5 to 62.4 and PM 64.9 to 66.8 and installation of bicyclist-friendly shoulder rumble strips would allow the bicyclists to safely enter and exit the shoulder area. According to the Transportation Management Plan (TMP), Caltrans would utilize traffic control to guide traffic through the construction zone. Therefore, the proposed 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 proposed project would not conflict or be inconsistent with CEQA guidelines section 15064.3, subdivision (b). The project is not a capacity increasing project and would not increase the "vehicle miles traveled." Therefore, there would be no impacts.

c) No Impact: Due to the nature and scope, the proposed alternatives would not substantially increase hazards due to geometric design features or incompatible uses. As such, the proposed project would have no impacts.

d) No Impact: Construction activities have the potential to result in temporary, localized, site-specific disruptions during the construction period. This could lead to an increase in delay times for emergency response vehicles during construction. However, the project proposes to have one lane open during construction hours and would implement a Traffic Management Plan. The completion of the project would not result in inadequate emergency access.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for Transportation.

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	No 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) No Impact: The proposed project would not result in significant adverse effects on any tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k).

A request was made to the Native American Heritage Commission (NAHC) on February 27, 2023, for a Sacred Land File (SLF) search. The NAHC responded with negative SLF results, indicating that there were no cultural resources present.

Letters requesting information about cultural resources or concerns regarding the project were sent to four Native American tribes:

- On October 5, 2022- Initial Consultation Letter Sent to the 29 Palms Band of Mission Indians, Sarah Bliss, Cultural Resource Manager. A follow-up attempts to contact the tribe was sent on February 14, 2023 and April 11, 2023. To date, a response has not been received.

- On October 5, 2022- Initial Consultation Letter Sent to the San Manuel Band of Mission Indians, Jessica Mauck, Cultural Resource Manager. October 7, 2022, we received a reply from Ryan Nordness, Tribal Cultural Resource Analyst, requesting continued consultation Pursuant to Section 106 and AB 52. On October 31, 2022, we received

additional information from Ryan Nordness and a request for project documents.

- On December 23, 2022, an update letter was sent to Yuhaaviatum of San Manuel Nation, to Alexandra McCleary, Cultural Resource Manager. The Tribe responded on December 23, 2023 to note that the proposed project passes through a known prehistoric village and they requested updated reports.

- On February 15, 2024- DNAC forwarded the Archaeological Survey Report (ASR) to the San Manuel Band. To date, no response has been received.
- On February 22, 2024-Kristen Tuosto responded on behalf of the tribe to explain that site P33-000933 / CA-SBR-933/H in Cactus Flat is a known habitation site, and as are the other prehistoric and mixed-component sites within the project limits, and all are highly sensitive
- On February 26, 2024, DNAC replied to Ms. Tuosto that Caltrans has an ESA Plan in place and anticipates tribal and archaeological monitoring during construction.

b) Less Than Significant Impact: The proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource determined by the lead agency. Caltrans, pursuant to Section 106 PA Stipulation X.B.2, has determined a Finding of **No Adverse Effect without Standard Conditions** and requests CSO's approval of this finding because there are known historic properties within the Area of Potential Effects (APE).

Avoidance, Minimization, and/or Mitigation Measures:
Implementation of measures CR-1, CR-2, CR-3 and CR-4 as described in the Cultural Resources Section above would reduce any potentially significant impacts from the proposed project to tribal cultural resources that may be inadvertently discovered during construction.

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?	Less Than Significant 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) **Less Than Significant Impact:** The existing utilities within the project limits belong to Big Bear Area Regional Wastewater Agency, Big Bear City Community Service District, Pacific Gas and Electric (PG&E) Gas Transmission-Hinkley, Spectrum-Riverside, Utiliquest for SCE Dist-Victorville, Utiliquest for Frontier-Bishop and Menifee and Frontier Communications. The relocation of the electrical poles would be further analyzed during the Final Design phase of the project. Impacts are to be determined and avoidance, minimization, and mitigation measures would be considered and implemented.

b) **No Impact:** The relocation of the electrical poles would be further analyzed during the Final Design phase of the project. Impacts are to be determined and avoidance, minimization, and mitigations measures would be considered and implemented, as appropriate.

c) **No Impact:** The project would not require a water supply, as there are no existing resources within the project area. There would be no impact.

d) No Impact: The project would not require wastewater treatment. As a result, there would be no impact.

e) No Impact: The project would not generate solid waste in excess of State or local standards or impair the attainment of solid waste reduction goals. There would be no impacts.

f) No Impact: The proposed project would be in compliance with all federal, state, and local solid waste statutes and regulations; therefore, there would be no impact.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, or mitigation measures are required for Utilities and Service Systems.

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

According to the map by CalFire's Fire and Resource Assessment Program (FRAP), the majority of the proposed project segment is located in a Federal Responsibility Area (FRA) from PM 58.5 to PM 65.2. The Northern and Southern portions of SR-18 is classified as State Responsibility Area (SRA). The project area is within a classified Moderate to Very High Fire Hazard Severity Zone (FHSZ). The Caltrans Climate Change Vulnerability Assessment mapping tool identified the project area to have a high level of concern. However, Caltrans 2023 Standard Specification 7-1.02M(2) mandates fire protection procedures during construction, including a fire prevention plan.

CEQA Significance Determinations for Wildfire

a) No Impact: The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, there are no impacts.

b) No Impact: The proposed project would not exacerbate wildfire risks or expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a fire. Therefore, there are no impacts.

c) No Impact: The proposed project would not exacerbate wildfire risks or expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a fire. Therefore, there are no impacts.

d) No Impact: The project would not require the installation or maintenance of the associated infrastructure. Relocations of existing utilities are not anticipated within the project scope of work. Since the utilities are already existing in the area, it is not expected to exacerbate a fire risk that would result in temporary or ongoing impacts to the environment. As a result, there would be no impact.

e) No Impact: According to the San Bernardino County Slope Instability Map in the General Plan, the project area is classified as a low to high susceptibility to landslides and rockfalls. The proposed project would implement Caltrans' current highway and structure seismic design standards. As mentioned under Section VII, Geology and Soils, the project is located within a landslide area and the probability is low according to the San Bernardino County Slope Instability Map in the General Plan. The project area is classified as a low to high susceptibility to landslides and rockfalls. Due to the scope of the project, people or structures would not be exposed to flooding, landslides, runoffs, or post-fire slope instability. Therefore, there would be no impact.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Wildfire.

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 with Mitigation Incorporated
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)?	No Impact
c) Does the project have environmental effects which would 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 with Mitigation Incorporated:** The proposed project would not 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, or reduce the number or restrict the range of a rare or endangered plant or animal species. Avoidance and/or minimization measures would be implemented to ensure the proposed project would result in less-than-significant impact with mitigation incorporated.

b) **No Impact:** The proposed project would not result in cumulatively considerable effects when combined with past, present, and reasonably foreseeable future projects and therefore would have no cumulative impact. As such, the proposed project would have no impact.

c) **No Impact:** The project would not have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, the proposed project would have no impact.

Avoidance, Minimization, and/or Mitigation Measures
No avoidance, minimization, or mitigation measures are required for Mandatory Findings of Significance.

Chapter 3 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 (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 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 CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

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.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emission from transportation sources.

Federal

To date, no nationwide numeric mobile-source GHG reduction targets have been established, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project. In January 2023, the White House Council on Environmental Quality (CEQ) issued updated and expanded interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (88 Fed. Reg. 1196) (CEQ NEPA GHG Guidance), in accordance with EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 FR 70935 (Dec. 13, 2021) and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. The CEQ guidance does not establish numeric thresholds of significance, but emphasizes quantifying reasonably foreseeable lifetime direct and indirect emissions whenever possible. This guidance also emphasizes resilience and environmental justice in project-level climate change and GHG analyses.

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.

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.

Environmental Setting

The proposed project is located in a mountainous region in San Bernardino County along SR-18 from PM 56.2 to PM 66.9. SR-18 severs as the primary route into the San Bernardino Mountains for both Riverside and San Bernardino metropolitan area. It begins at SR-210 in San Bernardino and ends at SR-138 in Liano. The highway varies as a two to four-lane conventional highway. The route provides connectivity to various mountain communities such as Big Bear, Lucerne Valley, Crestline, Running Springs, and Arrowhead, and others. The Southern California Association of Governments (SCAG) 2020, Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) guides transportation development in San Bernardino County. The County of San Bernardino Greenhouse Gas Reduction Plan Update addresses GHG in the project area.

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.

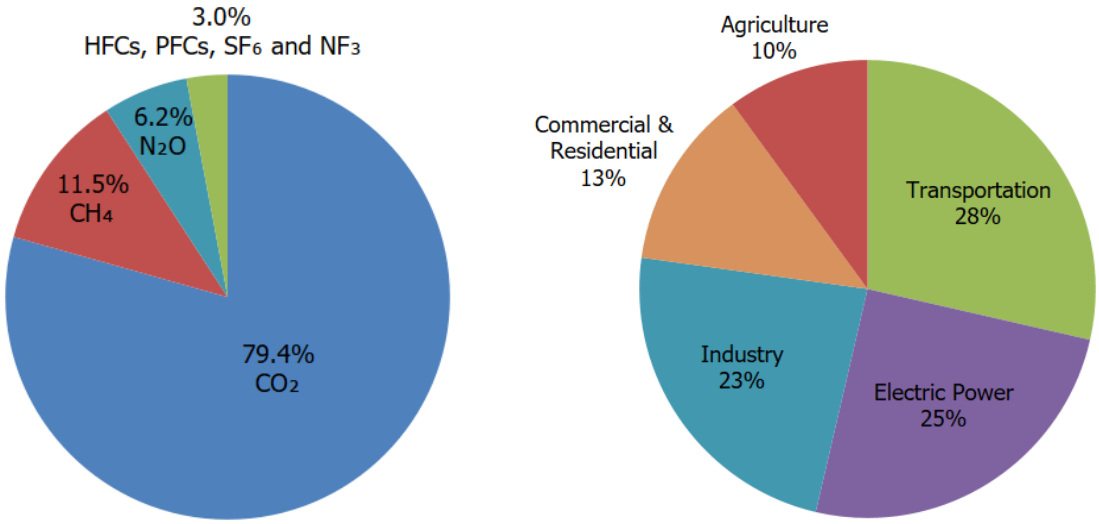
National GHG Inventory

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 2021 were 5,586.0 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 12% of total U.S. emissions in 2021 [U.S. EPA 2023a].) While total GHG emissions in 2021 were 17% below 2005 levels, they increased by 6% over 2020 levels. Of these, 79.4% were CO_2, 11.5% were CH_4, and 6.2% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2021, CO_2 emissions decreased by only 2% (U.S. EPA 2023a).

The transportation sector's share of total GHG emissions increased to 28% in 2021 and remains the largest contributing sector (**Error! Reference source not found.**). Transportation fossil fuel combustion accounted for 92% of all CO_2 emissions in 2021. This is an increase of 7% over 2020, largely due to the rebound in economic activity following the COVID-19 pandemic (U.S. EPA 2023a, 2023b).

Figure 1. U.S. 2021 Greenhouse Gas Emissions

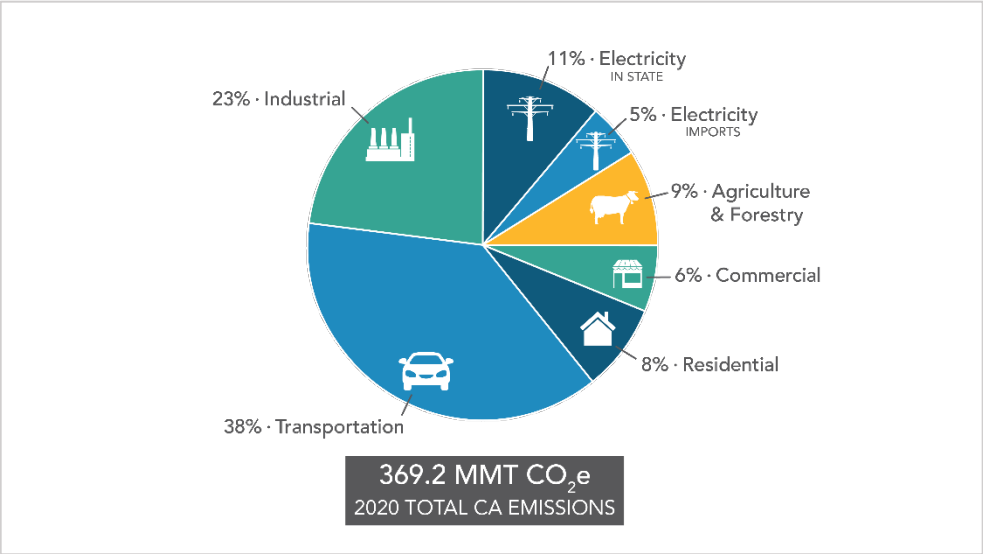


(Source: U.S. EPA 2023b)

State GHG Inventory

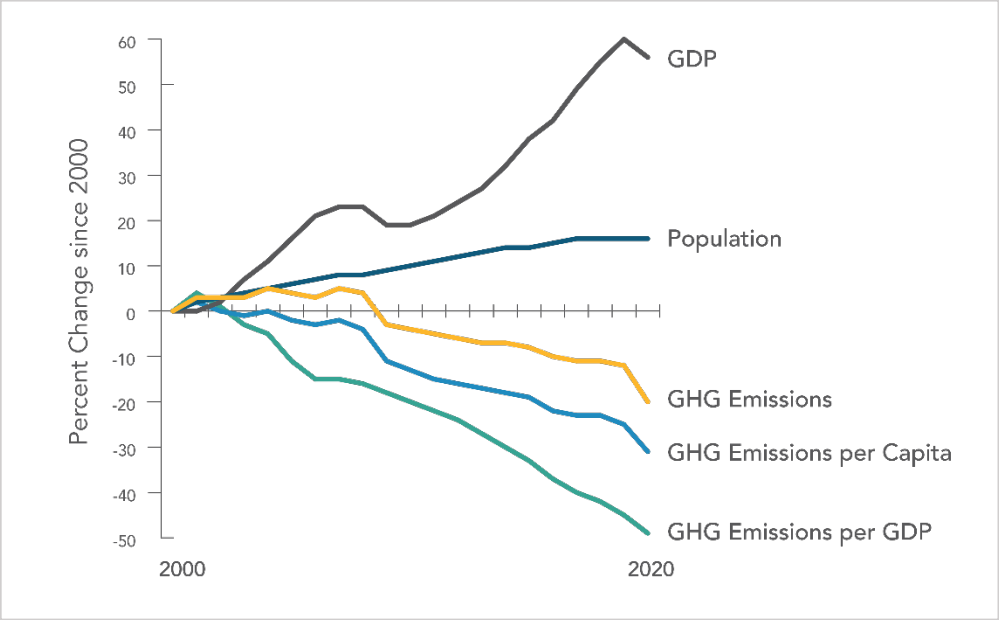
ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2020 despite growth in population and state economic output (Figure 3) (ARB 2022a).

Figure 2. California 2020 Greenhouse Gas Emissions by Economic Sector



(Source: ARB 2022a)

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



(Source: ARB 2022a)

AB 32 required ARB to develop a Scoping Plan that describes the approach California would 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 would 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 2022b).

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 would cumulatively achieve those goals and reporting how they would 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 (2020-2045) RTP/SCS for Southern California Association of Government. The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021).

Table 2. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
2020 Regional Transportation Plan/Sustainable Communities Strategy (2024 RTP/SCS)	• Improve mobility, accessibility, reliability, and travel safety for people and goods. • Enhance the preservation, security, and resilience of the regional transportation system. • Increase person and goods movement and travel choices within the transportation system. • Reduce greenhouse gas emissions and improve air quality. • Adapt to a changing climate and support an integrated regional development pattern and transportation network. • Leverage new transportation technologies and data-driven solutions that result in more efficient travel. • Encourage development of diverse housing types in areas that are supported by multiple transportation options
San Bernardino County Regional Greenhouse Gas Reduction Plan (adopted September 2021)	• OnRoad-1: Alternative Fueled Transit Fleets • OnRoad-2: Encourage Use of Mass Transit • OnRoad-3: Transportation Demand Management and Synchronization. • OnRoad-4: Expand Bike Routes • OnRoad-5: Community Fleet Electrification

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 CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. 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. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent", or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

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.

Operational Emissions

The purpose of the proposed project is to preserve and extend the service life of the existing pavement and improve ride quality and would not 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-18, 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.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and traffic delays due to construction. These emissions would 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.

Construction of the proposed project would result in GHG emissions from fuel combustion associated with off-road and on-road construction equipment and vehicles. The anticipated GHG construction activity emissions were calculated using the Caltrans construction emission and construction duration.

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 would 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.

CEQA Conclusion

The proposed project would increase GHG emissions during the construction period, but is not anticipated to directly nor indirectly, result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG reduction measures, the impact would be less than significant.

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

Greenhouse Gas Reduction Strategies

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 would transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (ARB 2022c).

Major sectors of the California economy, including transportation, would 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 would 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).

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 would 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.

Project-Level GHG Reduction Strategies

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

- **GHG-1:** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- **GHG-2:** Use of Long-Life Pavement and material to offset GHG emissions products during construction.
- **GHG-3:** Recycle existing project features on-site.
- **GHG-4:** Reduce emission by using Hot Mix Asphalt (HMA) pavement to extend the pavement service life and recycle natural resources.
- **GHG-5:** Replace lighting with ultra-reflective sign material.

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 would 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.

Federal Efforts

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance. Caltrans practices generally align with the 2023 CEQ interim Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, which offers recommendations for additional ways of evaluating project effects related to GHG emissions and climate change. These recommendations are not regulatory requirements.

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).

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 would 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 would 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 would triple to 370 by 2100, and 3,750 miles would 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).

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).

Project Adaptation Analysis

Sea Level Rise

The proposed project is outside the coastal zone and not in an area subject to sea level rise. Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected.

Precipitation and Flooding

Based on the Federal Emergency Management Agency Flood Insurance Rate Map (Map Number 06071C7315H), the proposed project is primarily within Zone D (Area with possible, but undetermined flood hazard) and Zone A (Areas in which flood hazards are undetermined, but possible) near 06071C7320H. Based on the Caltrans District 8 Climate Change Vulnerability Assessment Map (Caltrans 2019), the 100-year storm precipitation depth in the project area is expected to increase by 4.1% by 2055, but by 4.8% by 2085. This indicates heavier rainfall during storm events. It is expected that the project would be adapted to the anticipated changes in storm precipitation under climate change.

The proposed project aims to extend life and rehabilitate existing culverts and introduce new drainage systems to meet the 5-minute time of concentration requirement. Considering these measures and

increase in precipitation intensity, the project is expected to withstand projected precipitation changes associated with climate change.

Wildfire

According to the map by CalFire's Fire and Resource Assessment Program (FRAP), the majority of the proposed project segment is located in a Federal Responsibility Area (FRA) from PM 65.2 to PM 58.5. The Northern and Southern portions of SR-18 is classified as State Responsibility Area (SRA). The project area is within a classified Moderate to Very High Fire Hazard Severity Zone (FHSZ). The Caltrans Climate Change Vulnerability Assessment mapping tool identified the project area to have a high level of concern. However, Caltrans 2023 Standard Specification 7-1.02M(2) mandates fire protection procedures during construction, including a fire prevention plan.

Temperature

The project site is located within the "Mountainous" climate region. The mountain climate is known to have moderate temperatures during the day and nights are typically cold. The Caltrans District 8 Climate Change Vulnerability Assessment Map shows that the average minimum temperature in 2055 is anticipated to increase within the project area by 2.7 to 3.1 degrees Fahrenheit. The average seven-day maximum temperature in 2055 is anticipated to increase in the project area by 5.61 to 5.9 degrees Fahrenheit. In 2085, the project area minimum temperature change is anticipated to increase by 6.8 to 7.2 degrees Fahrenheit and the average seven-day maximum temperature change is anticipated to increase by 9.4 degrees Fahrenheit. The materials being used for the proposed project would utilize asphalt binder which is the product that holds the aggregate together. Asphalt binder is resistant to temperature variation and would be used with the Partial Depth Recycling with Hot Mix Asphalt. As a result, the pavement would be stronger. Therefore, the project is resilient to the temperature changes in the project area.

Chapter 4 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 and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, Project Development Team (PDT) meetings. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Consultation and coordination with several agencies occurred in conjunction with preparation of the proposed project technical reports and this IS. These agencies are identified in the various technical reports and include the California Department of Fish and Wildlife Service, Cleveland National Forest, State Water Resources Control Board, United States Army Corp of Engineers, United States Fish and Wildlife Service.

4.1 Consultation and Coordination with Public Agencies and Tribal Governments

The following provides a summary of all meetings, correspondence, and/or coordination relevant for the development of the proposed project.

4.1.1 AB 52 Consultation

AB 52 consultation was initiated on October 5, 2022. Caltrans contacted 29 Palms Band of Mission Indians and San Manuel Band of Mission Indians.

A request was made to the Native American Heritage Commission (NAHC) on February 27, 2023, for a Sacred Land File (SLF) search. The NAHC responded with negative SLF results, indicating that there were no cultural resources present.

Letters requesting information about cultural resources or concerns regarding the project were sent to four Native American tribes:

- On October 5, 2022- Initial Consultation Letter Sent to the 29 Palms Band of Mission Indians, Sarah Bliss, Cultural Resource Manager. Follow-up attempts to contact the tribe was sent on February 14, 2023, and April 11, 2023. To date, a response has not been received.
- On October 5, 2022- Initial Consultation Letter Sent to the San Manuel Band of Mission Indians, Jessica Mauck, Cultural Resource Manager. October 7, 2022, we received a reply from Ryan Nordness, Tribal Cultural Resource Analyst, requesting continued consultation Pursuant to Section 106 and AB 52. On October 31, 2022, we received additional information from Ryan Nordness and a request for project documents.

- On December 23, 2022, an update letter was sent to Yuhaaviatum of San Manuel Nation, to Alexandra McCleary, Cultural Resource Manager. The Tribe responded on December 23, 2023 to note that the proposed project passes through a known prehistoric village and they requested updated reports.
- On February 15, 2024- DNAC forwarded the ASR to the San Manuel Band. To date, no response received.
- On February 22, 2024, Kristen Tuosto responded on behalf of the tribe to explain that site P33-000933 / CA-SBR-933/H in Cactus Flat is a known habitation site, and as are the other prehistoric and mixed-component sites within the project limits, and all are highly sensitive
- On February 26, 2024, DNAC replied to Ms. Tuosto that Caltrans has an ESA Plan in place and anticipates tribal and archaeological monitoring during construction.

4.1.2 United States Fish and Wildlife Service

Caltrans obtained an updated official USFWS IPaC species list on February 26, 2024 (Appendix A; Official USFWS Species List). The project is located within a USFWS designated critical habitat unit for federally listed plants and critical habitat. Caltrans will consult with USFWS for Project activities occurring within critical habitat for Ash-grey paintbrush, Bear Valley sandwort, Cushenbury buckwheat, Cushenbury milkvetch, Cushenbury oxytheca, Parish's daisy and San Bernardino bluegrass. The project is also located within the distribution range for desert tortoise. Caltrans will consult with USFWS for potential impacts to desert tortoise.

Chapter 5 List of Preparers

Adam Compton, Senior of Biological Regulatory Permits

Alan Bisi, Senior Transportation Engineer

Alan Nakano, Landscape Architect, Hydraulic Studies

Almabeth Anderson, Senior Landscape Architect

Bahram Karim, Associate Environmental Planner, Paleontology Coordinator

Christian Duran, Transportation Engineer, Air Specialist

Craig Wentsworth, Supervising Environmental Planner

Dicken Everson, Associate Environmental Planner, Cultural Studies

Greg Clark, Senior Landscape Architect

Khalid Saoud, Transportation Engineer, Project Engineer

Kurt Heidelberg, Deputy District Director

Lisa Farzana, Transportation Engineer, Hazardous Waste

Nicolas Borrayo, Senior Transportation Engineer

Malisa Lieng, Senior Environmental Planner

Michael Grimes, Associate Environmental Planner, Natural Sciences

Maggi Elgeziry, Action Senior Environmental Planner

Man Lam, Transportation Engineer, Hydraulic Studies

Maria Hamlett, Associate Environmental Planner, Biological Regulatory Permits

Paul Phan, Senior Transportation Engineer,

Phong Hoang, Transportation Engineer, Noise Specialist

Shawn Oriaz, Office Chief Environmental

Steven Magallanes, Senior Landscape Architect

Trisha Lam, Associate Landscape Architect

Walid Saoud, Transportation Engineer, Project Engineer

Chapter 6 Distribution List

California Dept. Fish and Wildlife Region 6
3602 Inland Empire Blvd, Suite C-220 Ontario, CA 91764

Mojave Desert Air Quality Management District
14306 Park Ave
Victorville, CA 92392

Spectrum
7337 Central Ave
Riverside, CA 92504

Frontier Communications
401 Merritt 7
Norwalk, CT 06851

California Highway Patrol
601 N 7th St,
Sacramento, CA 95811

Big Bear Fire Station 284
45360 Lucky Baldwin Ranch
Big Bear, CA 92314

California Air Resources Board
1001 I Street,
Sacramento, CA 95814

Mitsubishi Cement Corpora□on
5808 CA-18,
Lucerne Valley, CA 92356

Colorado River Regional Water Quality Control Board Region 7
73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260

California Native American Heritage Commission
1550 Harbor Blvd. Suite 100 West
Sacramento, CA 95691 nahc@nahc.ca.org

Pacific Gas and Electric
P.O Box 997300
Sacramento, CA 95899-7300

Southwest Gas
P.O Box 24531
Oakland, CA 94623-1531

Office of Historic Preservation Street
1725 23rd Street, Suite 100
Sacramento, CA 95816

12th Senate District Senator Shannon Grove
5701 Truxtun Ave., Suite 150
Bakersfield, CA 93309

San Bernardino National Forest
602 S. Tippecanoe Ave.
San Bernardino, CA 92408

34th Assembly District Assemblyman Tom Lackey
14955 Dale Evans Pkwy Apple Valley, CA 92307

Center Water Company
32774 Old Woman Springs Rd, Lucerne Valley, CA 92356

Bear Valley Unified School District
42271 Moonridge Road
Big Bear Lake, CA 92315

Big Bear Area Regional Wastewater Agency
121 Palomino Drive, P.O Box 517
Big Bear City, CA 92314

Southern California Edison
2244 Walnut Grove Ave.
Rosemead, CA 91770

UtiliQuest
1891 Enterprise Blvd
Sacramento, CA 95691

California Transportation Commission
1120 N. St.
Sacramento, CA 95814

Appendix A Title VI/Non-Discrimination Policy Statement

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS–49 | SACRAMENTO, CA 94273–0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
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September 2023

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground 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.*"

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. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

Appendix B Avoidance, Minimization and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures would be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits would be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff would ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring would take place, as applicable. As the following ECR is a draft, some fields have not been completed, and would be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR.

Permit Type	Agency	Date Received	Expiration	Notes
1600	Department of Fish and Wildlife	N/A	N/A	Per Natural Environmental Study- MI dated 4/25/2024
2081	Department of Fish and Wildlife	N/A	N/A	
BO	Fish and wildlife Services			Application submitted
WDR	Regional Water Quality Control Board			
N/A	National Pollutant Discharge Elimination System (NPDES) Permit			

Date of ECR: April 30, 2024

Project Phase:
☒ PA/ED (*FED*)
☐ PS&E Submittal
☐ Construction

ENVIRONMENTAL COMMITMENTS RECORD
(SBD SR-18 Baldwin Lake Pavement Rehabilitation Project)

08-SBD-018
PM 56.2/ 66.9

EA 08-1L420
PN 0820000076
Generalist: Teresa Howard
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 buried cultural resources are encountered during Project Activities, it is Caltrans policy that work stop within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.		Screened Undertaking dated: 2/16/2024	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction	**Standard Specification 14-2.03A**					

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CR-2: In the event that human remains are found, the county coroner shall be notified and ALL construction 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 Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). **The person who discovered the remains will contact the District 8 Division of Environmental Planning; Ashley Bowman, DEBC: (909) 472-7730 and Gary Jones, DNAC: (909) 261-8157.** Further provisions of PRC 5097.98 are to be followed as applicable.		Screened Undertaking dated: 2/16/2024	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction	**Standard Specification 14-2.03A**					
CR-3: ESAs exist for this project between Post Miles 58.1 -58.4; 62.1 62.3; and 58.0 – 58.1. The ESA boundary is shown on the APE Map, in the Project Plans, and in the ESA / AMA Monitoring		Email dated: 3/28/2024	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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and Discovery Plan. The ESA is closed and may not be entered.										
CR-4: AMAs exists for this project between Post Miles 58.1 - 58.4; 62.1 62.3; and 58.0 – 58.1. The AMA boundary is a buffer area around the ESAs as shown on the APE Map, in the Project Plans, and in the ESA / AMA Monitoring and Discovery Plan. Construction activity within the limits of the AMA may not commence without the presence of the archaeological monitor.		Email dated: 3/28/2024	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIOLOGICAL RESOURCES										
BIO-1- Bio-General-1 Equipment Staging, Storing & Borrow Sites: Caltrans will confine all equipment maintenance, storage, and parking during	66,89	Natural Environmental Study (Minimal Impacts) Approval: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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construction activities to the designated construction area or to previously disturbed graded or paved areas, or level areas where grading and vegetation clearing are not required and that are not habitat for listed species, as determined in coordination with the approved biologist, BIO-7: Approved Biologist. Because fuels, lubricants, and solvents would be stored in staging areas, all staging areas would be located at least 150 feet from sensitive habitat areas, including streams/drainages and other aquatic habitat.										
Bio-2 Bio-7 Approved Biologist: A Service- and CDFW (if appropriate)-approved biologist(s) will conduct activities as specified in this NESMI. After the start of each calendar year, and at least 7 days prior	70, 90	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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to initiating project activities, Caltrans will submit to the Service and CDFW, in writing, the name(s), resumes, and statement of qualifications for all proposed approved biologists. Proposed activities will not begin until an approved biologist has been authorized by the Service and CDFW. Approvals of biologists will be valid throughout each calendar year, up to one year, or longer if indicated by the Service and CDFW. The approved biologist(s) will have the authority to work with the Resident Engineer to halt construction activities that do not comply with the construction-related conservation.										
BIO-3 BIO-GENERAL-8: Biological Monitor: An approved biologist (BIO-7: Approved Biologist) will be onsite during all vegetation	70, 90	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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management or ground-disturbing activities and will monitor active nests and/or suitable nesting habitat buffers for potential disturbance. The Qualified Biologist must monitor project activities daily to ensure that measures are being implemented and documented.										
BIO-4, BIO-General-9: Environmentally Sensitive Area (ESA)- To address impacts to Joshua tree woodland, jurisdictional waters, and plant critical habitats, delineate this area as an ESA as shown on the plan and/or described in the specifications.	70,91	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO-5-PEBBLE-1: Avoid Impacts to pebble Plain Plant Species on SR 18- To protect plant species occurring in pebble plain soil types when working on SR 18 at PM 57.5 to 58.6, all work will occur within the pavement or on the opposite side		Natural Environmental Study Approval: April 25, 2024								

Date of ECR: April 30, 2024

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							Date / Initials	Date / Initials	YES	NO
of the roadway from occurrences of all pebble plain species.										
BIO-6: BIO-General-12: Animal Entrapment: To prevent inadvertent entrapment of desert tortoise 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		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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released by the Caltrans Approved Biologist										
BIO-7: BIO-13: Water Quality, Aquatic Features, and Vegetation Protection Measures: To minimize the potential for degradation of water quality, aquatic features, and vegetation, Caltrans will implement construction site BMPs Appropriate BMPs, such as the use of temporary silt fences or fiber rolls, will be selected to prevent runoff from leaving the project site. Caltrans will also implement the following measures: a. Prior to the onset of work, Caltrans will develop a plan for prompt and effective response to any accidental spills. The plan will include informing all workers of the importance of preventing spills and of the appropriate measures to implement should a spill occur.	71	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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b. Refueling or maintenance of vehicles or equipment will occur at least 150 feet from sensitive habitat areas, including streams/drainages and other aquatic habitat. c. Vehicles and equipment will be checked daily for leaks, and all vehicular fluid spills will be contained and cleaned up immediately. d. Spill containment kits will be maintained onsite at all times during construction operations and/or staging or fueling of equipment. e. Dust control will be implemented and may include the use of water trucks and non-toxic tackifiers (binding agents) to control dust in graded areas. Dust control spray will avoid overspray into any Environmentally Sensitive Areas (ESAs) or areas outside the defined project areas.										

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							Date / Initials	Date / Initials	YES	NO
BIO-8: BIO-General-PSM-17: Sensitive Vegetation Communities Restoration Plan For temporary impact areas containing sensitive vegetation communities, a restoration plan will be developed and implemented by Caltrans to ensure that these areas can be restored to pre-project conditions.		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO-9: BIO-General-PSM-19: Environmentally Sensitive Areas and Ground Disturbance: No ground disturbing or fill activity of any type will be permitted within environmentally sensitive areas outside the project footprint. All construction equipment should be operated in a manner so as to prevent accidental damage to nearby preserved areas outside the PIA. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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these protected zones. Where appropriate, silt fence barriers may be installed at the environmentally sensitive area boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned ground disturbing activities										
BIO-10: BIO-General-21: Fuel and Oil Dispensing Activities All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland habitat areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering Waters of the U.S. The Residential Engineer and Caltrans Biologist shall coordinate on all sites prior to their approval and use.		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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							Date / Initials	Date / Initials	YES	NO
BIO-11 PLANT-1: Pre-Construction Plant Surveys during Blooming Period: An approved biologist will conduct surveys for covered plant species in areas identified as habitat for covered plants during the BIO-PLANT-PSM-1: Assessment for Covered Species Habitats and Designated Critical Habitat. Surveys will be conducted during the appropriate blooming period(s) and within suitable soils for all covered plants with potential to occur in the action area.	90	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO 12-PLANT-2: Avoidance Buffer of Covered Plants and their Habitats: If surveys confirm the presence of covered plants, or if a survey is not conducted and presence of covered plants is assumed based on suitable habitat, then an approved biologist (BIO-7:		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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Generalist: Teresa Howard
ECL: TBD

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							Date / Initials	Date / Initials	YES	NO
Approved Biologist) will establish a minimum 50-feet avoidance buffer around all covered plant occurrences or their suitable habitat (when presence is assumed). The avoidance buffer will be clearly established by an approved biologist. A larger avoidance buffer may be established if determined by the approved biologist to be necessary for the protection of the plant populations, individuals, or suitable habitat. Activities that have the potential to reduce habitat quality, including soil disturbance, will be avoided. For annual forbs, work may occur after plants have set seed and senesced and associated habitat will not be permanently impacted. For perennial species, disturbance to underground portions of the plant such as roots, bulbs and tubers will be avoided. The approved biologist will advise Caltrans of any										

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additional appropriate methods to limit disturbance of covered plants within these buffers. Caltrans will implement Category 2 conservation measures if work within these buffers cannot be limited to insignificant or discountable effects, or the buffers cannot be implemented.										
BIO-13: BIO-PSM-8: Worker Environmental Awareness Training (WEAT): Caltrans will require all construction personnel to participate in WEAT prior to participating in work activities. The training will be led by an approved biologist and delivered to all construction personnel and new field-based personnel before engaging in construction activities. The WEAT will: a) Include descriptions of all covered species that have a reasonable likelihood of occurring in the project footprint, their		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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habitats, and methods of identification, including visual aids as appropriate. b) Inform staff regarding invasive plant biology, identification, and any prevention measures to avoid spreading invasive plants. c) Describe activity-specific measures that will be implemented to avoid and minimize effects to covered species and their habitats. The measures will be provided to the Caltrans Resident Engineer and any contractors participating in construction activities. d) Review procedures to follow in the event covered species are observed in the construction area. e) WEAT will occur within the first week of every month. As covered activities move, WEAT will be updated to focus on relevant species expected to be encountered by activities occurring in that month.										

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f) Provide additional WEAT to inform crews entering sensitive habitat or other protected resource areas for the first time to remind them of pertinent conservation measures. g) Implement a system for documenting WEAT attendance and field identification of trained workers (e.g., hardhat stickers) so that all workers performing covered activities are verified as having completed WEAT.										
BIO-14: BIO-General-PSM-17: Sensitive Vegetation Communities Restoration Plan- For temporary impact areas containing sensitive vegetation communities, a restoration plan will be developed and implemented by Caltrans to ensure that these areas can be restored to pre-project conditions.		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO-15: BIO-PSM-19: Environmentally Sensitive		Natural Environmental	District Biological Studies/ District	Design / Construction						

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Areas and Ground Disturbance: No ground disturbing or fill activity of any type will be permitted within environmentally sensitive areas outside the project footprint. All construction equipment shall be operated in a manner to prevent accidental damage to nearby preserved areas outside the PIA. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Where appropriate, silt fence barriers may be installed at the environmentally sensitive area boundary to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned ground disturbing activities.		Study (Minimal Impacts) Approved: April 25, 2024	Design/ Resident Engineer/ Contractor							
BIO-16: BIRD-1: Seasonal Avian Work Windows: Caltrans will limit all project activities, including BIO-10: Nesting Bird	111	Natural Environmental Study (Minimal Impacts)	District Biological Studies/ District Design/ Resident	Design / Construction						

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Surveys to the work windows in areas identified as suitable habitat for covered bird species identified during pre-construction nesting bird surveys. Caltrans will implement additional conservation measures if these seasonal work windows cannot be implemented		Approved: April 25, 2024	Engineer/ Contractor							
BIO-17: BIRD-2: Pre-construction Nest and Suitable Habitat Surveys: An approved biologist (BIO-7: Approved Biologist) will conduct nest and suitable nesting habitat surveys no more than 7 days prior to the date of initial ground disturbance and vegetation clearing. These surveys may occur concurrently with BIO-10: Nesting Birds Surveys. During the surveys, the approved biologist will look for active nests and nesting habitat along the project alignment, as well as a 50-foot radius for non-owl	112	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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species and a 0.25-mile radius for owl species, as accessible**.**										
BIO-18: BIRD-3: Nesting Habitat and Nest Exclusion Buffers: If potentially active nests or nesting habitat are located during BIRD-2: Pre-construction Nest and Suitable Habitat Surveys, an approved biologist (BIO-7: Approved Biologist) will establish an exclusion buffer (see Table 12). Caltrans will not allow project activities within potential active nest or nesting habitat buffers. Work may proceed once an approved biologist as confirmed that the nest is inactive, or the Service authorizes activities within suitable buffers.	112	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO-19: BIO-Reptile-4: Authorized Biologist Clearance Surveys: Clearance desert tortoise surveys must be conducted by a Qualified USFWS-authorized		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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Desert Tortoise Biologist 3 days prior to project activities within suitable and critical desert tortoise habitat. If a desert tortoise is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required. Desert tortoise removed from work areas may be moved from harm's way to the nearest suitable habitat or translocated, following the most recent USFWS and CDFW guidelines. If a desert tortoise must be handled, then a CDFW 2081 permit must be acquired.										
BIO-20: BIO-DT-1: Agency Notification and Reporting Requirements: Any desert tortoises within or near the job site found alive, injured, or dead during the implementation of the project must provide immediate notification to the Resident		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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Engineer and Caltrans biologist. Caltrans biologist must then notify CDFW and USFWS. Veterinary treatment and/or final deposition must follow CDFW and USFWS approval.										
BIO-21: BIO-Bat-PSM-2: Bat Preconstruction Surveys Prior to work activities, a pre-construction survey within suitable areas and an appropriate survey buffer shall be surveyed for the presence of bat roosts by a qualified bat biologist. Initial surveys are recommended to be conducted at least 6 months prior to the initiation of work on, under, or adjacent to bridges, ideally during the maternity season (typically March 1 to August 31), to allow time to prepare mitigation, and/or exclusion plans if needed in accordance with CDFW guidelines. If the pre-construction	115	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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survey determines that no active roosts are present, then work activities shall commence within two weeks following the pre-construction survey.										
BIO22: BIO-Bat-PSM-3: Work Restriction Hours: Work activities should be restricted to daylight hours. This would reduce the potential of direct or indirect impacts to bat species that may be foraging in the vicinity of the BSA. Should work activities be required at night, night lighting should be focused on the direct area of work. Mature trees were identified in the vicinity of the BSA, and these may provide suitable roosting habitat for foliage-roosting bats. Tree removal is not an anticipated activity for the project, but if this changes, each affected tree would need to be assessed individually and additional measures may be required.	116	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024								

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BIO-23: BIO-Bat-PSM-4: Bat Species and Roost Determination If active bat roosts are present, a qualified bat biologist shall determine the species of bats present and the type of roost (i.e., day roost, night roost, maternity roost). If the biologist determines that the roosting bats are not a special status species and the roost is not being used as a maternity roost, then the bat biologist will determine appropriate measures to minimize and avoid potential impacts to bats. Appropriate measures may include evicting bats from the roost by a qualified bat biologist experienced in developing and implementing bat mitigation and exclusion plans.	116	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO-24: BIO-Bat-PSM-5: Active Roost Buffer:	116	Natural Environmental	District Biological Studies/ District	Design / Construction						

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If special-status bat species or a maternity roost of any bat species is present, but no direct removal of active roosts will occur, a qualified bat biologist shall determine appropriate avoidance measures, which may include implementation of a construction-free buffer around the active roost.		Study (Minimal Impacts) Approved: April 25, 2024	Design/ Resident Engineer/ Contractor							
BIO-25: BIO-Bat-PSM-6: Bat Mitigation and Exclusion Plan If special-status bat species or a maternity roost of any bat species is present and direct removal of habitat (roost location) will occur, then a qualified bat biologist experienced in developing bat mitigation and exclusion plans shall develop a mitigation plan to compensate for the lost roost site. Removal of the roost shall only occur when the		Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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mitigation plan has been approved by CDFW and only when bats are not present in the roost. The mitigation plan shall detail the methods of excluding bats from the roost and the plans for a replacement roost in the vicinity of the project site. The mitigation plan shall be submitted to the CDFW for approval prior to implementation. The plan shall include: (1) a description of the species targeted for mitigation; (2) a description of the existing roost or roost sites; (3) methods to be used to exclude the bats if necessary; (4) methods to be used to secure the existing roost site to prevent its reuse prior to removal; (5) the location for a replacement roost structure; (6) design details for the construction of the replacement roost; (7) monitoring protocols for assessing replacement roost										

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use; (8) a schedule for excluding bats, demolishing of the existing roost, and construction of the replacement roost; and (9) contingency measures to be implemented if the replacement roosts do not function as designed.										
BIO-26: CDFW Individual Take Permit – Western Joshua Tree (Compensatory Mitigation): In addition to the above measures, to address impacts to western Joshua Tree, Caltrans will comply with the Western Joshua Tree Conservation Act. During Plans, Specifications, and Estimates Phase, Caltrans will coordinate with CDFW and apply for an Individual Take Permit for take of western Joshua tree. The ITP will include corresponding application fees and compensatory mitigation based on the current CDFW fee	92	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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schedule number of affected individuals										
BIO 27: USFWS Coordination for Cushenbury Milk-vetch and its Critical Habitat: The project includes work within federally designated critical habitat unit for: Ash-grey paintbrush, Bear Valley sandwort, Cushenbury buckwheat, Cushenbury milk-vetch**,** Cushenbury oxytheca, Parish's daisy, San Bernardino bluegrass and southern mountain buckwheat. Therefore, to address potential impacts within a federal critical habitat Caltrans will initiate consultation with USFWS pursuant to Section 7(a)(2) of the Federal Endangered Species Act.	92	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						
BIO-28: Compensatory Mitigation-The project is expected to impact jurisdictional aquatic resources through the repair/upgrade of culverts and the installation of concrete lining within Cushenbury Creek.	92	Natural Environmental Study (Minimal Impacts) Approved: April 25, 2024	District Biological Studies/ District Design/ Resident Engineer/ Contractor	Design / Construction						

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Therefore, coordination with CDFW and RWQCB would be necessary and compensatory mitigation would be developed. Compensatory mitigation has not been determined at this time and would be determined through coordination between Caltrans and the appropriate regulatory agencies in the form of permit application fees for CDFW 1600 and RWQCB Report of Waste Discharge: If impacts to federally and/or state-listed or candidate state species occur as result of the proposed Project, take authorization permits are required from USFWS and/or CDFW, then compensatory mitigation to offset impacts to those species will be outlined in those permit documents										
GREENHOUSE GAS										
GHG-1: Limit idling to 5 minutes for delivery and dump trucks and		IS Document	District Environmental	Design / Construction						

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other diesel-powered equipment (with exceptions).			Studies/District Design/ Resident Engineer/ Contractor							
GHG-2: Long Life Pavement. Minimize life-cycle costs by designing long-lasting pavement structures. Consider future climate conditions in decisions. (For example, areas that are expected to experience increased temperatures and extreme heat days may have different pavement needs than areas expecting more frequent freezing temperatures) https://www.sustainablehighways.org/		IS Document	District Environmental Studies/District Design/ Resident Engineer/ Contractor	Design / Construction						
GHG-3 Recycle Existing Project Features Onsite (For example, MBGR, light standards, Sub-base Granular Material or native material that meets Caltrans specifications for incorporation into new work.)		IS Doc	District Environmental Studies/District Design/ Resident Engineer/ Contractor	Design / Construction						
GHG-4: **Reduce Emission by Hot Mix Asphalt and Recycling Natural Material**. This pavement		IS Doc	District Environmental Studies/District	Design / Construction						

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rehabilitation treatment is used on low traffic-volume, Hot Mix Asphalt (HMA) pavements to extend the pavement service life and to recycle natural resources. The treatment also reduces emissions and energy use associated with processing and hauling these materials			Design/ Resident Engineer/ Contractor							
GHG-5: Replace Lighting with Ultra-Reflective sign materials: Illuminated by headlights to reduce energy used by electric lighting.		IS Doc	District Environmental Studies/District Design/ Resident Engineer/ Contractor	Design / Construction						
HAZARDOUS WASTE/ MATERIALS										
HAZ-1: Conditions for use of local material from non-commercial source (LCP) and item for LCP.	1	Initial Site Assessment Checklist (ISA) dated: 4/4/2024	District Env. Engineering/ District Design/ Resident Engineer/ Contractor	Design / Construction	**Standard Special Provisions (SSP) 6-1.03**					
Haz-2: Earth material. Requires Lead Compliance Plan	1	Initial Site Assessment	District Env. Engineering/ District Design/ Resident	Design / Construction	**Standard Special Provisions**					

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							Date / Initials	Date / Initials	YES	NO
		Checklist (ISA) dated: 4/4/2024	Engineer/ Contractor		**(SSP) 7-1.02k(6)(j)(iii)**					
Haz-3: For the removal and disposal of Treated Wood Waste (TWW)	1	Initial Site Assessment Checklist (ISA) dated: 4/4/2024	District Env. Engineering/ District Design/ Resident Engineer/ Contractor	Design / Construction	**Standard Special Provisions (SSP) 14-11.14**					
Haz-4: Asbestos NESHAP notification	1	Initial Site Assessment Checklist (ISA) dated: 4/4/2024	District Env. Engineering/ District Design/ Resident Engineer/ Contractor	Design / Construction	**Standard Special Provisions (SSP) 14-9.02**					
HAZ-5: Residue from grinding or cold planning containing lead from paint and thermoplastic	1	Initial Site Assessment Checklist (ISA) dated: 4/4/2024	District Env. Engineering/ District Design/ Resident Engineer/ Contractor	Design / Construction	**SSP 36-4:**					
HAZ-6: SSP 14-9.02 National Emission Standards for hazardous Air Pollution	1	Initial Site Assessment Checklist (ISA) dated: 4/4/2024	District Env. Engineering/ District Design/ Resident Engineer/ Contractor	Design / Construction	**SSP 14-9.02**					

Appendix C Federal Transportation Improvement Program

SBDLS02	Exempt Grouped Projects for Pavement Resurfacing and/or Pavement Rehabilitation - SHOPP Roadway Preservation Program	2021 FTIP Amendment #21-30

Agency	County	District EA	Notes	Project Description	Program Year (FFY)	Federal Funds	State Funds	Total Project Cost (in $1000's)
Caltrans	SBd	1J300	PCR: SHOPP Amendment #22H-002, CTC June 29-30, 2022 approval.	On SR-18 in Apple Valley and Victorville, from Apple Valley Inn Road/Dale Evans Parkway to Route 15. Rehabilitate pavement, rehabilitate drainage systems, upgrade facilities to Americans with Disabilities Act (ADA) standards, upgrade signs, and construct sidewalk, Light Emitting Diode (LED) lighting, enhanced crosswalks, bike lanes, and flashing beacons as complete streets elements. . RW Cap and CON Cap/Sup Only	2023/24	$20,533	$0	$20,533
Caltrans	SBd	1J720	PCR: SHOPP Amendment #22H-002, CTC June 29-30, 2022 approval.	On I-40 in and near Barstow, from Route 15 to 3.4 miles west of National Trails Highway; also on Main Street spur (PM S0.0/S0.8). Pavement rehabilitation, upgrade signs and lighting, upgrade curb ramps to Americans with Disabilities Act (ADA) standards, and upgrade safety devices. RW Cap and CON Cap/Sup Only	2023/24	$44,883	$0	$44,883
Caltrans	**SBd**	**1G660**	**PCR. SHOPP Amendment #22H-004. CTC October 12 13, 2022 Approval**	**On SR-66 in San Bernardino, from Pepper Avenue to H Street (PM20.14/23.156). Rehabilitate pavement,add barrier separation, upgrade bridge rail, add sidewalk as a complete street element, and upgrade facilities to Americans with Disabilities Act (ADA) standards. RW Cap and CON Cap/Sup Only.**	**2023/24**	**$18,503**	**$0**	**$18,503**
Caltrans	SBd	1J280	2022 SHOPP Carryover from 2020 SHOPP, approved by CTC March 17, 2022.	On SR-83 in Ontario, fom south of Cedar Street to Route 10. Rehabilitate pavement and upgrade facilities to Americans with Diabilities Act (ADA) standards. RW Cap and CON Cap/Sup Only.	2023/24	$29,892	$0	$29,892
Caltrans	SBd	1J270	2022 SHOPP Carryover from 2020 SHOPP, approved by CTC March 17, 2022.	On SR-247 in and near Yucca Valley, from Route 62 to north of Gin Road. Rehabilitate pavement and widen shoulders. RW Cap and CON Cap/Sup Only.	2023/24	$31,987	$0	$31,987
Caltrans	SBd	1J310	PCR: SHOPP Amendment #22H-002, CTC June 29-30, 2022 approval.	On SR-18 near Big Bear Lake, from Arrowbear Drive to Route 38. Rehabilitate culverts and install Changeable Message Sign (CMS). RW Cap and CON Cap/Sup Only.	2023/24	$7,253	$0	$7,253
Caltrans	SBd	1L150	New. 2022 SHOPP approved by CTC March 17, 2022.	On I-15 near Baker, from south of Basin Road to 7.4 miles north of Route 127. Rehabilitate pavement, drainage systems, and lighting, upgrade guardrail, and replace sign panels. PS&E and RW Sup Only.	2023/24	$2,568	$0	$2,568
Caltrans	SBd	1L420	New. 2022 SHOPP approved by CTC March 17, 2022.	On SR-18 near Big Bear Lake, from 1.4 miles south of Baldwin Lake Road to Camp Rock Road. Rehabilitate pavement and drainage systems, upgrade guardrail, and replace sign panels. PS&E and RW Sup Only.	2023/24	$2,586	$0	$2,586
Caltrans	SBd	1L140	New. 2022 SHOPP approved by CTC March 17, 2022.	On SR-18 near Lucerne Valley, from Camp Rock Road to Custer Avenue. Rehabilitate pavement, upgrade guardrail and Transportation Management System (TMS) elements, and construct shoulders and rumble strips. PS&E and RW Sup Only.	2023/24	$6,459	$0	$6,459

Appendix D List of Technical Studies

The following studies and/or technical analyses have been prepared and are incorporated by reference into this Initial Study and can be located on STEVE database:

- Greenhouse Gas (GHG) Analysis
- Historic Property Survey Report
- Initial Site Assessment (ISA) Checklist
- Natural Environment Study (Minimal Impact)
- Scoping Questionnaire for Water Quality Issues
- Visual Impact Assessment (VIA) Questionnaire

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