

# SBD 15 Pavement Rehab

SAN BERNARDINO COUNTY, CALIFORNIA  
DISTRICT 08-SBD-15 - Post Miles (PM) R121.0 to PM 144.0  
EA 08-1L150 / PN 0819000152

## Initial Study [with Proposed] Mitigated Negative Declaration



Prepared by the  
State of California, Department of Transportation



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 on Interstate 15 (I-15) at Post Miles (PM) R121.0 to PM 144.0. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document describes why the project is being proposed, which alternatives are being considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures.

### What you should do:

- Please read this document.
- We welcome your comments. If you have any concerns about the proposed project, please send your written comments to Caltrans by the deadline.
- Send comments via U.S. mail or email to Caltrans at the following address:  
Malisa Lieng, Senior Environmental Planner  
California Department of Transportation  
464 W. 4<sup>th</sup> Street, 6<sup>th</sup> Floor - MS 823  
San Bernardino, CA. 92401-1400
- Send comments via email to: [SBD15PavementRehab@dot.ca.gov](mailto:SBD15PavementRehab@dot.ca.gov)
- Be sure to send comments by the deadline: June 10, 2024.

### What happens next:

After comments are received from the public and reviewing agencies, Caltrans, as assigned by the FHWA, 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 District 8 could design and construct all or part of the project.

### Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans District 8, Attn: Malisa Lieng, 464 W. 4<sup>th</sup> Street, 6<sup>th</sup> Floor - MS 823, San Bernardino, CA. 92401-1400, (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-15-PM R121.0/144.0  
EA 08-1L150  
PN 0819000152

Multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15), between post mile (PM) R121.0 and PM 144.0 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  
Deputy District Director, District 8  
Division of Environmental Planning  
California Department of Transportation  
CEQA Lead Agency

May 1, 2024

Date

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

Malisa Lieng  
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(909) 261-3955

## Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

### Project Description

The California Department of Transportation (Caltrans) proposes a multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15). The limits of work for this project are along I-15 between post mile (PM) R121.0 and PM 144.0 in San Bernardino County. The improvements include 0.15' mill and 0.25' overlay, and 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2. The project would also include upgrading the guardrails, replacing AC dikes, restriping (all lanes), sleeve-lining 6 culverts, rock slope protection (RSP) and guardrail installation at PM R137.67, upgrading 18 sign panels (Type 11), rehabilitating 12 freeway lighting Type 10, 15, 30, and 31, and removing vegetation. All work would be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) would be required for each culvert and guardrail location to facilitate the upgrades.

### Determination

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

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

The proposed project would have no effect on: Aesthetics, Agriculture and Forest Resources, Cultural Resources, Energy, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, Wildfire, Mandatory Findings of Significance.

In addition, the proposed project would have less than significant effects to: Air Quality, Greenhouse Gas Emissions.

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

- **BIO-Waters 1:** Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.
- **BIO-Waters 2:** On-site habitat restoration for temporary impacts for native communities through revegetation and reseeded with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.
- **BIO-Waters 3:** Off-site mitigation banking at a ratio of 3:1 for permanent impacts to native communities.
- **BIO-Waters 4:** Compensatory Mitigation: Any additional permanent impacts to jurisdiction areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.
- **BIO-General 8:** Biological Monitor: A qualified biologist must monitor project activities to ensure that measures intended to protect desert tortoise, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.
- **BIO-Reptile 6:** Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work locations (PM R122.23, R126.11, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer as shown on the plans and/or described in the specifications, to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans,

to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.

- **BIO-Reptile 8:** Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand.
- **BIO-DT 2:** Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in the PA&ED phase to determine if desert tortoise is active in the project area. Measures will be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert tortoise is confirmed, additional measures may be needed.

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Kurt Heidelberg  
Deputy District Director, District 8  
Division of Environmental Planning  
California Department of Transportation  
CEQA Lead Agency

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Date

DRAFT

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# **Chapter 1 Proposed Project**

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## **1.1 INTRODUCTION**

The California Department of Transportation (Caltrans), proposes a multi-asset project with minor pavement rehabilitation improvements on Interstate 15 (I-15). The limits of work for this project are along I-15 between post mile (PM) R121.0 and PM 144.0 in San Bernardino County. The improvements include 0.15' mill and 0.25' overlay, and 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2. The project would also include upgrading the guardrails, replacing AC dikes, restriping (all lanes), sleeve-lining 6 culverts, rock slope protection (RSP) and guardrail installation at PM R137.67, upgrading 18 sign panels (Type 11), rehabilitating 12 freeway lighting Type 10, 15, 30, and 31, and removing vegetation. All work would be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) would be required for each culvert and guardrail location to facilitate the upgrades. Figure 1-1 shows the project location, respectively.

This project is a candidate for programming in the 2022 SHOPP under the Minor Pavement Rehabilitation (201.121) (Anchor Asset) and the following Satellite Assets: Roadside Safety Improvements (201.235), Lighting and Sign Panel (201.170), and Storm Water Mitigation (201.235). The project is also eligible for Federal-aid funding.

Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

## **1.2 PURPOSE AND NEED**

### **1.2.1 Purpose**

The purpose of this project is to restore this segment of Interstate 15 (I-15) to a state of good repair so that the roadway is in a condition that requires minimal maintenance, extend the life of the facility, improve the ride quality, and upgrade other highway appurtenances and facilities that are worn out or functionally obsolete.

### **1.2.2 Need**

Due to heavy and continuous traffic, the existing pavement is showing distress and deterioration. There are areas of excessive cracking exhibiting poor ride quality that need repair. Other deficiencies in need of being addressed include non-standard guardrail, lighting rehabilitation, culvert sleeve-lining, sign panel replacement, and installment of rock slope protection (RSP).

### **1.2.3 Independent Utility and Logical Termini**

The proposed project has independent utility and logical termini, as the project is self-contained and is not in need of further repair beyond the project limits at present (see Figure 1-1).

## **1.3 PROJECT DESCRIPTION**

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts.

I-15 is a major interstate goods-movement commuter corridor, which links to the Los Angeles Metropolitan area. It is a primary link between major economic centers and geographic regions. Weekend and holiday recreational traffic volumes on the route are exceptionally high since it serves as a connection to the city of Las Vegas and to the Colorado River area. I-15 is part of the Freeway system, National Highway System, Strategic Highway Network, has a truck network designation of National Network, and is part of the Interregional Road System.

Within the project limits, I-15 traverses rural and undeveloped areas within San Bernardino County with the following land uses, Resource/Land Management (RLM), Commercial (C), and Open Space (OS) within the project limits, while the surrounding area land uses are Single Residential (SR), Low Density Residential (LDR), Limited Industrial (LI), Community Industrial (IC), Resource Conservation (RC), Commercial (C), Highway Commercial (CH), and Regional Industrial (IR). The existing lanes are 12 feet wide and outside shoulders are 10 feet wide throughout the segment.

In the County's General Plan, I-15 is designated as a 4-lane freeway. The project covers a distance of approximately 50.604 lane miles. Within the limits of the proposed project, I-15 is a four-lane, north-south oriented freeway. It has two mixed flow lanes in each direction and an unpaved median.

## **1.4 PROJECT ALTERNATIVES**

One No-build and one Build Alternative has been studied for the project.

### **1.4.1 No Build Alternative**

The "No Build" Alternative is considered the base case scenario and proposes that no improvements be implemented on the mainline facility. Without the project, the existing deficiencies would not be corrected, conditions would continue to worsen, and the mainline would continue to deteriorate and result in the operational breakdown of this area along I-15.

### **1.4.2 Build Alternative**

The proposed project improvements include a multi-asset project with minor pavement rehabilitation improvements on I-15. The limits of work for this project are along I-15 between PM R121.0 and PM 144.0 in San Bernardino County. The improvements include:

- 0.15' mill and 0.25' overlay
- 2' shoulder backing on each side of the roadway on the mainline, shoulders, and on/off ramps, from PM R124.4 to PM R137.2

- upgrading all guardrail systems and crash cushion to current standards
- replacing AC dikes
- restriping (all lanes)
- sleeve-lining 6 culverts at PM 142.97, R133.27, R130.31, R133.94, R126.11, and R122.23
- RSP and Midwest Guardrail System (MGS) barrier and Rock Slope Protection installation at PM R137.67 (northbound direction)
- replace 18 sign panels (Type 11)
- rehabilitating 12 freeway lighting Type 10, 15, 30, and 31
- removing vegetation

All work would be performed within existing Caltrans right of way (ROW). However, Temporary Construction Easements (TCE) would be required for each culvert and guardrail location to facilitate the upgrades.

Bicycle and Pedestrian traffic during construction would be included where applicable. The project would be staged to minimize impacts to existing traffic. Detailed staging plans and traffic handling plans would be developed in the design phase.

The capital cost for support, construction, and right of way for this alternative is estimated at \$59,292,100. The estimated number of working days is 164. 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.

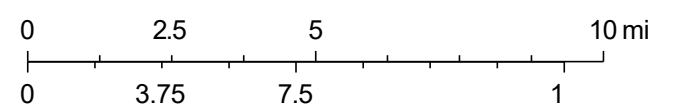
## **1.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION**

No additional alternatives were considered for the proposed project.



 Build Alternative

1:258,375



### Figure 1-1 Project Location Map

SBD 15 Pavement Rehab  
EA 08-1L150 / PN 0819000152

Source: Esri, NASA, NGA, USGS, California State Parks, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

## 1.6 PERMITS AND APPROVALS NEEDED

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

**Table 1-1: Permits and Approvals**

Agency	PLAC	Status
United States Fish and Wildlife Service (USFWS)	Section 7 Consultation for Threatened and Endangered Species	Caltrans has requested concurrence that the Project is consistent with the Desert Tortoise Programmatic Biological Opinion (PBO) between USFWS and Caltrans, dated Feb. 17, 2021.
California Department of Fish and Wildlife	1602 Agreement for Streambed Alteration	Applications for 1602 permit agreement expected after final environmental document (FED) approval.
California Regional Water Quality Control Board (RWQCB)	WDR (Waste Discharge Requirement)	Application for the WDR permit expected after FED approval.
California Transportation Commission	CTC vote to approve funds.	Following the approval of the FED, the California Transportation Commission will be required to vote to approve funding for the project.

# **Chapter 2 California Environmental Quality Act (CEQA) Evaluation**

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## **2.1 DETERMINING SIGNIFICANCE UNDER CEQA**

The Department is the lead agency under CEQA. CEQA requires the Department to identify each “significant effect on the environment” resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of “mandatory findings of significance,” which also require the preparation of an EIR. This chapter discusses the effects of this project and CEQA significance.

## **2.2 CEQA ENVIRONMENTAL CHECKLIST**

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

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below. The annotations to this checklist are summaries of information in order to provide the reader with the rationale for significance determinations.

## 2.2.1 AESTHETICS

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Aesthetics

#### a) **No Impact**

According to the Visual Impact Assessment (VIA) Questionnaire, completed on June 19, 2023, the proposed project would have no negligible visual changes to the Environment. In addition, the project would not have a substantial adverse impact on a scenic vista.

#### b) **No Impact**

This portion of the I-15 is not officially designated as a state scenic highway and there are no designated scenic highways within the project limits; therefore, the project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The proposed project area is classified as Resource/Land Management (RLM), Commercial (C), and Open Space (OS), while the surrounding areas are Single Residential (SR), Low Density Residential (LDR), Limited Industrial (LI), Community Industrial (IC), Resource Conservation (RC), Commercial (C), Highway Commercial (CH), and Regional Industrial (IR) areas. As such, there would be no impact.

#### c) **No Impact**

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 project would also not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

## 2.2.2 AGRICULTURE AND FOREST RESOURCES

<p>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 Dept. 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.</p>				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Agriculture and Forest Resources

#### a) No Impact

According to the California Department of Conservation Map, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use within the project limits. There is also no Forest Land within the project limits.

#### b) No Impact

The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract.



**c) No Impact**

The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

**d) No Impact**

The project would not result in the loss of forest land or conversion of forest land to non-forest use.

**e) No Impact**

The project would not 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.

### 2.2.3 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### CEQA Significance Determinations for Air Quality

##### a) No Impact

The project is located in the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with SCAG, local governments, and the private sector. The AQMP provides the blueprint for meeting state and federal ambient air quality standards. This project is not a capacity-increasing transportation project and would not conflict with or obstruct implementation of the applicable air quality plan.

##### b) Less Than Significant Impact

The project would have no impact on traffic volumes and would generate a less than significant amount of pollutants during construction due to the duration of project construction. The proposed project is included in SCAG's most recent RTP and RTIP both of which were found to be conforming. Therefore, the proposed project would not conflict with the AQMP, violate any air quality standard, result in a cumulatively considerable net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant. No mitigation is required.

##### c) No Impact

The project would not expose sensitive receptors to substantial pollutant concentrations, as there are no schools, residences, playgrounds, or medical facilities within the immediate vicinity of the project.

##### d) No Impact

The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

## 2.2.4 BIOLOGICAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Biological Resources

#### a) Less Than Significant with Mitigation Incorporated

The project would have a less than significant effect with mitigation incorporated, 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.

This includes Federal and State-listed species desert tortoise, least Bell's vireo, and Mohave tui chub, Federal-listed species southwestern willow flycatcher, monarch butterfly, and golden eagle, and State-candidate species mountain lion.

#### Avoidance and Minimization, and/or Mitigation Measures:

- **BIO-General 6:** Species Avoidance: If during project activities a bighorn sheep, desert tortoise, or special status plant species is discovered within the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, and the Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be required prior to restarting activities.
- **BIO-General 8:** Biological Monitor: A qualified biologist must monitor project activities to ensure that measures intended to protect desert tortoise, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.
- **BIO-Reptile 1:** Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for special status reptile species desert tortoise and Mojave fringe-toed lizard before operating equipment at any time.
- **BIO-Reptile 6:** Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work locations (PM R122.23, R126.11, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer as shown on the plans and/or described in the specifications, to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.
- **BIO-Reptile 8:** Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand.
- **BIO-DT 1:** Agency Notification & Reporting Requirements: Any worker who observes 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. The Caltrans biologist must then notify USFWS and CDFW. Veterinary treatment and/or final deposition must follow USFWS and CDFW approval.
- **BIO-DT 2:** Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in the PA&ED phase to determine if desert tortoise is active in the project area. Measures will be needed to avoid and minimize any impact on desert tortoise and Desert Tortoise Designated Critical Habitat. If the presence of desert tortoise is confirmed, additional measures may be needed.
- **BIO-DT 6:** Biological Monitoring: An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for desert tortoise and Mojave fringe-toed lizard.

#### **b) No Impact**

There are significant areas of habitat within the BSA suitable for many of the species listed on the Federal and State threatened and endangered species lists as potentially present in the project area, as well as species on the CNPS and BLM lists.

These areas contain significant stands of native vegetation, dominated by desert wash and desert scrub species. However, the project would have no impact, 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.

### **c) Less Than Significant with Mitigation Incorporated**

The project would have a less than significant effect with mitigation incorporated, 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.

A total of seven drainages that cross I-15 in the project area were identified in the field as potentially impacted by the proposed project. The seven drainages identified in the field are classified as ephemeral, which generally flow for less than three months per year and would therefore be classified as non-relatively permanent waterways (RPWs) by the USACE. The seven ephemeral drainages within the project area are Waters of the State (WOS) under the jurisdiction of CDFW and the Lahontan RWQCB. A CFGC Section 1602 LSAA Permit will be required. In addition, under Section 401 of the CWA, the Project will need certification from RWQCB to ensure the discharge of dredged or fill material into WOS does not violate State water quality standards. The remaining minor drainages were determined not to be WOS as they have no significant nexus to a Traditional Navigable Waterway (TNW). No National Wetland Inventory (NWI) wetlands are located within the limits of the Project area. The project location is within the Soda Lake watershed. The project is located within the Lahontan Regional Water Quality Control Board jurisdiction.

Proposed project impacts to jurisdictional areas would be mitigated and coordinated with RWQCB and CDFW during the permitting process. Aquatic resources present anticipate the need for a RWQCB WDR, and a California Fish and Game Code 1602 permit. These results are subject to modification following a formal jurisdictional delineation and agency verification, as they apply to the streambed modifications (RSP) that are generating the need for the 401 and 1602 permits.

Compensatory mitigation for permanent impacts is potentially anticipated, with resource agency approval, through on-site restoration activities, permitted-responsible mitigation, suitable mitigation/conservation bank credits, suitable in-lieu fee program credits, and/or other mitigation acceptable to the resource agencies involved as applicable. A pre-application consultation with CDFW and RWQCB to discuss potential impacts and appropriate mitigation requirements is recommended. Anticipated mitigation requirements include permanent protection and restoration of compensatory habitat within the watershed associated with the project area. Compensatory mitigation measures intended to satisfy CDFW requirements for anticipated project impacts to WOS would be required.

#### Avoidance, Minimization, and/or Mitigation Measures

- **BIO-Waters 1:** Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.
- **BIO-Waters 2:** On-site habitat restoration for temporary impacts for native communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.
- **BIO-Waters 3:** Off-site mitigation banking at a ratio of 3:1 for permanent impacts to native communities.

- **BIO-Waters 4:** Compensatory Mitigation: Any additional permanent impacts to jurisdiction areas will be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.

**d) No Impact**

The project would have no impact, interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

**e) No Impact**

This project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

**f) No Impact**

The project would have no impact and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

## 2.2.5 CULTURAL RESOURCES

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Cultural Resources

#### a) No Impact

A Historic Property Survey Report for the proposed project was approved on December 6, 2023. The project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.

Caltrans, pursuant to Section 106 PA Stipulation IX.A, has determined a Finding of No Historic Properties Affected is appropriate for this undertaking because there are no historic properties present within the APE. There are also No Historical Resources present, as outlined in CEQA Guidelines 15064.5(a).

#### b) No Impact

The project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

#### c) No Impact

The project is not anticipated to disturb any human remains, including those interred outside of dedicated cemeteries.

#### Avoidance, Minimization, and/or Mitigation Measures:

- **CUL 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.
- **CUL 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; Gary Jones, Acting Senior DNAC: (909) 261-8157. Further provisions of PRC 5097.98 are to be followed as applicable.

**2.2.6 ENERGY**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Energy**

**a) No Impact**

The project is not anticipated to result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

**b) No Impact**

The project would also not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.



## 2.2.7 GEOLOGY AND SOILS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Significance Determinations for Geology and Soils

#### A i, ii, iii, iv) No Impact

The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. According to the California Department of Conservation Earthquake Zones of Required Investigation Maps, the proposed project is not located on an Alquist-Priolo Earthquake Fault Zone. The nearest identified fault is Manix Fault which is approximately 5 miles southwest of PM 110.4.

**b) No Impact**

The project would not result in substantial soil erosion or the loss of topsoil.

**c) No Impact**

The project is not located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

**d) No Impact**

The project is not located on expansive soil, creating substantial direct or indirect risks to life or property topsoil.

**e) No Impact**

The project does not 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 wastewater.

**f) No Impact**

The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

## 2.2.8 GREENHOUSE GAS EMISSIONS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Greenhouse Gas Emissions

#### a) Less Than Significant Impact

The project is not a capacity-increasing project. Therefore, the project would not generate operational greenhouse gas emissions, either directly or indirectly, increase the number of travel lanes and/or increase traffic volumes. However, the project would generate a less than significant amount of pollutants during construction due to the duration of project construction. The GHG estimates for construction emissions on-road/offsite operations have been deduced as Carbon Dioxide Equivalent (CO<sub>2</sub>e) in 23,443.05 lbs./day and 1922 Tons during the 164 days of construction activity.

#### b) No Impact

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

#### Avoidance, Minimization, and/or Mitigation Measures:

- **GHG-1:** Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- **GHG-2:** Maximize use of recycled materials.
- **GHG-3:** Recycle existing project features on-site.
- **GHG-4:** Use recycled water or reduce consumption of potable water for construction.
- **GHG-5:** Use Partial Depth Recycling as the construction method to rehabilitate the pavement.

## 2.2.9 HAZARDS AND HAZARDOUS MATERIALS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Hazards and Hazardous Materials

#### a) No Impact

The project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

#### b) No Impact

The project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

**c) No Impact**

The project would also not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

**d) No Impact**

The project would not 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, create a significant hazard to the public or the environment.

**e) No Impact**

The project is also not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport or would result in a safety hazard or excessive noise for people residing or working in the project area.

**f) No Impact**

The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

**g) No Impact**

The project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Avoidance, Minimization, and/or Mitigation Measures:

- **HAZ-1:** Include 84-9.03B Non-Hazardous Striping/ Marker.

## 2.2.10 HYDROLOGY AND WATER QUALITY

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Hydrology and Water Quality

#### a) No Impact

The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

#### b) No Impact

The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

**C i, ii, iii, iv) No Impact**

The project would also not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows.

**d) No Impact**

The project is not within a flood hazard, tsunami, or seiche zones, or does it risk release of pollutants due to project inundation.

**e) No Impact**

The project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Avoidance, Minimization, and/or Mitigation Measures:

- **SWQ-1:** Order No. 2022-0033-DWQ, NPDES No. CAS000003, NPDES Statewide Storm Water Permit for the State of California, Department of Transportation (Caltrans Permit) issued by the California State Water Resources Control Board (SWRCB). This permit regulates stormwater and non-stormwater discharges from Caltrans properties and facilities, and discharges associated with operations and maintenance of the statewide State highway system.
- **SWQ-2:** Caltrans Statewide Stormwater Management Plan (SWMP). The SWMP is the document that describes how Caltrans plans to implement the “Caltrans Permit” requirements.
- **SWQ-3:** During phases “0” and “1”, a Storm Water Data Report (SWDR) will be developed for each phase. The SWDR is a planning document prepared by the Project Engineer that documents stormwater design information associated with the project. It is used to document stormwater-related decisions to assure compliance throughout all phases of project delivery.
- **SWQ-4:** During the construction phase, a Water Pollution Control Document (WPCD) will be developed by the contractor. The WPCD is a project-specific plan that includes a site map(s), identifies construction and contractor activities that could cause pollutants in stormwater, and a description of measures or practices to control these pollutants.

**2.2.11 LAND USE AND PLANNING**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Land Use and Planning**

**a) No Impact**

The project would not physically divide the established community of Baker, as the project location is already disturbed and located on the Interstate to the south of the community. Therefore, the project would have no impacts.

**b) No Impact**

According to the San Bernardino County Land Use Plan, Land Use Zoning Districts Map, the proposed project area is classified as Resource/Land Management (RLM), Commercial (C), and Open Space (OS), while the surrounding areas are Single Residential (SR), Low Density Residential (LDR), Limited Industrial (LI), Community Industrial (IC), Resource Conservation (RC), Commercial (C), Highway Commercial (CH), and Regional Industrial (IR) areas. The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.



**2.2.12 MINERAL RESOURCES**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Mineral Resources**

**a) No Impact**

According to the San Bernardino County General Plan, Mineral Resources, the proposed project is located within the North Desert Region; however, there are no mineral resources classified as “Identified Significant Resources” or as “Potential Significant Resources” within the project limits. Therefore, the project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

**b) No Impact**

The project would also not 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.

**2.2.13 NOISE**

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Noise**

**a) No Impact**

The project would not expose people to or generate noise levels in excess of standards established in a general plan or noise ordinance, or applicable standards of other agencies. The project is a Type III project under 23 CFR 772.7; 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 ground-borne noise or vibration would be limited to the construction period and would be short in duration. Because there are no noise- or vibration- sensitive uses located in the immediate project vicinity and because the proposed project would comply with Caltrans' Standard Specifications, no impacts would occur.

**c) No Impact**

The project would not permanently increase ambient noise levels in the project vicinity and is not located within an airport land use plan, or in the vicinity of a private airstrip. Also, the project would not expose people to or generate excessive noise levels. Therefore, no noise impacts related to air traffic would occur.

**2.2.14 POPULATION AND HOUSING**

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

**CEQA Significance Determinations for Population and Housing**

**a) No Impact**

The project would not induce substantial unplanned population growth in an area, either directly or indirectly, as work is occurring on the existing pavement, and would not induce growth within the project limits.

**b) No Impact**

The project would also not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

## 2.2.15 PUBLIC SERVICES

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Public Services

#### a) No Impact

The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services, to include fire and police protection, schools, parks, or other public facilities.

- Response to Fire protection and Police protection: No Impact. The San Bernardino County Fire Station 53, in the community of Baker is located to the north of the project area. 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.
- Response to Police Protection: No Impact. The nearest San Bernardino County Sherriff's Department and California Highway Patrol is located outside of project limits, in the city of Barstow. 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.
- Response to Schools: No Impact. Baker Valley USD is located 0.5 miles to the north of I-15 on State Route 127. The proposed project would not result in accessibility problems to existing schools as the I-15 Business Route (Baker Blvd) is accessible through the community of Baker and travels parallel to I-15 and perpendicular to SR-127, and with the appropriate traffic detours, as needed, is not expected to result in any other impacts on school services.

- Response to Parks: No Impact. There are no public parks near the project vicinity; therefore, the proposed project would have no impacts.
- Response to Other Public Facilities: No Impact. There are no other public facilities in the immediate project area. Therefore, there would be no impact on public facilities as a result of construction or operation of the project.

**2.2.16 RECREATION**

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Recreation**

**a) No Impact**

The project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

**b) No Impact**

The project also does not include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

**2.2.17 TRANSPORTATION**

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

**CEQA Significance Determinations for Transportation**

**a) No Impact**

The Caltrans District 8 State Highway System Bicycle Access Map indicates that bicyclists can ride on the shoulder of this segment of I-15. “Share the Road” and bicycle signs would be posted at the construction areas. 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 project would also not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

**c) No Impact**

The project would not substantially increase hazards due to a geometric design feature or incompatible uses.

**d) No Impact**

With appropriate traffic detours, as needed, the project is not anticipated to result in any inadequate emergency access.

**2.2.18 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:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Tribal Cultural Resources**

**a) No Impact**

The project is not 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).

**b) No Impact**

The project would not result in 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.

A request for a Sacred Lands File search was sent to the Native American Heritage Commission (NAHC) and a response was received on April 21, 2023. The SLF search results were positive, based on the original post miles planned for the project. A previous Caltrans project (1C720) identified the cultural resource associated with the SLF results and the CCRD confirmed locational information for the site. However, due to a subsequent adjustment to the project post miles for the current project, that location is now outside of 1L150's Area of Potential Effect.

In consultation with the District 8 DNAC it was determined that consultation letters would be sent to Yuhaaviatam of San Manuel Nation and the Twenty-Nine Palms Band of Mission Indians. The initial consultation letter was sent to Jessica Mauck, Director of Cultural Resources, Yuhaaviatam of San Manuel Nation for Section 106, and AB 52. The letter was sent on March 23, 2023. A response was received from Ryan Nordness, Cultural Resource Analyst for Yuhaaviatam of San Manuel Nation,



responded, via email, on April 6, 2023, that he did not think that the project would be of much concern, despite it being in a very culturally sensitive space. The email then requested additional information regarding the shoulder backing and lighting rehabilitation. On November 13, 2023, an email was sent to Dr. Alexandra McCleary, Cultural Lands Manager for Yuhaaviatam of San Manuel Nation, which contained the information requested by Mr. Nordness. In addition, the email stated that the sensitive area has been completely removed from the project and no work would be occurring within or adjacent to that area. No response has been received to date.

On March 23, 2023, an initial consultation letter was sent to Sarah Bliss, Director Tribal Programs EPA, Twenty-Nine Palms Band of Mission Indians, for Section 106 and AB 52. A second consultation letter was sent to Sarah O'Brien, Tribal Archivist, Twenty-Nine Palms Band of Mission Indians on May 5, 2023. On June 19, 2023, a third consultation letter was sent to Ms. O'Brien. No response has been received to date.

No additional information about cultural resources were received during Native American consultation.

## 2.2.19 UTILITIES AND SERVICE SYSTEMS

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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??	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### CEQA Significance Determinations for Utilities and Service Systems

#### a) No Impact

The project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

#### b) No Impact

The project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years, as applicable.

#### c) No Impact

The project would not result in a determination by the wastewater treatment provider which serves or may serve the project, that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

**d) No Impact**

The project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.

**e) No Impact**

The project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

**2.2.20 WILDFIRE**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Wildfire**

**a) No Impact**

The project would not substantially impair and adopted emergency response plan or evacuation plan. According to the California State Fire Marshal, Local Responsibility Area (LRA) Fire Hazard Severity Zones (FHSZ) Map, the project is not located in a fire severity zone.

**b) No Impact**

The project would also not, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.

**c) No Impact**

The project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

**d) No Impact**

The project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

**2.2.21 MANDATORY FINDINGS OF SIGNIFICANCE**

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Mandatory Findings of Significance**

**a) Less Than Significant with Mitigation Incorporated**

The project does not 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. Biological Resources' avoidance and/or minimization measure would be implemented to ensure the proposed project would result in less-than-significant impact with mitigation incorporated.

**b) No Impact**

The project does not have impacts that are individually limited, but cumulatively considerable. 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 impacts.

**c) No Impact**

The project does not have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

## 2.3 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<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF<sub>6</sub>), and various hydrofluorocarbons (HFCs). CO<sub>2</sub> 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<sub>2</sub> 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<sub>2</sub>.

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 would include a discussion of both in the context of this transportation project.

### Regulatory Setting

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

### 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 in a rural area within San Bernardino County along I-15 from PM R121.0 to PM 144.0, with a primarily natural-resources based agricultural and tourism economy. Interstate 15 (I-15) is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is Interstate 40 (I-40), to the south. Traffic counts are low, Connect SoCal 2024 Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) guides transportation development in San Bernardino County. The San Bernardino County Greenhouse Gas Reduction Plan Update addresses GHGs in the project area.

## **GHG Inventories**

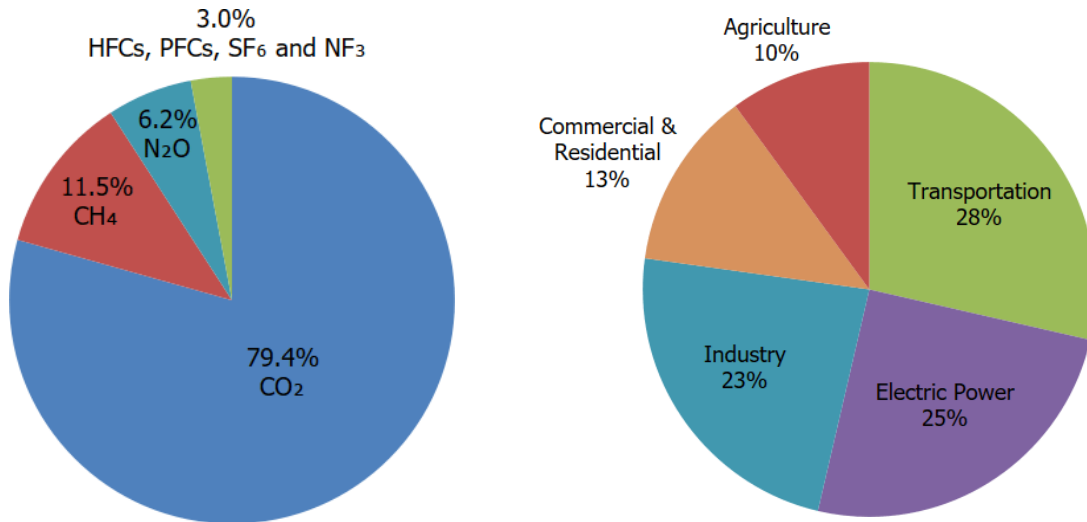
A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission 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<sub>2</sub>, 11.5% were CH<sub>4</sub>, and 6.2% were N<sub>2</sub>O; the balance consisted of fluorinated gases. From 1990 to 2021, CO<sub>2</sub> 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 (Figure 2-1). Transportation fossil fuel combustion accounted for 92% of all CO<sub>2</sub> 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 2-1. U.S. 2021 Greenhouse Gas Emissions**

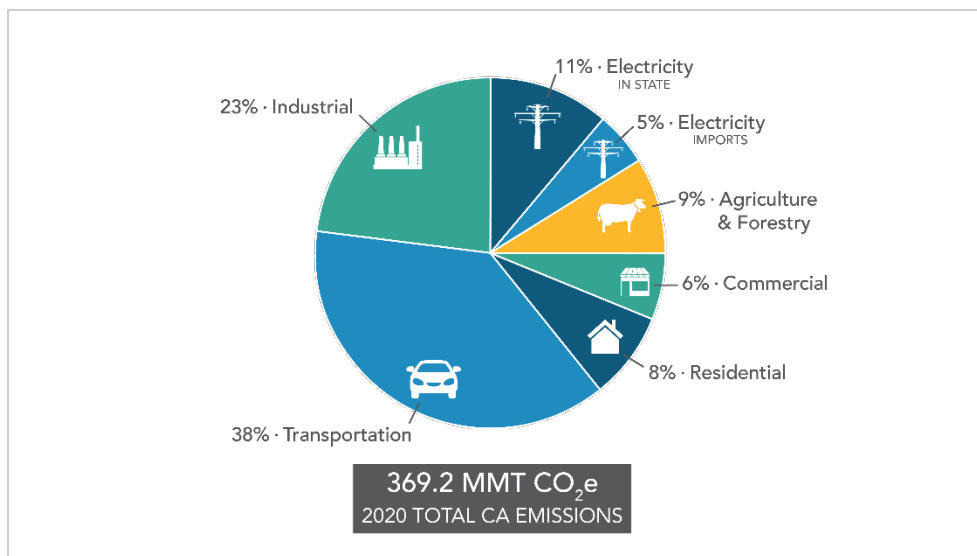


(Source: U.S. EPA2023b)

**State GHG Inventory**

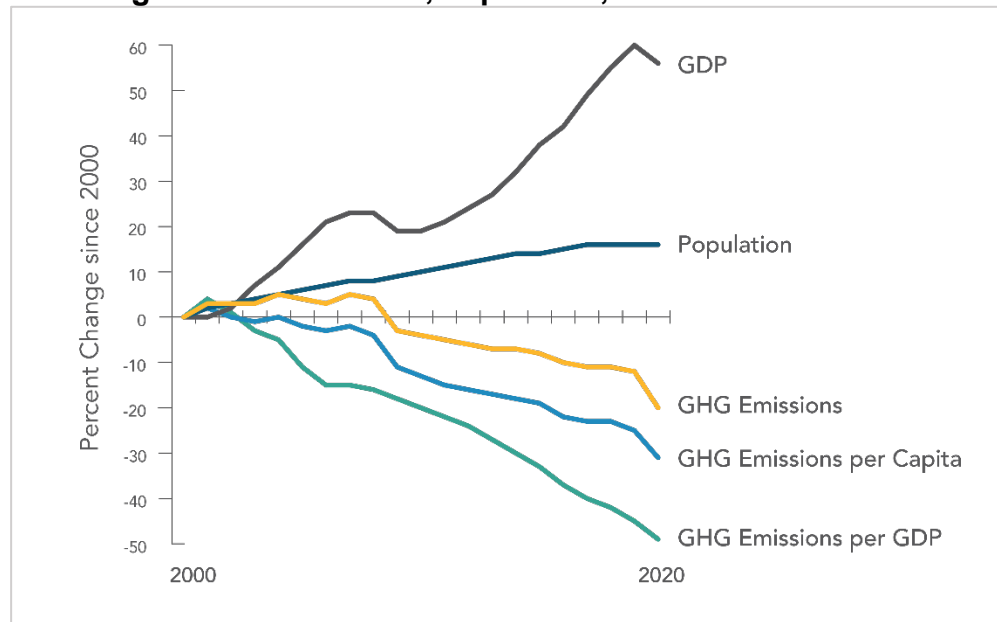
ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state’s progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2020 despite growth in population and state economic output (Figures 2-2, 2-3) (ARB 2022a).

**Figure 2-2. California 2020 Greenhouse Gas Emissions by Economic Sector**



(Source: ARB2022a)

**Figure 2-3. Change in California GDP, Population, and GHG Emissions since 2000**



(Source: ARB2022a)

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 RTP/SCS for SCAG. The regional reduction target for SCAG is 19 percent by 2035 (ARB 2021).

**Table 2-1. Regional and Local Greenhouse Gas Reduction Plans**

Plan Title	GHG Reduction Policies or Strategies
<p><i>2024 Regional Transportation Plan/ Sustainable Communities Strategy (2024 RTP/SCS)</i></p>	<ul style="list-style-type: none"> <li>• Reduce hazardous air pollutants and greenhouse gas emissions and improve air quality throughout the region through planning and implementation efforts</li> <li>• Support investments that reduce hazardous air pollutants and greenhouse gas emissions</li> <li>• Reduce the exposure and impacts of emissions and pollutants and promote local and regional efforts that improve air quality for vulnerable populations, including but not limited to Priority Equity Communities and the AB 617 communities</li> <li>• Accelerate the deployment of a zero- emission transportation system and use zero-emission technology to offer short- term benefits where zero-emissions solutions are not yet feasible or commercially viable</li> <li>• Promote equitable use of and access to clean transportation technologies so that they may all benefit from them</li> </ul>
<p><i>San Bernardino Countywide Plan Policy NR-1.7 &amp; 1.8 (Oct 2020)</i></p>	<ul style="list-style-type: none"> <li>• Policy NR-1.7 Greenhouse gas reduction targets. We strive to meet the 2040 and 2050 greenhouse gas emission reduction targets in accordance with state law.</li> <li>• Policy NR-1.8 Construction and Operations. We invest in County facilities and fleet vehicles to improve energy efficiency and reduce emissions. We encourage County contractors and other builders and developers to use low- emission construction vehicles and equipment to improve air quality and reduce emissions</li> </ul>
<p><i>San Bernardino County Regional Greenhouse Gas Reduction Plan (March 2021)</i></p>	<ul style="list-style-type: none"> <li>• OnRoad-1: Alternative Fueled Transit Fleets</li> <li>• OnRoad-2: Encourage Use of Mass Transit</li> <li>• OnRoad-3: Transportation Demand Management and Synchronization</li> <li>• OnRoad-4: Expand Bike Routes</li> <li>• OnRoad-5: Community Fleet Electrification</li> <li>• OffRoad-2: Idling Ordinance</li> </ul>

## 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<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs. CO<sub>2</sub> emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH<sub>4</sub> and N<sub>2</sub>O. 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<sub>2</sub> is the most important GHG, so amounts of other gases are expressed relative to CO<sub>2</sub>, using a metric called “carbon dioxide equivalent”, or CO<sub>2</sub>e. The global warming potential of CO<sub>2</sub> is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO<sub>2</sub>.)

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 restore between PM R121.0 and PM 144.0 on Interstate 15 (I-15), in San Bernardino County, to a state of good repair so that the roadway is in a condition that requires minimal maintenance, extend the life of the facility, improve the ride quality, and upgrade other highway appurtenances and facilities that are worn out or functionally obsolete, 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 I-15, 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.

The Caltrans Construction Emissions Tool (Cal-CET) was used to estimate construction and Greenhouse gas (GHG) emissions. The GHG estimates for construction emissions on-road/offsite operations have been deduced as Carbon Dioxide Equivalent of CO<sub>2</sub>e. The project is anticipated to generate 1922 Tons CO<sub>2</sub>e during the 164 days of construction activity.

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
- **GHG2:** Maximize use of recycled materials
- **GHG3:** Recycle existing project features on-site
- **GHG4:** Use recycled water or reduce consumption of potable water for construction
- **GHG 5:** Use Partial Depth Recycling as the construction method to rehabilitate the pavement

## **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***

The proposed project area lies within the Southern Mojave Watershed and is located outside of a floodplain. The National Flood Hazard Layer FIRMette Maps 06071C4625H and 06071C4650H identifies the area as not encroaching upon any FEMA-defined floodplain. The Caltrans Climate Change Vulnerability Assessment mapping tool for District 8 assesses and maps changes in the 100-year storm precipitation depth in the district. According to this assessment, 100-year storm precipitation depth in the project area is expected to increase by 1.2-1.6% by 2055 and 1.2-1.5% by 2085.

Due to the location of the project and the change in percentage of precipitation, the effects of climate change on precipitation and flooding is not likely to adversely affect the project.

### ***Wildfire***

According to the CALfire Fire Hazard Severity Zones (FHSZ) Map, the project is not located in a fire hazard severity zone. The Caltrans Climate Change Vulnerability Assessment mapping tool does not identify the project area to have a level of wildfire exposure for the years of 2040 to 2099. In addition, Caltrans 2023 Standard Specification 7-1.02M(2) mandates fire protection procedures during construction, including a fire prevention plan.

### ***Temperature***

Temperature affects choice of pavement materials, design of foundations and retaining walls in terms of ground moisture conditions and need for expansion/contraction of bridge joints. During operations and maintenance, higher temperatures would affect safety of employees working outdoors, survival of landscaping and vegetation in right-of-way, and pavement condition, which could require more frequent maintenance.

The project site is located within the “Desert” climate region. The desert climate is known to have high 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 by 3.4 to 3.9 degrees Fahrenheit. The average seven-day maximum temperature in 2055 is anticipated to increase by 5.77 to 5.85 degrees Fahrenheit. In 2085, the minimum temperature change is anticipated to increase by 6.9 to 7.5 degrees Fahrenheit and the average seven-day maximum temperature change is anticipated to increase by 8.8 to 9.0 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 Reclamation with Hot Mix Asphalt. As a result, the pavement would be stronger. The project is resilient to the temperature changes in the project area and have been assessed and accounted for in project design pavement materials and material design life.

# Chapter 3      Comments and Coordination

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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.

## **3.1 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.

### **3.1.1 AB 52 Consultation**

A request was made to the Native American Heritage Commission (NAHC) for a Sacred Land File (SLF) search and a response was received on April 21, 2023. The SLF search results were positive, based on the original post miles planned for the project. A previous Caltrans project (1C720) identified the cultural resource associated with the SLF results and the CCRD confirmed locational information for the site. However, due to a subsequent adjustment to the project post miles for the current project, that location is now outside of 1L150's Area of Potential Effect.

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

- The initial consultation letter was sent to Jessica Mauck, Director of Cultural Resources, Yuhaaviatam of San Manuel Nation for Section 106, and AB 52. The letter was sent on March 23, 2023. A response was received from Ryan Nordness, Cultural Resource Analyst for Yuhaaviatam of San Manuel Nation, responded, via email, on April 6, 2023, that he did not think that the project would be of much concern, despite it being in a very culturally sensitive space. The email then requested additional information regarding the shoulder backing and lighting rehabilitation. On November 13, 2023, an email was sent to Dr. Alexandra McCleary, Cultural Lands Manager for Yuhaaviatam of San Manuel Nation, which contained the information requested by Mr. Nordness. In addition, the email stated that the sensitive area has been completely removed from the project and no work would be occurring within or adjacent to that area. No response has been received to date.
- On March 23, 2023, an initial consultation letter was sent to Sarah Bliss, Director Tribal Programs EPA, Twenty-Nine Palms Band of Mission Indians, for Section 106 and AB 52. A second consultation letter was sent to Sarah O'Brien, Tribal Archivist, Twenty-Nine Palms Band of Mission Indians on May 5, 2023. On June 19, 2023, a third consultation letter was sent to Ms. O'Brien. No response has been received to date.

No additional information about cultural resources were received during Native American consultation.

### **3.1.2 California Department of Fish and Wildlife (CDFW), California Native Plant Society (CNPS)**

A list of State-listed species for the project area was obtained from the CDFW California Natural Diversity Database (CNDDDB), on April 25, 2023, updated November 29, 2023. A CNPS list of rare and endangered plants in the project area was obtained on November 6, 2023.

### **3.1.3 US Fish and Wildlife Service (USFWS), National Oceanographic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS)**

An official USFWS species list (generated through IPaC) was requested and received on April 25, 2023; updated November 29, 2023. The project is not within NOAA or NMFS jurisdiction. It will therefore have “No Effect” on any NOAA/NMFS species or Essential Fish Habitat.

## **Chapter 4      List of Preparers**

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### **California Department of Transportation**

Amr Abuelhassan, Project Manager

Jared Anderson, Landscape Architect (Visual)

Donald Cheng, Transportation Engineer (Environmental Engineering - Hazardous Waste)

Alan Espejo, Transportation Engineer (Environmental Engineering - Noise)

Kourtney Graves, Environmental Scientist – Generalist (Initial Study)

Fatima Islam, Transportation Engineer (Environmental Engineering - Air Quality)

Bahram Karimi, Associate Environmental Planner (Paleontology)

Jin Seob Kim, Project Engineer (Transportation Engineering)

Ronn Knox, Associate Environmental Planner (Biology)

Malisa Lieng, Senior Environmental Planner – Generalist (Initial Study)

Steven Magallanes, District Landscape Architect (Visual)

Olufemi Odufalu, Senior Transportation Engineer (Environmental Engineering)

Hung Pham, Project Engineer (Transportation Engineering)

Danny Pheng, Senior Transportation Engineer (Acting)

Mary K. Smith, Associate Environmental Planner (Cultural/Architectural History)

Victoria Stosel, Associate Environmental Planner (Cultural/Archaeology)

Tri Tran, Transportation Engineer (Storm Water Quality)

Joseph William, District Hydraulics Engineer (Hydraulics/Floodplain)

## Chapter 5 Distribution List

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An electronic copy of this Initial Study with Proposed Mitigated Negative Declaration (IS/MND) and a Notice of Availability (NOA) was distributed to federal, state, regional, local agencies, utilities and service providers, as well as interested groups, organizations and individuals, and elected officials.

California Department of Fish and Wildlife  
Inland Region  
ATTN: Andrew Briggs  
3602 Inland Empire Blvd, Suite C-220  
Ontario, CA 91764

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

California Highway Patrol  
Attn: Administrator  
300 E. Mountain View St.  
Barstow, CA 92311-2887

U.S. Fish and Wildlife Service  
Region 8  
2800 Cottage Way  
Sacramento, CA 95825

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

U.S. Army Corps of Engineers  
Attn: Veronica Li, Senior Project Manager  
Los Angeles District, Regulatory Division 915  
Wilshire Blvd., Suite 1109  
Los Angeles, CA 90017

Lahontan Regional Water Quality Control  
Board Victorville Branch Office  
15095 Amargosa Rd., Bldg. 2 – Ste. 210  
Victorville, CA 92394

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

San Bernardino County Flood Control  
825 E. Third St.  
San Bernardino, CA 92415-0835

San Bernardino County Planning Dept. 385  
N. Arrowhead Ave., First Floor  
San Bernardino, CA 92415

Bureau of Land Management  
California Desert District Office  
1201 Bird Center Drive  
Palm Springs, CA 92262

Planning & Environmental Coordinator  
BLM Barstow Field Office  
2601 Barstow Road  
Barstow, CA 92311

Baker Community Services District  
P.O. Box 590  
Baker, CA 92309-0590

U.S. Fish and Wildlife Service – Palm Springs  
777 East Tahquitz Canyon Way, Suite 208  
Palm Springs, CA 92262

Baker Valley USD  
P.O. Box 460  
Baker, CA 92309-0460

San Bernardino County Fire Station - 53  
72734 Baker Blvd.  
Baker, CA 92309

California State Assembly, District - 33  
9700 7<sup>th</sup> Ave., Suite 227  
Hesperia, CA 92345

Native American Heritage Commission  
1550 Harbor Blvd., Suite 100  
Sacramento, CA 95691

California Air Resources Board  
1001 I Street,  
Sacramento, CA 95812

California Transportation Commission  
1120 N St,  
Sacramento, CA 95814



# **Appendix A Title VI / Non-Discrimination Policy Statement**

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## California Department of Transportation

OFFICE OF THE DIRECTOR  
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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](mailto:Title.VI@dot.ca.gov).

A handwritten signature in black ink, appearing to read 'Tony Tavares'.

TONY TAVARES  
Director

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

# **Appendix B    Avoidance, Minimization and/or Mitigation Summary**

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Permit Type	Agency	Date Received	Expiration	Notes
1602	California Department of Fish and Wildlife			
WDR	California Regional Water Quality Control Board (RWQCB)			

Date of ECR: May 2024

## ENVIRONMENTAL COMMITMENTS RECORD

SBD 15 Pavement Rehab

08-SBD-15  
PM R121.0/144.0

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

EA 08-1L150  
PN 0819000152  
Generalist: Kourtney Graves  
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	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date/ Initials	Date/ Initials	YES	NO
<b><u>BIOLOGICAL RESOURCES</u></b>										
<b>BIO-Waters 1:</b> Habitat enhancement for temporary impacts, which entails exotic and/or invasive plant control immediately following the impact.	36	Natural Environment Study – Minimal Impacts (NES-MI) 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					
<b>BIO-Waters 2:</b> On-site habitat restoration for temporary impacts for native	36	NES-MI 12/12/23	Environmental Biological Studies/	Post-Construction	SSP:					

Date of ECR: May 2024

# ENVIRONMENTAL COMMITMENTS RECORD

SBD 15 Pavement Rehab

08-SBD-15  
PM R121.0/144.0

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

EA 08-1L150  
 PN 0819000152  
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 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	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date/ Initials	Date/ Initials	YES	NO
communities through revegetation and reseeding with vegetation native to the impacted area immediately following completion of maintenance activities, or, with written approval from CDFW, at the beginning of the next growing season after project completion.			Resident Engineer/ Contractor							
<b>BIO-Waters 3:</b> Off-site mitigation banking at a ratio of 3:1 for permanent impacts to native communities.	36	NES-MI 12/12/23	Environmental Biological Studies	Construction	SSP:					
<b>BIO-Waters 4:</b> Compensatory Mitigation: Any additional permanent impacts to jurisdiction areas would be mitigated with appropriate mitigation measures to be identified during the regulatory permitting process.	36	NES-MI 12/12/23	Environmental Biological Studies	Construction	SSP:					

Date of ECR: May 2024

# ENVIRONMENTAL COMMITMENTS RECORD

08-SBD-15  
PM R121.0/144.0

Project Phase:

- PA/ED(DED/FED)
- PS&E Submittal \_\_\_ %
- Construction

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PN 0819000152  
Generalist: Kourtney Graves  
ECL:TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/Phase	SSPor NSSP	Action(s) Taken to Implement Measure/if checked No, add Explanation	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date/Initials	Date/Initials	YES	NO
<b>BIO-General 1:</b> Equipment Staging, Storing, & Borrow Sites: All staging, storing, and borrow sites require the approval of the Caltrans biologist.	38	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					
<b>BIO-General 2:</b> Temporary Artificial Lighting Restrictions: To address potential impacts to fringed myotis, pallid bat, spotted bat, and other bat species, artificial lighting must be directed at the job site to minimize light spillover onto potential bat roosting areas, if project activities occur at night.	42	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					
<b>BIO-General 4:</b> Preconstruction Surveys: Preconstruction surveys for fringed myotis, pallid bat, spotted bat and other bat species must be conducted by a qualified mammal and bat biologist within the Project	42	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer	Pre-Construction	SSP:					

Date of ECR: May 2024

# ENVIRONMENTAL COMMITMENTS RECORD

SBD 15 Pavement Rehab

08-SBD-15  
PM R121.0/144.0

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

EA 08-1L150  
PN 0819000152  
Generalist: Kourtney Graves  
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	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date/ Initials	Date/ Initials	YES	NO
Impact Area within 14 days prior to project activities and following a bat roosting habitat suitability assessment. If one of the species listed above or other special status species is located, the Resident Engineer and Caltrans biologist must be contacted and additional measures and/or agency coordination may be required.										
<b>BIO-General 5:</b> Work Avoidance: To address impacts to fringed myotis, pallid bat, spotted bat, and other bat species, avoid project activities from April 1 to August 31 within 300 feet of all potential roosting structures in the project impact area.	42	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					
<b>BIO-General 6:</b> Species Avoidance: If during project activities a, bighorn sheep,	38	NES-MI 12/12/23	Environmental Biological Studies/	Construction	SSP:					

Date of ECR: May 2024

# ENVIRONMENTAL COMMITMENTS RECORD

08-SBD-15  
PM R121.0/144.0

- Project Phase:  
 PA/ED (DED/FED)  
 PS&E Submittal \_\_\_ %  
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							Date/Initials	Date/Initials	YES	NO
desert tortoise, or special status plant species is discovered within the project site, all construction activities must stop within 100 feet for bighorn sheep, 100 feet for birds, 50 feet for desert tortoise, and 20 feet for special status plants, and the Caltrans biologist and Resident Engineer must be notified. Coordination with CDFW and USFWS may be required prior to restarting activities.			Resident Engineer/ Contractor							



<p><b>BIO-General 7:</b> Worker Environmental Awareness Program (WEAP): A Qualified Biologist must present a biological resource information program/WEAP for desert bighorn sheep, mountain lion, fringed myotis, pallid bat, spotted bat, vermilion flycatcher, desert</p>	<p>38</p>	<p>NES-MI 12/12/23</p>	<p>Environmental Biological Studies/ Resident Engineer/ Contractor</p>	<p>Pre- Construction</p>	<p>SSP:</p>					
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tortoise, Mojave fringe-toed lizard, monarch butterfly, and special status plant species, prior to project activities to all personnel that would be present within the project limits for longer than 30 minutes at any given time.										
<b>BIO-General 8:</b> Biological Monitor: A qualified biologist must monitor project activities to ensure that measures intended to protect desert tortoise, Mojave fringe-toed lizard, and other special status species during construction are being implemented and documented.	38	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer	Construction	SSP:					

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<b>BIO-General 10:</b> Environmentally Sensitive Area (ESA) Fence Monitoring: Integrity inspections of Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must occur throughout the duration of the project prior to commencing project activities and after activities are completed. If during construction the fence fails, work must stop until it is repaired, and the qualified Biologist inspects (and clears) the job site.	46	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer	Construction	SSP:					

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<b>BIO-General 11:</b> Environmentally Sensitive Area (ESA) Fence Removal: All Environmentally Sensitive Area (ESA) fencing, desert tortoise temporary fencing, and rare or special status plant fencing and enclosures must be removed as a last order of work. During removal, a qualified biologist must be present.	46	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					

<p><b>BIO-General 16:</b> Invasive Weed Control: To address potential impacts to Lower Bajada and Fan Mojave an-Sonoran Desert Scrub, Mojave and Great Basin Upper Bajada and Toe slope, and Shadscale-Saltbush Cool Semi-Desert Scrub. communities, Desert Tortoise Designated Critical Habitat, Booth's evening primrose, desert pincushion, Emory's</p>	<p>33</p>	<p>NES-MI 12/12/23</p>	<p>Environmental Biological Studies/ Resident Engineer/ Contractor</p>	<p>Construction</p>	<p>SSP:</p>					
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crucifixion-thorn, flat-seeded spurge, Harwood's eriastrum, and Wright's jaffueliobryum moss, or other rare plant species, a qualified biologist must identify invasive plant species at the culvert and RSP work locations (PM 142.97, R133.27, R130.31, R133.94, R126.11, R122.23, and R137.67) within the PIA and a 50-foot buffer, within 30 days prior to project activities. Treatment and disposal methods must be approved by the Caltrans biologist prior to vegetation removal.										
<b>BIO-Plant 1:</b> Rare Plant Surveys, Flagging and Fencing: Within 30 days prior to construction, a preconstruction survey must be conducted by a qualified biologist for Booth's evening	53	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					

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primrose, desert pincushion, Emory's crucifixionthorn, flat-seeded spurge, Harwood's eriastrum, and Wright's jaffueliobryum moss in areas of suitable habitat, within 50 feet of the PIA. Any rare plant species identified must be flagged for visual identification to construction personnel for work avoidance. Any rare plant species detected that feature multiple plants in a single location must be fenced with Environmentally Sensitive Area (ESA) temporary fencing.										
<b>BIO-Plant 2:</b> Rare Plant Translocation: If Booth's evening primrose, desert pincushion, Emory's crucifixion-thorn, flat-seeded spurge, Harwood's eriastrum, Wright's jaffueliobryum moss, or other rare plant species is	53	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer	Construction	SSP:					

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found within the job site and cannot be fenced but can survive transplantation, the qualified biologist/botanist must contact the Caltrans biologist to determine the time and suitable translocation area for the plant species to be moved. Additional requirements and actions must be determined at the time such a situation occurs.										
<b>BIO-Reptile 1:</b> Equipment Flagging: Project personnel must attach surveyor flagging tape to a conspicuous place on each piece of equipment to remind the operator to check under the equipment for special status reptile species desert tortoise and Mojave fringe-toed lizard before operating equipment at any time.	46	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					



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							Date/ Initials	Date/ Initials	YES	NO
<b>BIO-Reptile 5:</b> Trash/Predation: Caltrans must implement measures to reduce the attractiveness of job sites to common raven, and other predators and scavengers by controlling trash and educating workers.	46	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					
<b>BIO-Reptile 6:</b> Temporary Demarcation: Temporary demarcation in the form of temporary desert tortoise fencing must be installed following the most recent USFWS guidelines for construction fencing, to delineate both sides of the PIA at the culvert and RSP work locations (PM R122.23, R126.11, R130.31, R133.27, R133.94, 142.97, and R137.67), with a 50-foot buffer as shown on the plans and/or described in the specifications,	46	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					

<p>to exclude desert tortoise from these areas. Temporary desert tortoise fencing must also be installed at any equipment staging, storage, and borrow sites prior to construction, as shown on the plans, to exclude desert tortoise from these areas. All temporary demarcation materials must be removed once construction has been completed.</p>										
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							Date/ Initials	Date/ Initials	YES	NO
<b>BIO-Reptile 8:</b> Rock Slope Protection: To prevent trapping of desert tortoise, interstitial spaces within rock slope protection must be partially filled with concrete grout or sand.	47	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					
<b>BIO-DT 1:</b> Agency Notification & Reporting Requirements: Any worker who observes desert tortoises within or near the jobsite found alive, injured, or dead during the implementation of the Project must provide immediate notification to the Resident Engineer and Caltrans biologist. The Caltrans biologist must then notify USFWS and CDFW. Veterinary treatment and/or final deposition must follow USFWS and CDFW approval.	47	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					

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<p><b>BIO-DT 2:</b> Desert Tortoise Translocation: If determined necessary for this project, desert tortoise translocation must follow the current USFWS Biological Opinion guidelines and BLM guidelines as applicable. Due to the presence of desert tortoise Designated Critical Habitat adjacent to the project site, and the existence of primary constituent elements for desert tortoise within the BSA and parts of the PIA, a presence/absence survey must be conducted in the PA&amp;ED phase to determine if desert tortoise is active in the project area. Measures would be needed to avoid and minimize any impact On desert tortoise and Desert Tortoise</p>	47	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer	Construction	SSP:					

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Designated Critical Habitat. If the presence of desert tortoise is confirmed, Additional measures may be needed.										
<b>BIO-DT 6:</b> Biological Monitoring: An Acceptable Biologist shall oversee construction activities to ensure compliance with the protective stipulations for Desert tortoise and Mojave fringe-toed lizard.	48	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer	Construction	SSP:					

<p><b>BIO-General-PSM 1:</b>                  Vehicle Washing: Comply with 2022 SSP or latest version. It would be required that the contractor would wash equipment prior to entering the project site. The biologist would coordinate with the resident engineer and contractor in order to inspect the vehicles and equipment prior to the initiation work to verify that they have been washed.</p>	<p>34</p>	<p>NES-MI                  12/12/23</p>	<p>Environmental                  Biological                  Studies/                  Resident                  Engineer/                  Contractor</p>	<p>Construction</p>	<p>SSP:</p>					
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							Date/Initials	Date/Initials	YES	NO
<b>BIO-General-PSM 2:</b> Agency Notification & Reporting Requirements: Any listed species within or near the job site, or as specified in BIO-General-6, found alive, injured, or dead during the implementation of the Project must be immediately reported to the Resident Engineer and Caltrans Biologist. The Caltrans Biologist must then notify the Resource Agencies. Veterinary treatment and/or final deposition must follow Resource Agencies' approval. Monitoring reports must include WEAP Training and be submitted to the Resources Agencies	39	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					

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							Date/ Initials	Date/ Initials	YES	NO
on a timeframe to be determined.										
<b>BIO-Avian 1:</b> Pre-Construction Nesting Bird Survey: If project activities cannot avoid the nesting bird season, February 1 – September 30, then preconstruction nesting bird surveys must be conducted by a qualified biologist in areas of suitable habitat within the projects limits and up to the limit of the BSA, no more than 3 days prior to construction to locate and avoid nesting birds. If an active avian nest is located, a no-construction buffer (100 feet for non-passerine, 300 feet for passerine, and 500 feet for raptors) would be established and Monitored by a qualified biologist.	43	NES-MI 12/12/23	Environmental Biological Studies	Construction	SSP:					



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							Date/Initials	Date/Initials	YES	NO
<p><b>Bio-Arthropod 1:</b> Rare Insect Host Plant Preconstruction Clearance Survey, Flagging, and Fencing: No more than 30 days prior to project activities, a qualified biologist must perform a preconstruction survey for rare insect host plants (milkweed) at PM 142.97, R133.27, R130.31, R133.94, R126.11, R122.23 and R137.67 within the PIA and a 50-foot buffer. Should any rare insect host plants be found, the Resident Engineer and Caltrans biologist must be contacted, and host plants must be flagged by the qualified biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the</p>	49	NES-MI 12/12/23	Environmental Biological Studies/ Resident Engineer/ Contractor	Construction	SSP:					

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groupings must be fenced with Environmentally Sensitive Area (ESA) temporary fencing.										
<b><u>CULTURAL RESOURCES</u></b>										
<b>CUL-1:</b> 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.	N/A	District Environmental Cultural Resources 12/06/23	District Cultural Studies/District Design/ Resident Engineer/ Contractor	Construction		Standard Specification (SS) 141, 142				
<b>CUL-2:</b> 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	N/A	District Environmental Cultural Resources 12/06/23	District Cultural Studies/District Design/ Resident Engineer/ Contractor	Construction		SS14-1, 14-2				

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would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendant (MLD). The person who discovered the remains would contact the District 8 Division of Environmental Planning; Gary Jones, Acting Senior and DNAC: (909) 261-8157. Further provisions of PRC 5097.98 are to be followed as applicable.										
<b><u>STORM WATER QUALITY</u></b>										
<b>SWQ 1:</b> Order No. 2022-0033-DWQ, NPDES No. CAS000003, NPDES Statewide Storm Water Permit for the State of California, Department of Transportation (Caltrans	1	Memorandum to File 11/28/23	Storm Water Quality/ Resident Engineer/ Contractor	Construction						

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Permit) issued by the California State Water Resources Control Board (SWRCB). This permit regulates stormwater and non-stormwater discharges from Caltrans properties and facilities, and discharges associated with operations and maintenance of the statewide State highway system.										
<b>SWQ 2:</b> Caltrans Statewide Stormwater Management Plan (SWMP). The SWMP is the document that describes how Caltrans plans to implement the "Caltrans Permit" requirements.	1	Memorandum to File 11/28/23	Storm Water Quality/ Resident Engineer/ Contractor	Construction						

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<b>SWQ 3:</b> During phases "0" and "1", a Storm Water Data Report (SWDR) would be developed for each phase. The SWDR is a planning document prepared by the Project Engineer that documents stormwater design information associated with the project. It is used to document stormwater-related decisions to assure compliance throughout all phases of project delivery.	1	Memorandum to File 11/28/23	Storm Water Quality/ Resident Engineer/ Contractor	Construction						
<b>SWQ 4:</b> During the construction phase, a Water Pollution Control Document (WPCD) would be developed by the contractor. The WPCP is a project-specific plan that includes a site map(s), identifies construction and	1	Memorandum to File 11/28/23	Storm Water Quality/ Resident Engineer/ Contractor	Construction						

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contractor activities that could cause pollutants in stormwater, and a description of measures or practices to control these pollutants.										
<b>CLIMATE CHANGE / GHG</b>										
<b>GHG 1:</b> Limit idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.	45	Section 2.3	Environmental Studies A, Resident Engineer/ Contractor	Construction						
<b>GHG2:</b> Maximize use of recycled materials.	45	Section 2.3	Environmental Studies A, Resident Engineer/ Contractor	Construction						
<b>GHG3:</b> Recycle existing project features on-site.	45	Section 2.3	Environmental Studies A, Resident Engineer/ Contractor	Construction						

<p><b>GHG4:</b> Use recycled water or reduce consumption of potable water for construction.</p>	<p>45</p>	<p>Section 2.3</p>	<p>Environmental Studies A, Resident Engineer/ Contractor</p>	<p>Construction</p>						
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SBD 15 Pavement Rehab

EA 08-1L150  
 PN 0819000152  
 Generalist: Kourtney Graves  
 ECL:TBD

Avoidance, Minimization, and/or Mitigation Measures	Page	Environmental Analysis Source	Responsible for Development and/or Implementation of Measure	Timing/ Phase	SSPor NSSP	Action(s) Taken to Implement Measure/if checked No, add Explanation	PS&E Task Complete	Construction Task Complete	Environmental Compliance	
							Date/ Initials	Date/ Initials	YES	NO
<b>GHG 5:</b> Use Partial Depth Recycling as the construction method to rehabilitate the pavement.	45	Section 2.3	Environmental Studies A, Resident Engineer/ Contractor	Construction						
<b>HAZARDOUS WASTE</b>										
<b>HAZ 1:</b> Include 84-9.03B Non-Hazardous Striping/ Marker.	1	Initial Site Assessment Checklist (ISA Checklist) 3/26/24	Environmental Engineering/ Resident Engineer/ Contractor	Construction	Standard Specification 84-9.03B					



# **Appendix C Federal Transportation Improvement Program**

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**SBDLS02 Exempt Grouped Projects for Pavement Resurfacing and/or Pavement Rehabilitation - SHOPP Roadway Preservation Program 2023 FTIP Amendment #23-12**

Agency	County	DistrictEA	Notes	Project Description	Program Year(FY)	Federal Funds	State Funds	Total Project Cost (in \$1000's)
Caltrans	SBd	1J270	PCR.2022SHOPP Amendment#22H- OnSR-247 inandnearYuccaValley, from Route62 tonorthofGin Road. Rehabilittate 009. CTC June28-29, pavementand widen shoulders. RW Cap and CONCap/Sup Only. 2023 annroval.		2023/24	\$34,026	\$0	\$34,026
Caltrans	SBd	IJ310	PCR: SHOPP Amendment #22H- On SR-18 nearBig Bear Lake, from Arrowbear Drive to Route 38. Rehabilitate culverts 002, CTC June 29-30, and install Changeable Message Sign (CMS). RW Cap and CON Cap/Sup Only. 2022approval.		2023/24	\$7.253	\$0	\$7,253
Caltrans	SBd	1LI50	New.2022 SHOPP approved by CTC March 17, 2022.	On 1-15 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	IL420	New. 2022 SHOPP approved by CTC March 17, 2022.	OnSR-18 nearBig Bear Lake, from 1.4miles 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	1LI40	New. 2022SHOPP approved by CTC March17, 2022.	OnSR-18 near LucerneValley, from CampRock Road to CusterAvenue. Rehabilitate pavement, upgrade guardrail andTransportation Management System (TMS) elements, andconstructshoulders and rumblestrips.PS&E andRW Sup Only.	2023/24	\$6.459	\$0	\$6.459
Caltrans	SBd	IK940	New. 2022 SHOPP approved by CTC March 17, 2022.	OnSR-38in Redlands, from RouteIO to Occidental Drive; also on spurs from Orange Street to Pearl Avenue (PM S0.372/S0.597) and from Eureka Street to Route I0 (PM S0.598/S0.855). Rehabilitate pavement, upgrade Transportation Management System (TMS)elements, andupgrade facilities toAmericanswithDisabilitiesAct (ADA) standards. PS&E and RW Sup Only.	2023/24	\$3,676	\$0	\$3,676

# **Appendix D List of Technical Studies**

The following studies and/or technical analyses have been prepared and are incorporated into this Initial Study.

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Air Quality Memorandum, October 23, 2023

Hazardous Waste Initial Site Assessment Checklist, March 26, 2024

Historic Property Survey Report, December 6, 2023

Natural Environment Study – Minimal Impacts, December 12, 2023

Noise Memorandum, November 27, 2023

Questionnaire to Determine Visual Impact Assessment Level, June 19, 2023

Right of Way Data Sheets, June 2023

Storm Water Quality Memorandum, November 28, 2023

Summary Floodplain Encroachment Report, June 6, 2023

# Appendix E List of Acronyms and Abbreviations

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ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
ADT	Average Daily Traffic
APE	Area of Potential Effects
ARB	California Air Resources Board
BMPs	Best Management Practices
BSA	Biological Study Area
Caltrans	California Department of Transportation
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CHP	California Highway Patrol
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
County	San Bernardino County
COZEEP	Construction Zone Enhanced Enforcement Program
CTP	California Transportation Plan
CWA	Clean Water Act
dBA	A-weighted decibels
DSA	Disturbed Soil Area
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Environmentally Sensitive Areas
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse Gas
H <sub>2</sub> S	Hydrogen Sulfide
I-15	Interstate 15

IS	Initial Study
ISA	Initial Site Assessment
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
mph	Miles per Hour
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
MVP	Maintenance Vehicle Pullout
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NHS	National Highway System
NHTSA	National Highway Traffic Safety Administration
NNL	National Natural Landmarks
NO <sub>x</sub>	Nitrogen Oxides
NO <sub>2</sub>	Nitrogen Dioxide
N <sub>2</sub> O	Nitrous Oxide
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
O <sub>3</sub>	Ozone
PA	Programmatic Agreement
PAC	Public Awareness Campaign
Pb	Lead
PB	Proposed Barrier
PCB	Polychlorinated Biphenyl
PM	Post Mile
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns in diameter
PM <sub>10</sub>	Particulate matter less than 10 microns in diameter
PRC	Public Resources Code
RAP	Relocation Assistance Program
RCRA	Resource Conservation and Recovery Act
RSA	Resources Study Area
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF <sub>6</sub>	Sulfur Hexafluoride
SHPO	State Historic Preservation Officer

SIP	State Implementation Plan
SO <sub>x</sub>	Sulfur Oxides
SO <sub>2</sub>	Sulfur Dioxide
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TASAS	Traffic Accident Surveillance and Analysis System
TDM	Transportation Demand Management
TMDL	Total Maximum Daily Load
TSM	Transportation System Management
USC	United States Code
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
WDR	Waste Discharge Requirements
WPCP	Water Pollution Control Program
WRCC	Western Regional Climate Center
VHT	Vehicle Hours Traveled
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled

# Appendix F      References

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