

# **I-10 Pavement Rehabilitation Project**

RIVERSIDE COUNTY, CALIFORNIA  
DISTRICT 8 – RIV – 10 (PM 60.7/R74.3)  
1C081/0816000086

## **Draft Initial Study with Proposed Mitigated Negative Declaration/ Environmental Assessment**



**Prepared by the  
State of California, Department of Transportation**

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.



**February 2020**



## General Information about This Document

### What's in this document:

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

### What you should do:

- Please read this document.
- Additional copies of this document and related technical studies are available for review at:

Department of Transportation,  
Caltrans District 8  
12<sup>th</sup> Floor  
464 W. 4<sup>th</sup> Street  
San Bernardino, CA 92401

- We'd like to hear what you think. If you have any comments about the proposed project, please call (909) 806-2541 or send your written comments to Caltrans by the deadline.
- Send comments via postal mail to:  
Antonia Toledo, Environmental Branch Chief  
Department of Transportation  
Caltrans District 8  
Environmental Planning (MS 820)  
464 W. 4th Street, San Bernardino, CA 92401
- Send comments via email to: [1C081.Comments@dot.ca.gov](mailto:1C081.Comments@dot.ca.gov)
- Be sure to send comments by the deadline: March 9, 2019

**What happens next:**

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

**Alternative Formats:**

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write Caltrans, Attn: Terri Kasinga, Chief, Public and Media Affairs, 464 W. 4<sup>th</sup> Street, 6<sup>th</sup> Floor, MS 823, San Bernardino, CA 92401; (909) 383-4646 (Voice) or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice) or 711.



SCH: \_\_\_\_\_  
08-RIV-10-PM R60.7/R74.3  
1C081  
0816000086

Rehabilitate existing pavement, ramps, and guardrail, install an eastbound truck climbing lane, and update ADA facilities on I-10, from 2.0 miles east of Dillon Road Interchange (PM R60.7) to 2 miles east of Cactus City Rest Area (PM R74.3), in the County of Riverside.

**Draft INITIAL STUDY with Proposed Mitigated Negative Declaration/Environmental Assessment**

Submitted Pursuant to: (State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2)(C), 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA  
Department of Transportation

Responsible Agencies: California Transportation Commission

2/3/2020  
Date of Approval

  
\_\_\_\_\_  
DAVID BRICKER  
Deputy District Director  
District 8 Division of Environmental Planning  
California Department of Transportation

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SCH: \_\_\_\_\_

## Proposed Mitigated Negative Declaration Pursuant to: Division 13, Public Resources Code

### Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate the existing asphalt concrete (AC) pavement on Interstate 10 (I-10) from 2.0 miles east of Dillon Road Interchange to 2.0 miles east of Cactus City Rest Area. The project is located in the Coachella Valley, within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). The project limits are from Post Mile (PM) R60.7 to PM R74.3. Rehabilitation activities include removal and replacement of existing inside and outside shoulders, guardrails, rumble strips, drainage inlets, dikes, and oversized drains. The project also includes widening of bridges and placement, repair, and installation of permanent desert tortoise fence. Grading will be limited to five feet outside the edge of shoulder, except at bridge locations. The proposed project will also include the installation of a two-lane temporary detour in the existing median. Following construction, the eastbound detour lane would be converted to a general-purpose lane, and the eastbound outside lane would be designated as a truck climbing lane.

### 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 a 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 a Draft 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 impact on agricultural and forest resources, energy, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, population and housing, recreation, transportation/traffic, wildfire, or utilities and service systems.

The proposed project would have less than significant impact on aesthetics, air quality, tribal and cultural resources, public services, and hydrology and water quality. The proposed project would have less than significant impacts, with mitigation, on biological resources, paleontological resources, and greenhouse gases.

To avoid, minimize, and/or mitigate potential impacts to biological resources, the following measures will be implemented:

**BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01)  
Materials and Spoils Control-2018 Caltrans Standard Specification 14-10.01:  
Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts,

wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.

- BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- BIO-4: Contractor Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D) The Contractor will hire with the approval and authorization by the Caltrans Biologist a well-qualified Contractor Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologist and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.
- BIO-5: Predation Prevention** (2018 Caltrans Standard Specification 14-10.01) To preclude attracting predators, such as the common raven and coyote, food-related trash items will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife.
- BIO-8: Worker Environmental Awareness Training** (2018 Caltrans Standard Specification 14- 6.03D(3) The CSB will present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They will be advised of the special status species in the BSA, the steps to avoid impacts to the species, and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area environs. Included in this program will be color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the contractor and resident engineer office, where they will remain through the duration of the project. The contractor, resident engineer, and the CSB will be responsible for ensuring that employees are aware of the listed species. If additional employees are added to the project after initiation, they will receive instruction prior to working on the project.

- BIO-9: Desert Tortoise Under Equipment** (2018 Caltrans Standard Specification 14-6.03D[3]) Whenever project vehicles are parked outside of a desert tortoise fence that is intended to preclude entry by desert tortoises, workers will check under the vehicle before moving the vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the CSB to relocate the tortoise. If an authorized biologist is not present on-site, the Resident Engineer or supervisor must notify the Caltrans Biologist. Workers will not be allowed to capture, handle, or relocate tortoises.
- BIO-10: Exclusionary Desert Tortoise Fencing** (2018 Caltrans Standard Specification 80-4.02B[2]) Permanent exclusionary desert tortoise fencing will be installed to prevent entry by desert tortoises into a work site. The CSB will ensure that desert tortoises cannot pass under, over, or around the fence. The CSB must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction clearance surveys for desert tortoise and desert tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction clearance surveys will be performed.
- BIO-11: Deceased or Injured Tortoise Within the Project Site** Upon locating a dead or injured tortoise within a project site, the resident engineer will immediately notify the CSB and the Caltrans Biologist whom will notify the USFWS within 24 hours of the observation via email/telephone. Written notification must be made to the appropriate USFWS field office within 5-days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).
- BIO-12: Transportation of Injured Tortoise** Injured desert tortoises will be transported to a veterinarian for treatment at the expense of the contractor or Caltrans. Only the CSB or an approved desert tortoise biological monitor will be allowed to handle an injured tortoise. If an injured animal recovers, the appropriate USFWS field office will be contacted for final relocation of the animal.
- BIO-20:** Rock Slope Protection must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.
- BIO-21:** CVMSHCP has identified the following desert tortoise linkages and conservation measures. Caltrans must adhere to the following conservation measures for compliance with the CVMSHCP: CVMSHCP, Section 4.3.17 Desert Tortoise and Linkage Conservation Area, CVMSHCP, Section 4.4.6 Biological Corridors under the I-10 Freeway in the Desert Tortoise and Linkage Conservation Area.
- BIO-23:** Permanent impacts to DTCH and desert tortoise suitable habitat will be mitigated at a minimum 1:1 ratio by land purchase or in-lieu fee credit purchase. Compensatory mitigation measures for impacts to DTCH will be refined in coordination with the regulatory agencies and may include measures to relocate individual desert tortoises found during construction or hydroseed habitat in the median on-site after the project has been completed. Any additional conditions required on permits by regulatory agencies will be included in the mitigation measures.

**BIO-24:** The project is entirely located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with the eastern portion of the project, from PM 67.4 to PM 74.30, located within the Desert Tortoise Linkage Conservation Area and the western portion of the project, from PM 60.9 to PM 674.4 located outside of any CVMSHCP Conservation Areas. Caltrans will coordinate with the Coachella Valley Conservation Commission (CVCC) for the acquisition of conservation lands, and management and monitoring of these lands. Additionally, Caltrans will comply with the applicable avoidance and minimization measures described in the CVMSHCP Section 4.4 for Covered Activities.

**BIO-25:** The project will impact jurisdictional Waters of the State (WSC) and Waters of the US (WOTUS). The impact analysis and mitigation ratios will be determined during the permitting process, in coordination with the US Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Mitigation for permanent and temporary impacts will be calculated in coordination with the regulatory agencies.

The following measure will help to mitigate future greenhouse gas emissions:

**GHG-1: Installation of zero-emission vehicle (ZEV) infrastructure:** Caltrans will install electric vehicle charging station at Cactus City Rest Area, on the eastbound and westbound sides.

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David Bricker  
Deputy District Director  
District 8 Division of Environmental Planning  
California Department of Transportation

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Date

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# Chapter 1      Proposed Project

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## 1.1 Introduction

The California Department of Transportation (Caltrans) proposes to rehabilitate a portion of Interstate 10 (I-10), in Riverside County, from 2.0 miles east of Dillon Road Interchange to 2.0 miles east of Cactus City Rest Area. The scope of work primarily consists of rehabilitation of existing Asphalt Concrete (AC) pavement and construction of a truck climbing lane on the eastbound roadbed. The project is located in the Coachella Valley, just east of the City of Coachella (see Figure 1.1). The project limits are from Post Mile (PM) R60.7 to PM R74.3 (see Figure 1.2).

California participated in the “Surface Transportation Project Delivery Pilot Program” (Pilot Program) pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with FHWA. The NEPA Assignment MOU became effective October 1, 2012 and was renewed on December 23, 2016 for a term of five years. In summary, the Department continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and the Department assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Department under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions.

Caltrans, as assigned by the Federal Highway Administration (FHWA), is the lead agency under the National Environmental Policy Act (NEPA). The Department is also the lead agency under the California Environmental Quality Act (CEQA).

As a transcontinental west-east route, I-10 begins in District 7 in Los Angeles County from the Pacific Coast and traverses across eight states to Florida's Atlantic Coast along nearly 2,500 miles of flat and rolling terrain. In California, I-10 traverses 244 miles across three counties within Districts 7 and 8. Within District 8, I-10 is 196 miles long, ranging from four mixed-flow lanes to eight mixed-flow and two HOV lanes across the Inland Empire and desert regions of both Riverside and San Bernardino counties. In District 8, it begins in Montclair and travels through 20 different cities in both counties.

I-10 serves as a primary connection for commuter traffic and goods movement from seaports in neighboring District 7 to the rest of the country. Although I-10 does not directly link to the ports of Los Angeles and Long Beach, the combined ports have the highest twenty-foot equivalent unit (TEU) of shipping container traffic of any point of entry in the United States. Offloaded container traffic from both ports funnel from District 7 towards the Inland Empire via I-10. From the Los Angeles metropolitan area into the Coachella Valley, the route provides a means for regional commuter trips. East of the Coachella Valley, most trips are interstate, along with a substantial increase of trips related to goods movement (Caltrans, 2017b).

This project is included in the 2017 Federal Transportation Improvement Program (FTIP) Amendment Modification #17-16 and is proposed for funding from the 2018 State Highway Operation and Protection Program (SHOPP) Roadway Preservation Program.

## I-10 Rehabilitation Project 1C081 PM 60.7 - 74.3

Region



Figure 1.1. Project Vicinity Map

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## I-10 Rehabilitation Project 1C081 PM 60.7 - 74.3

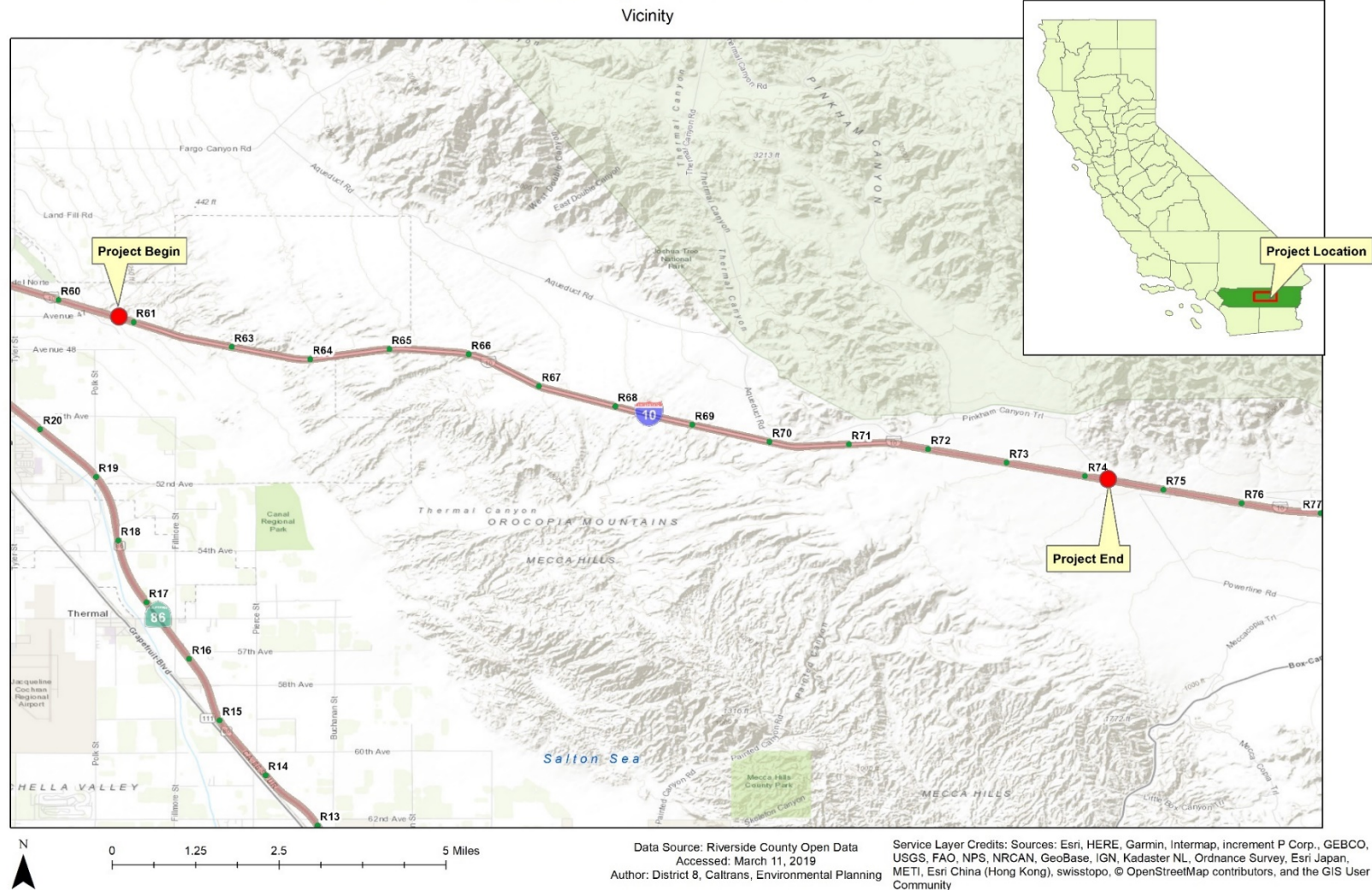


Figure 1.2. Project Location Map

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## 1.2 Purpose and Need

### Project Purpose

- The primary purpose of this project is to restore and extend service life of existing pavement for a minimum of 40 years, enhance trip reliability, and consequently minimize expenditures associated with future maintenance.
- The secondary purpose is to improve safety and mobility for the traveling public by adding an eastbound truck climbing lane, and upgrading features, such as Midwest Guardrail System (MGS), bridge rails, and drainage facilities, to current design standards.

### Project Need

- This project is needed to address current and future deficiencies of the existing pavement and extend the service life within the project limits and minimize maintenance frequency and consequently worker exposure.
- Additionally, slow-moving freight vehicles currently travel along the general-purpose lanes, impairing traffic flow.

## 1.3 Independent Utility and Logical Termini

Although two other projects with similar scope are proposed along this route, the project limits extend a sufficient length to have independent utility in addressing route maintenance concerns. These rehabilitation efforts have been broken down for ease of delivery in terms of funding, but also to lessen impacts to the traveling public. Rehabilitation activities are of sufficient scope to improve the travel experience of motorists through this stretch of I-10 without the need for additional improvements. The project being close to 14 miles long, with a detailed scope, also allows for an effective analysis of potential environmental impacts. Impacts are addressed in Section 2.4.

## 1.4 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. Two alternatives are considered, including the No-Build Alternative and one Build Alternative. The proposed I-10 rehabilitation build alternative extends 14 miles from 2.0 miles east of Dillon Road Interchange to 2 miles east of Cactus City Rest Area and includes rehabilitation of existing pavement on both the eastbound (EB) and westbound (WB) sides as described in Section 1.5. Additionally, the Build Alternative also consists of the installation of a two-lane temporary detour in the existing median. Following construction, the eastbound detour lane would be converted to a general-purpose lane, and the eastbound outside lane would be designated as a truck climbing lane. The westbound detour would be striped, signaling to the public that it is not available for use.

Other rehabilitation activities include removal and replacement of existing inside and outside shoulders, guardrails, rumble strips, drainage inlets, dikes, and oversized drains. The project also includes widening of bridges and placement, repair, and installation of permanent desert tortoise fence. Grading will be limited to five feet outside the edge of shoulder, except at bridge



locations. The proposed rehabilitation activities would occur within the existing right of way limits, would meet current transportation design standards, while avoiding and/or minimizing impacts to the environment. The current construction costs for the proposed project is estimated to be \$204,850,000.

## **1.5 Project Alternatives**

One no-build and one build alternative are considered for this project. This section describes the proposed alternatives.

### ***No-Build Alternative***

The No-Build Alternative would maintain existing pavement condition of I-10 within the project limits with no rehabilitation on the mainline lanes and ramps or associated improvements. The No-Build Alternative fails to address the project purpose and need, and it provides none of the project benefits cited for Alternative 2.

Without pavement rehabilitation, the existing pavement condition will further deteriorate along the corridor resulting in operational deficiencies and will necessitate future costly maintenance measures. With no capital improvements, there is no capital cost for this alternative. However, there would be continued costs associated with maintenance, periodic rehabilitation, and any necessary safety and/or operational improvements to the existing facility.

### ***Build Alternative***

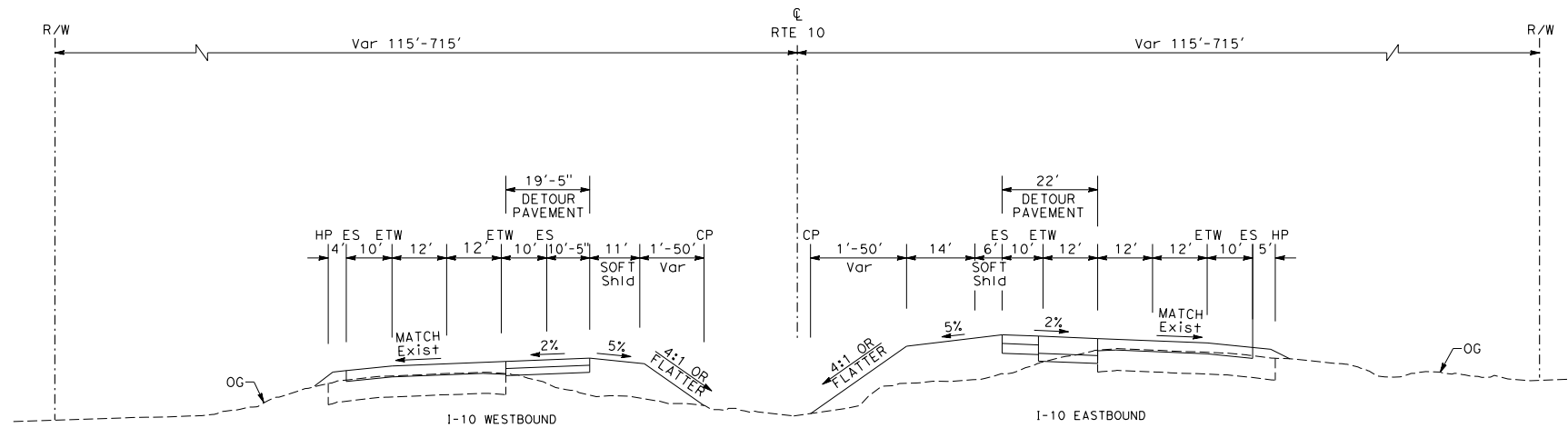
The Build Alternative would include the following improvements to the identified portion of the I-10 Corridor:

- Cold plane existing asphalt concrete (AC) pavement on the mainline and shoulders.
- Raise the profile grade by approximately one foot to achieve the recommended structural section.
- Remove existing mainline asphalt concrete (AC) pavement and base.
- Construct temporary detour lanes and crossover lanes in the existing median for traffic handling during construction. As a result of detour construction, all existing bridges and/or drainage crossings, on the EB and WB direction, would be widened towards the median. Both detour lanes would remain in place after completion of the project.
- The EB detour lane, from PM R60.7 to PM R74.3 would be repurposed and incorporated into the mainline for public use after rehabilitation activities have concluded. Through this stretch, the facility would be re-striped so that the temporary detour lane on the EB would be used as General-Purpose lane and the outside lane would be used as a truck climbing lane. The WB detour would be striped, signaling to the public that it is not available for use.
- Extend existing culverts in the median outside the Clear Recovery Zone.
- Remove existing AC on all bridges and treat the exposed deck.



- Remove and replace all existing bridge railings.
- Replace existing inlets in the median.
- Remove and replace existing dikes.
- Remove existing Metal Beam Guard Railing (MBGR) and replace with MGS.
- Remove and reinstall rumble strips.
- Widen existing bridges towards the median. Remove/replace/repair existing Rock Slope Protection (RSP) at all bridge locations in each direction.
- Construct approach and departure slabs at all bridges.
- Hydroseed the median for erosion control and attempted vegetation restoration.
- Cold plane and overlay existing Rest Area and ramps with Rubberized Hot Mix Asphalt.
- Repair, replacement, and installation of permanent desert tortoise fence.
- Install Inventory Marker Signs (G-11) at both bridge approaches facing traffic. Information, Warning, and Regulatory signs impacted by the project median widening will be replaced.
- Install electric vehicle charging stations at Cactus City Rest Area, on the EB and WB sides.
- Retrofit existing bridges and replace bridge railings at all (9) bridge locations:
  1. Polaris Wash/Bridge No. 54-0476 R/L
  2. Echo Ditch/Bridge No. 54-0475 R/L
  3. Smoky Gulch/Bridge No. 54-0201 R/L
  4. Sunny Gulch/Bridge No. 54-0202 R/L
  5. Brown Arroyo/Bridge No. 54-0204 R/L
  6. West Cactus Wash Br/Bridge No. 54-0460 R/L
  7. Cactus Wash Br//Bridge No. 54-0461 R/L
  8. East Cactus Wash Br/Bridge No. 54-0462 R/L
  9. Hazy Gulch Br/Bridge No. 54-0463 R/L
- Scope of work for EA 08-1J910, within the project limits of 1C081, has been incorporated into this project. The scope of work for 1J910 consists of upgrading Changeable Message Sign (CMS) panels on existing sign structures and replacing structurally deficient single post sign structures.

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**ROUTE 10**

PM R60.7 TO PM R74.3

**WHITE TOPPING**

Figure 1.3. Project Typical Cross Section.

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This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2.

After the public circulation period, all comments will be considered, and the Department will select a preferred alternative and make the final determination of the project's effect on the environment. Under the California Environmental Quality Act (CEQA), if no unmitigable, significant, adverse impacts are identified, the Department will prepare a Negative Declaration (ND) or Mitigated ND.

Similarly, if the Department, as assigned by the Federal Highway Administration (FHWA), determines the National Environmental Policy Act (NEPA) action does not significantly impact the environment, the Department will issue a Finding of No Significant Impact (FONSI).

## 1.6 Permits and Approvals Needed

Permits, licenses, agreements, and certifications (PLACs) required for project construction are listed on Table 1.1.

**Table 1.1. Permits and Approvals Needed**

Agency	PLAC	Status
United States Fish and Wildlife Service (USFWS)	Section 7 Consultation for Threatened and Endangered Species. Review and Comment on 404 Permit.	Received Draft Streamline Biological Opinion for desert tortoise.
United States Army of Engineers	Section 404 Standard Individual Permit (SIP) for filling and dredging of the waters of the United States.	Application for Section 404 permit would be submitted after FED approval.
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement for modifications of the Waters of the State.	Applications for 1602 permit Agreement would be submitted after FED approval.
California Water Resources Board	Water Discharge Permit.	Application for Section 401 permit would be submitted after FED approval.
State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES)	General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit). Caltrans MS4 Permit.	Permits are state-wide and are already awarded.

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## **Chapter 2      Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures**

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As part of the scoping and environmental analysis carried out for the project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

- Coastal Zone: The project is not within the State Coastal Zone.
- Wild and Scenic Rivers: The project is not located near a designated Wild or Scenic River.
- Sole-Source Aquifer: The project is not within a designated Sole-Source Aquifer.
- Floodplain: Since the project is not within a 100-year flood zone and there are no effects to the 100-year floodplain, a significant encroachment, as defined in 23 CFR 650.105, would not occur.
- Relocations and Real Property Acquisitions: No property would be acquired, nor would temporary construction easements be necessary.
- This project is located outside of National Marine Fisheries Service (NMFS) jurisdiction; therefore, a NMFS species list is not required and no effects to NMFS species are anticipated.

The technical reports prepared for this analysis are listed in Appendix H.

## **2.1 Human Environment**

### **2.1.1 Land Use**

#### **2.1.1.1 Affected Environment**

The western portion of the project, about 3.7 miles, is located in the City of Coachella and the rest of the project is within an unincorporated area of Riverside County. This section is based on information from the *City of Coachella General Plan Update 2035* (April 2015), the *Riverside County General Plan* (April 2019) and the *Eastern Coachella Valley Area Plan* (December 2016). The study area for land use analysis is the project footprint and properties adjacent and surrounding the Project area. For this Project, the study area is within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) and within the Eastern Coachella Valley Area.

#### **Existing Land Use**

The study area is located in Riverside County, with the majority of work being performed between the Dillon Road Interchange, in Coachella, and the Cactus City Rest Area, a 13.6-mile stretch. The existing land uses in the study area, adjacent to this stretch of the I-10 in Riverside County, include open space rural, conservation habitat, and the City of Coachella (refer to Figure 2.1). Currently, the project location area is sparsely populated. As shown on Figure 2.3, City land use designations in the project area include a future Resort District and La Entrada Specific Plan.

#### **Eastern Coachella Valley**

According to the County of Riverside General Plan (Eastern Coachella Valley Area Plan), the Eastern Coachella Valley encompasses several small unincorporated communities and the incorporated City of Coachella. The land use plan is designed to maintain the predominantly rural, agricultural, and open space character of the Eastern Coachella Valley. Surrounding land uses regulated by the County's General Plan, and the Eastern Coachella Valley Area Plan, as shown in figure 2.1, are predominantly conservation habitat and open space rural uses.



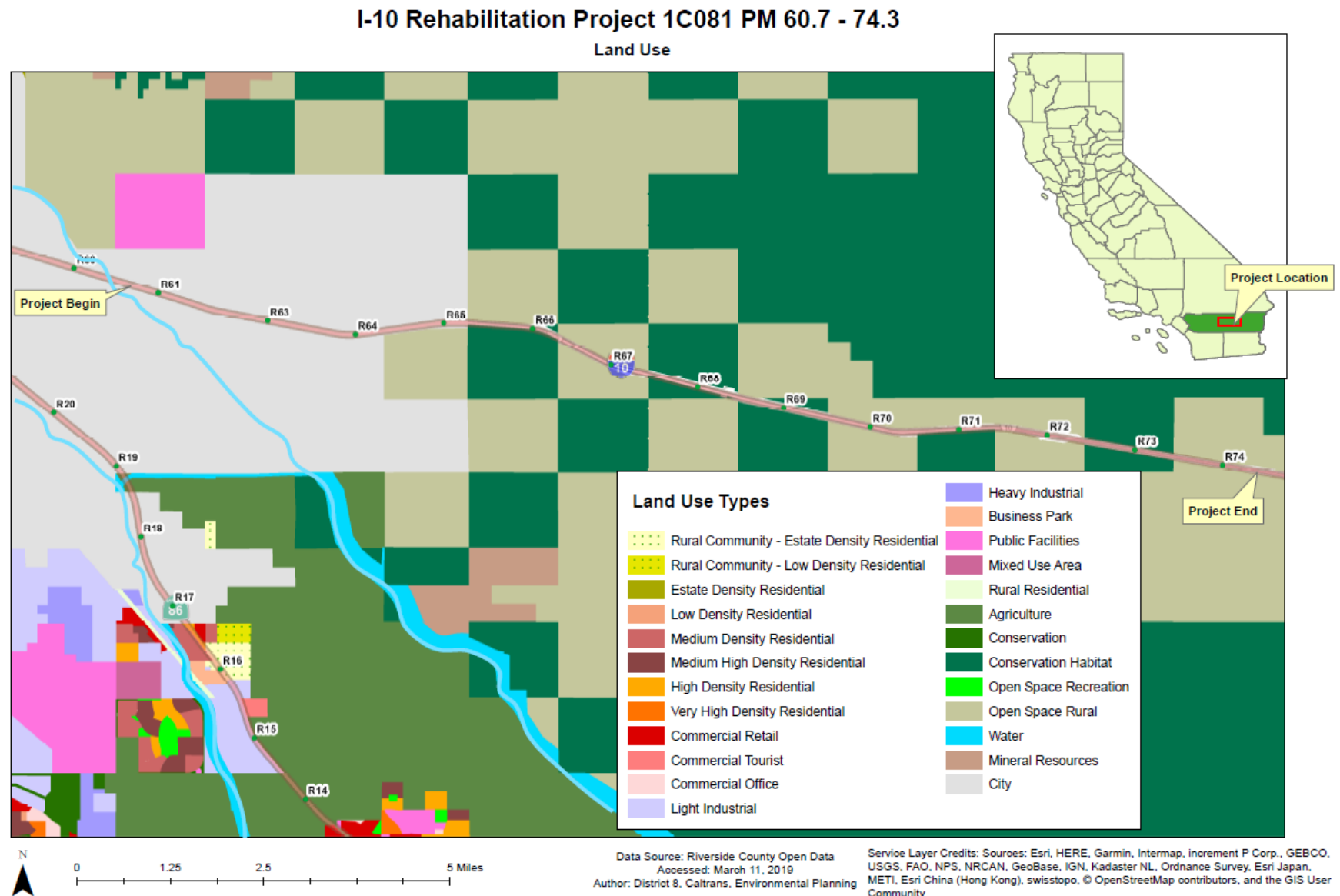


Figure 2.1. Land Use (County)

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## City of Coachella

As stated in the City of Coachella General Plan Update 2035, the land uses within Coachella's neighborhoods include residential housing, public spaces (parks and streets), industrial activity, and commercial activities, such as restaurants, retail stores, offices, and services. Some areas within the City's commercial areas have a mix of uses. As shown on table 2.1, the majority of current land use (53%) is vacant land.

**Table 2.1. City of Coachella Land Use Designations**

<b>Land Use Classification</b>	<b>Acres</b>	<b>% of Total Area</b>	<b>% of Total Area Excluding Agriculture and Vacant Land</b>
Agriculture	11,174	33%	-
Commercial and Services	138	0.4%	3%
Education	98	0.3%	2%
Facilities	54	0.2%	1%
General Office	101	0.3%	2%
Industrial	892	3%	18%
Mixed Commercial and Industrial	5	0.01%	0%
Multi-Family Residential	55	0.2%	1%
Open Space and Parks	109	0.3%	2%
Other Residential	277	1%	6%
Single Family Residential	1,007	3%	20%
Transportation, Communications, + Utilities	1,889	6%	38%
Under Construction	300	1%	6%
Vacant	18,224	53%	-
<b>Total</b>	<b>34,322</b>	<b>100%</b>	<b>100%</b>

Source: City of Coachella. "General Plan Update 2035." 2015. pp. 03-9 – 03-10.  
<https://www.coachella.org/Home/ShowDocument?id=3221>

## Future Land Use

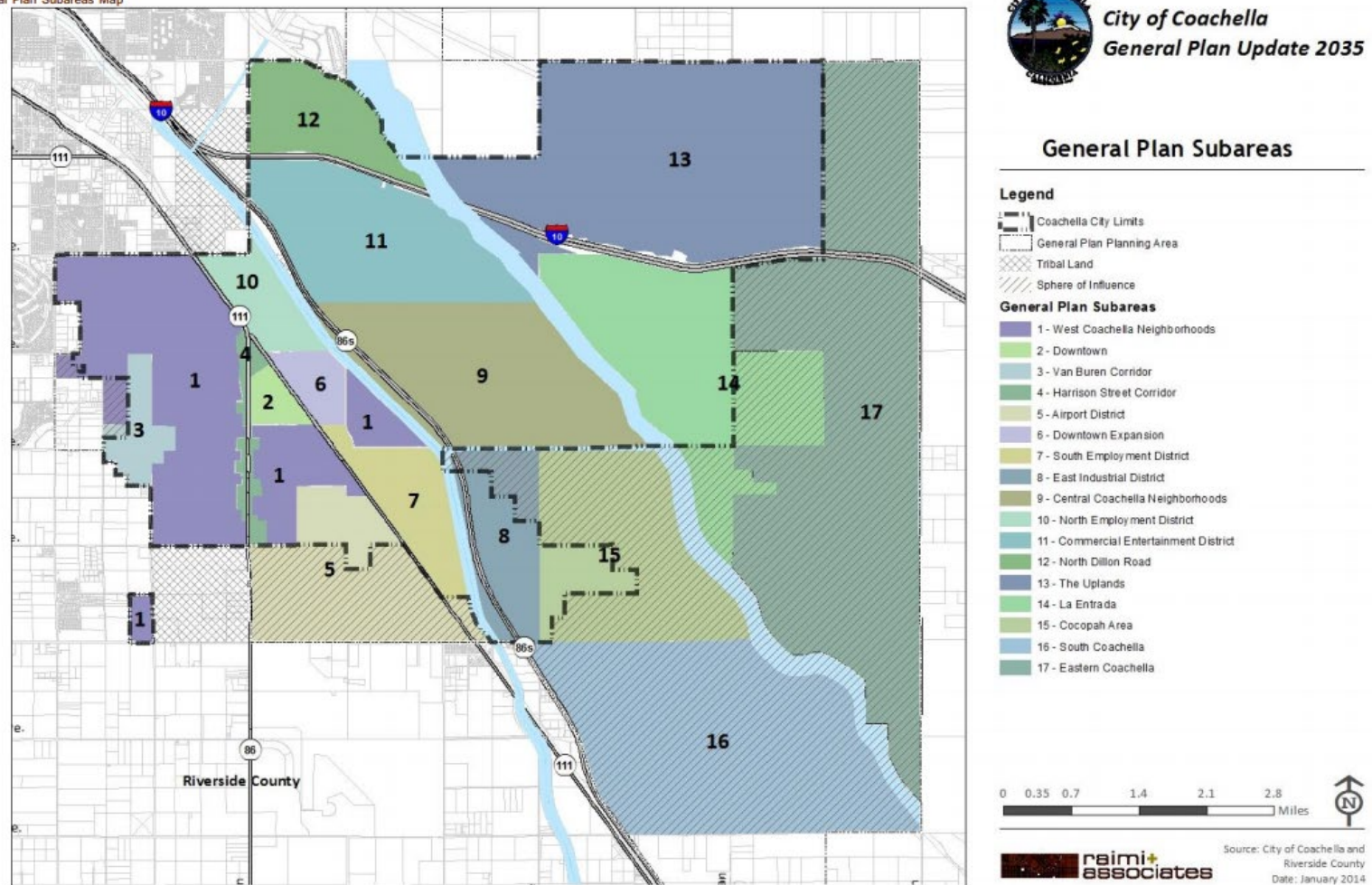
The proposed project falls within the Eastern Coachella Valley Area Plan under the Fourth District of unincorporated Riverside County, as well as the City of Coachella General Plan Update 2035. The Fourth District of Riverside County provides information regarding completed and current projects. According to the County of Riverside General Plan, the General Plan Land Use Map is intended to communicate Riverside County's goals for future land use and development of the land. Future land use will be focused into strategically located centers or into existing developed areas, thus minimizing development pressures on rural, agricultural, and open space areas.

In its General Plan, the City of Coachella is divided into 17 subareas (see Figure 2.2). The project location falls within the vicinity of Subarea 13, Desert Lakes, and Subarea 14, La Entrada. The vision for Subarea 13 is to remain undeveloped. When development does occur in this subarea, it is envisioned to have low density resorts, rural residential development and some suburban neighborhoods and suburban retail. Subarea 14, La Entrada, is envisioned in the City Plan with a diversity of neighborhoods and commercial services, while still maintaining the rugged natural topography with lower density residential and open space areas.

**Table 2.2. Proposed Development and Other Projects in the Area**

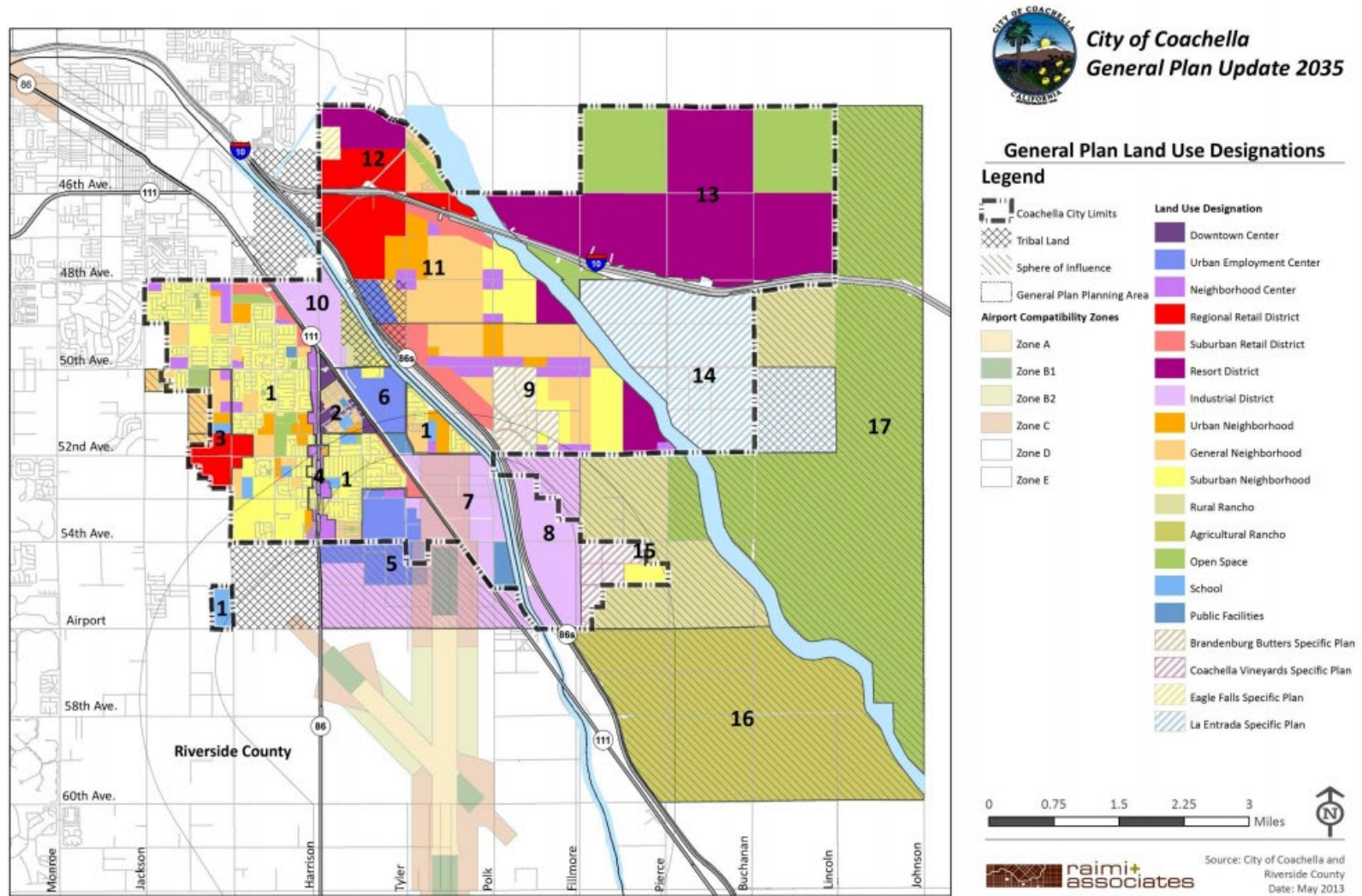
	<b>Name</b>	<b>Sponsor</b>	<b>Proposed Uses</b>	<b>Status</b>
1	RIV-10 Ave. 50 New Interchange	California Department of Transportation  And City of Coachella	Construct a new spread diamond-type interchange (IC) along I-10 from post mile (PM) R62.3 to R63.7	In design
2	La Entrada Specific Plan <sup>1</sup>	City of Coachella	La Entrada is an Approved Specific plan and EIR that includes 7,800 master planned residential units in several distinct villages linked by over 550 acres of open space.	In planning
3	Replace Existing Guide Signs	California Department of Transportation	Replacing in-kind the existing guide sign panels with new sign panels that have high-performance retroreflecting sheeting.	In construction
4	RIV-10/79/86 Bridge Preventative Maintenance	California Department of Transportation	Rehabilitate 22 bridges within Riverside County, on Routes 10, 79, and 86.	In construction
<sup>1</sup> La Entrada Specific Plan, accessed Nov. 21, 2019, website <a href="https://laentradacommunity.com/">https://laentradacommunity.com/</a>				

Figure 4-24: General Plan Subareas Map



**Figure 2.2.** City of Coachella General Plan Subareas from: (City of Coachella. 22 April 2015. General Plan Update 2035; <https://www.coachella.org/Home/ShowDocument?id=3221>. Accessed Nov. 2019.)

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**Figure 2.3.** City of Coachella General Plan Land Use Designations from: (City of Coachella. 22 April 2015. General Plan Update 2035; <https://www.coachella.org/Home/ShowDocument?id=3221>. Accessed Dec. 2019.)

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## Consistency with State, Regional, and Local Plans and Programs

### Riverside County General Plan

Development in the project area is guided by the Riverside General Plan. The thrust of the General Plan is to manage the overall pattern of development more effectively. It determines how the land will be used for the next 20 years. It addresses regional issues and policies to address the specific needs of each community within the County.

### Goals, Policies, and Programs

#### County General Plan – Circulation Element<sup>1</sup>

- C 3.2 Maintain the existing transportation network, while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.
- C 7.4 Coordinate with transportation planning, programming and implementation agencies such as Caltrans, Riverside County Transportation Commission, Western Riverside Council of Governments, Coachella Valley Association of Governments, and the cities of Riverside County on various studies relating to freeway, high occupancy vehicle/high occupancy toll lanes, and transportation corridor planning, construction, and improvements in order to facilitate the planning and implementation of an integrated circulation system.
- C 20.6 Control dust and mitigate other environmental impacts during all stages of roadway construction.
- C 20.15 Implement National Pollutant Discharge Elimination System Best Management Practices relating to construction of roadways to control runoff contamination from affecting the groundwater supply.
- C 23.1 Implement street and highway projects to provide safe, sustainable, and economical goods movement in areas where large concentration of truck traffic exist or are anticipated to exist.
- C 23.7 Identify economically feasible street and highway improvement and maintenance projects that will improve goods movements.
- C 23.14 The County should develop best practices and standards for design of distribution facilities and supporting infrastructure to promote environmental sustainability, safety, long-term maintenance cost reduction, and general quality of life.

#### Regional Plans

The Southern California Association of Governments (SCAG) develops and maintains the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) for the counties of San Bernardino, Imperial, Los Angeles, Orange, Riverside, and

<sup>1</sup> Riverside County General Plan, Chapter 4 Circulation Element,  
[http://planning.rctlma.org/Portals/0/genplan/general\\_plan\\_2016/elements/Ch04\\_Circulation\\_120815.pdf?ver=2016-04-01-100756-397](http://planning.rctlma.org/Portals/0/genplan/general_plan_2016/elements/Ch04_Circulation_120815.pdf?ver=2016-04-01-100756-397)

Ventura. SCAG is mandated by federal law to research and develop plans for transportation, growth management, hazardous waste management, and air quality.

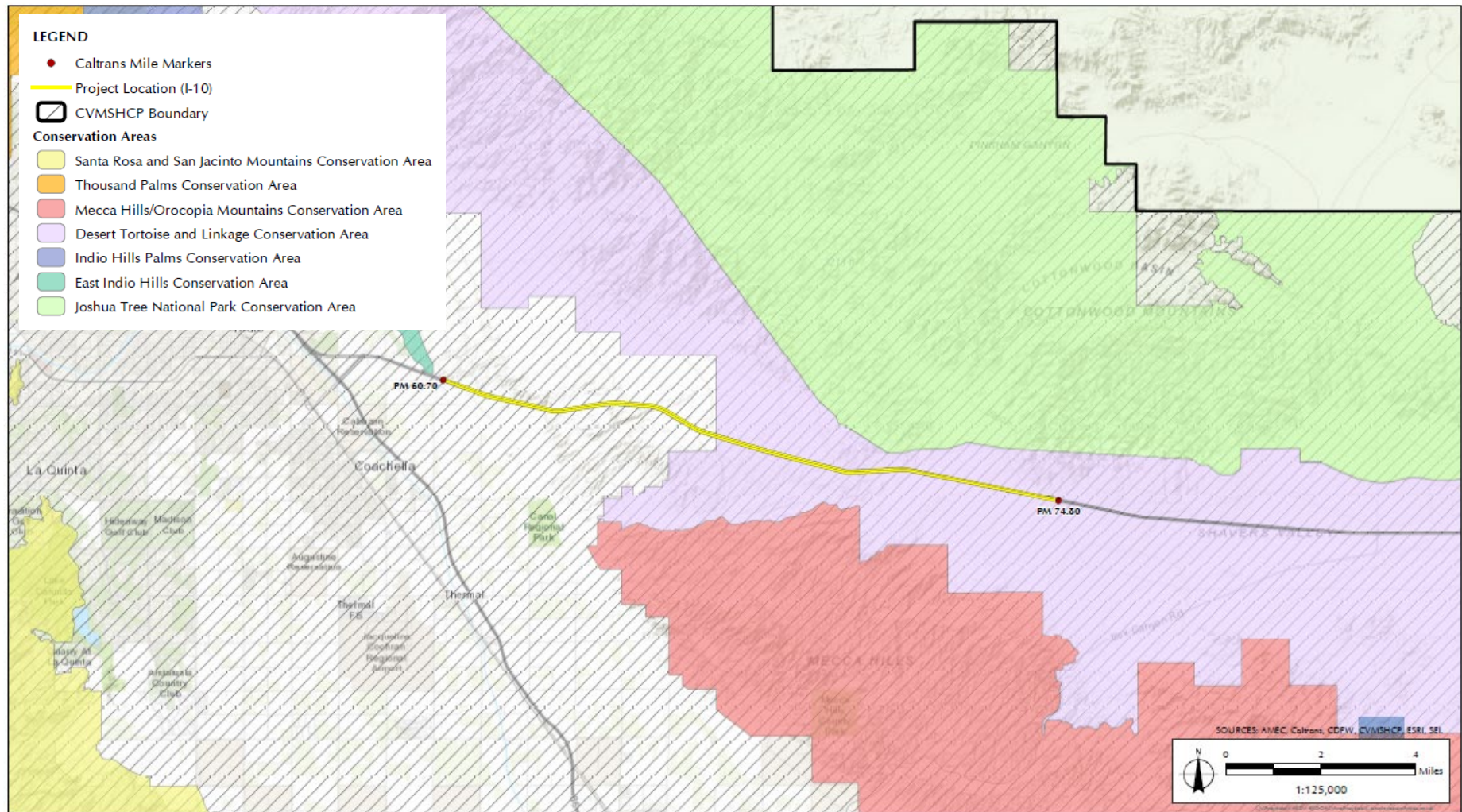
Goals in the 2016-2040 RTP include:

- Maximize mobility and accessibility for all people and goods in the region;
- Ensure travel safety and reliability for all people and goods in the region;
- Preserve and ensure a sustainable regional transportation system;
- Maximize the productivity of our transportation system;
- Protect the environment, improve air quality, and promote energy efficiency; and
- Encourage land use and growth patterns that complement our transportation investments.

### **Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)**

The CVMSHCP (CVMSHCP 2018), developed in 1996 by the Bureau of Land Management (BLM), nine Coachella Valley cities, Riverside County, and state and other federal agencies, provides a regional vision for balanced growth that will help conserve the Coachella Valley's natural heritage while also building a strong economy that is vital to the future of the Valley. The Plan was developed in tandem with the Coachella Valley region of the CDCA to provide a framework for implementation actions supporting landscape-level approach to conservation. The CVMSHCP protects 240,000 acres of open space and 27 plant and animal species. By providing comprehensive compliance with federal and state endangered species laws, the CVMSHCP safeguards the desert's natural heritage for future generations and it allows for more timely construction of roads and other infrastructure that is essential to improving quality of life in the Coachella Valley.

As shown in figure 2.4, the project is entirely located within the CVMSHCP with the eastern portion of the project from PM 67.4-74.30 located within the Desert Tortoise and Linkage Conservation Area and the western portion of the project from PM 60.9-67.4 located outside of any CVMSHCP Conservation Areas.



**Figure 2.4.** Coachella Valley Multiple Species Habitat Conservation Plan

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### 2.1.1.2 Environmental Consequences

#### No-Build Alternative

The No-Build Alternative would not support the goals of the RTIP or RTP or be consistent with local policies. The 2016-2040 RTP recognizes that a significant number of our roadways and bridges are in a state of disrepair due to years of underinvestment<sup>2</sup>. The region's aging transportation system is encountering diminishing revenues with increasing preservation costs and the delay in pavement maintenance would lead to deficient road pavement conditions<sup>3</sup>. The pavement along this stretch of the I-10 is in need of maintenance and rehabilitation and the No-build Alternative will not address this need. The No-build Alternative would not impact existing or future land use in the project vicinity, but it would not be consistent with the goals and policies of the local and regional plans.

#### Build Alternative

The proposed project is located within the CVMSHCP. Caltrans, as a signatory to the CVMSHCP, is obligated through CVMSHCP Section 6.6.2 to contribute funds to CVCC for the acquisition, management, and monitoring of conservation lands. Additionally, Caltrans would comply with the applicable avoidance and minimization measures described in Covered Activities Section 6.6.2 of the CVMSHCP. In accordance with BIO-24 avoidance and minimization measure, Caltrans will consult with the Coachella Valley Conservation Commission (CVCC) to determine project coverage and compliance needs.

The Build Alternative would rehabilitate an existing section of one of the main transportation corridors in the western region of the United States. This alternative is consistent with the goals and policies of local, regional, and state transportation plans and policies. Rehabilitating the mainline pavement, shoulders, and ramps would allow for reliable travel for all goods and people in the region. There will be no conflict with existing land uses due to the scope of activities of the project. No acquisition of new property would be required since all proposed construction would occur within the exiting Caltrans right of way, primarily towards the median. Furthermore, the project would not improve access; which has the potential to cause land use changes. Therefore, the Build Alternative would not result in land use impacts to the area.

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

**BIO-24:** The project is entirely located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with the eastern portion of the project, from PM 67.4 to PM 74.30, located within the Desert Tortoise Linkage Conservation Area and the western portion of the project, from PM 60.9 to PM 67.4 located outside of any CVMSHCP Conservation Areas. Caltrans will coordinate with the Coachella Valley Conservation Commission (CVCC) for the acquisition of conservation lands, and management and monitoring of these lands. Additionally, Caltrans will comply with the

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<sup>2</sup> SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, RTP/SCS Adopted April 2012, Executive Summary, Page 4, accessed June 4, 2018.

<sup>3</sup> SCAG 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, RTP/SCS Adopted April 2012, Chapter 1, Page 26, System Preservation, accessed June 4, 2018.

applicable avoidance and minimization measures described in the CVMSHCP Section 4.4 for Covered Activities.

## **2.1.2 Parks and Recreational Facilities**

### **2.1.2.1 Regulatory Setting**

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

### **2.1.2.2 Affected Environment**

Joshua Tree National Park is located approximately 0.75 mile north of the project site at PM R71.3. Joshua Tree National Park is approximately 800,000 acres. About 2.8 million visitors come to the park each year to enjoy activities such as hiking, camping, photography, rock climbing, and simply enjoying the serene desert scenery (NPS 2018). The nearest entrance to the park is located about 7.2 miles east of the project site, with Cottonwood Visitor Center being located near this entrance. The Joshua Tree South Entrance and Cottonwood Visitor Center are open year-round.

Pinkham Canyon-Thermal Canyon Road is located in Joshua Tree National Park. The 4-wheel drive road begins south of Cottonwood Visitor Center, travels along Smoke Tree Wash, then cuts down Pinkham Canyon, exiting onto a service road that connects to I-10 (NPS 2018). The service road that connects Pinkham Canyon-Thermal Canyon Road connects to a service road that is located north of I-10, near the end of the project limits.

Mecca Hills Wilderness is also located near the project; the distance from the project site to the nearest point of park is about 0.60 miles. Mecca Hills Wilderness consists of 26,242 acres managed by the Bureau of Land Management (BLM). This designated Wilderness Area offers the opportunity for challenging recreational activities and solitude (BLM 2019).

The distance between the project site and Mecca Hills Wilderness, measured is 0.60 miles (measured at nearest points nearest point)

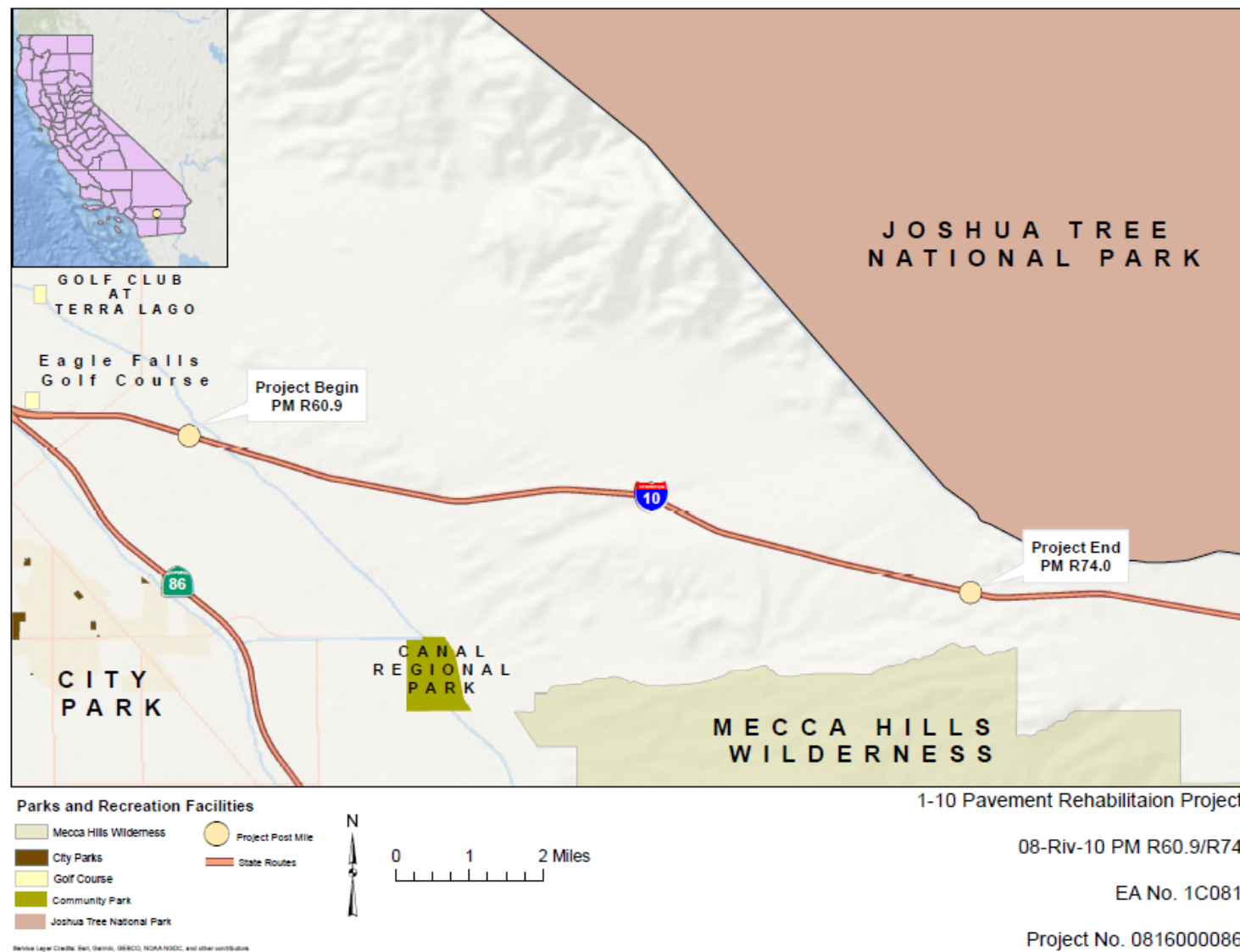
Joshua Tree National Park and Mecca Hills Wilderness are Section 4(f) resources; however, they are not located within 0.5-mile of the project site. There will be no use of these resources. During construction, grading would be limited to five feet from edge of shoulder. The nearest recreational facilities were considered as listed in Table 2.3 and depicted in Figure 2.5.

**Table 2.3. Parks and Recreational Areas Near Project Limits**

Jurisdiction	Name	Location	Approximate Distance from the Project	Type	Amenities
National Park Service	Joshua Tree National Park	74485 National Park Drive Twentynine Palms, CA 92277-3597	0.75 miles from nearest point of park, but 7.2 miles from an entrance to park.	National Park	800,000 acres with approximately 2.8 million visitors per year. Includes hiking, camping, rock climbing, etc.
Bureau of Land Management	Mecca Hills Wilderness	1201 Bird Center Drive, Palm Springs, CA 92262	0.60 miles from nearest point of park, but four miles from nearest access.	Designated Wilderness Area	Campground, wildlife viewing, prehistoric Native American petroglyphs, hiking, etc.
Riverside County	Canal Regional Park	89452 54 <sup>th</sup> Ave, Thermal, CA 92274	3.6 miles	Regional Park	
Private Land	Eagle Falls Golf Course	84-245 Indio Springs Dr, Indio, CA 92203	1.8 miles	Golf Course	Resort and Golf Course.
Private Land	Golf Club at Terra Lago	84-000 Terra Lago Pkwy, Indio, CA 92203	2.5 miles	Golf Course	Resort and Golf Course.
Source: BLM, Google Maps, and NPS.					

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**Figure 2.5. Parks and Recreation Areas**

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### 2.1.2.3 Environmental Consequences

After scoping of a three-mile radius around the project limits was performed, it was determined that Joshua Tree National Park is located 0.75 miles from nearest point of the project location and 7.2 miles from the South Entrance to the park. In addition, Mecca Hills Wilderness is located 0.60 miles from the nearest point of the project location. This project is located within the vicinity of a facility that is protected by the Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409). The Park Preservation Act prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land. The project, however, is located within existing Right of Way (ROW), and will not require acquisition of park property. Therefore, there will be no permanent impact to the facility as protected by the Park Preservation Act.

To handle traffic during construction, a temporary detour and crossovers will be constructed by widening within the median. Aside from traffic handling, the detour lanes would also ensure that park visitors can have continued access to and from the park. In addition, access to the I-10 from Thermal Canyon Road, will remain in place during construction. Thus, there would be no potential for temporary impacts to the park, and therefore no use of the Section 4(f) Resources.

A Traffic Management Plan (TMP), as required by the avoidance and minimization measures, would also be implemented during the project.

### 2.1.2.4 Avoidance, Minimization, and Mitigation

To avoid and/or minimize temporary impacts to nearby recreational areas, the following will be implemented.

**T-1:** Prepare a detailed TMP during the design phase with the following elements as major components:

- Public Awareness Campaign (PAC) particularly related to the scheduling of construction activities and their impacts on the traveling public and surrounding community.
- Construction Zone Enforcement Enhancement Program (COZEEP).
- Utilization of Portable Changeable Message Signs (PCMS).
- Advance information signing pertaining to date, time, and duration of intersection closure as well as detour alternatives.

### 2.1.3 Farmlands/Timberlands

The project study area is void of timberland (as defined by Public Resources Code [PRC] Section 4526), forest land (as defined in PRC Section 12220[g]), and timberland zoned Timberland Production (as defined by Government Code Section 51104[g]). The proposed project will not impact timberland or forestry resources. This section analyzes potential impacts to farmlands only.

#### 2.1.3.1 Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 United States Code [USC] 4201-4209; and its regulations, 7 Code of Federal Regulations [CFR] Part 658) require federal agencies, such as the Federal Highway Administration (FHWA), to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act (CEQA) requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

The Conservation Element of the County General Plan provides direction regarding the conservation, development, and utilization of the County's natural resources, including soils that have the potential to be used for agriculture such as prime farmland. The Conservation Element for Agricultural land policies and statistics relevant to the proposed project are listed below.

#### 2.1.3.2 Affected Environment

Information sources used in the preparation of this section include the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program, and the DOC 2006-2008 Land Use Conversion Report (2014-2016 LUCR<sup>4</sup>). The DOC and the NRCS classify agricultural lands into four categories: prime farmlands, farmlands of statewide importance, unique farmland, and farmland of local importance (DOC 2016)<sup>5</sup>.

- *Prime farmland* is rural land with the best combination of physical and soil characteristics for the production of crops and was used for irrigated agricultural production at some point during the four years prior to the mapping date.
- *Unique farmland* is land other than prime farmland that has lesser quality soils that are used for the production of high-value specialty crops (e.g., citrus and nuts) and has been cropped at some time during the four years prior to mapping.

<sup>4</sup> Riverside County 2014-2016 Land Use Conversion Table, (COD), <http://www.conservation.ca.gov/dlrp/fmmp>, accessed June 2018.

<sup>5</sup> Important Farmland Mapping Categories and Soil Taxonomy Terms, DOC, [http://www.conservation.ca.gov/dlrp/fmmp/Documents/soil\\_criteria.pdf](http://www.conservation.ca.gov/dlrp/fmmp/Documents/soil_criteria.pdf), accessed June 2018.

- *Farmland of statewide importance* is land that does not qualify as prime or unique farmland and has been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- *Farmland of local importance* is defined by, and under the authority of, the Board of Supervisors of each county. San Bernardino County defines farmland of local importance as “Farmlands which include areas of soils that meet all the characteristics of Prime, Statewide, or Unique farmland and which are not irrigated.”<sup>6</sup> The definition also includes farmlands not covered by above categories but is of high economic importance to the community.

According to the 2016 California Department of Conservation Division of Land Resource Protection, Riverside County has approximately 419,835 acres of important agricultural land. Approximately 117,484 acres of prime farmland were inventoried in 2016, a decrease from 118,077 acres in 2014. 267 acres were converted for urban uses, and 183 acres were converted for other purposes.<sup>7</sup> For about 0.6 mile, in the western portion of the project, the project location is within 0.5 miles of Prime Farmland and Farmland of Local Importance (see Figure 2.6). However, the project will only grade to a maximum of five feet outside of the edge of the existing shoulder.

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<sup>6</sup> *Farmland of Local Importance*, California Department of Conservation, available at: [http://www.conservation.ca.gov/dlrp/fmmp/Documents/Local\\_definitions\\_00.pdf](http://www.conservation.ca.gov/dlrp/fmmp/Documents/Local_definitions_00.pdf). Accessed June 2018.

<sup>7</sup> 2014-2016 Land Use Conversion Table, California Department of Conservation, available at: <http://www.conservation.ca.gov/dlrp/fmmp/Pages/Riverside.aspx>. Accessed July 2018.

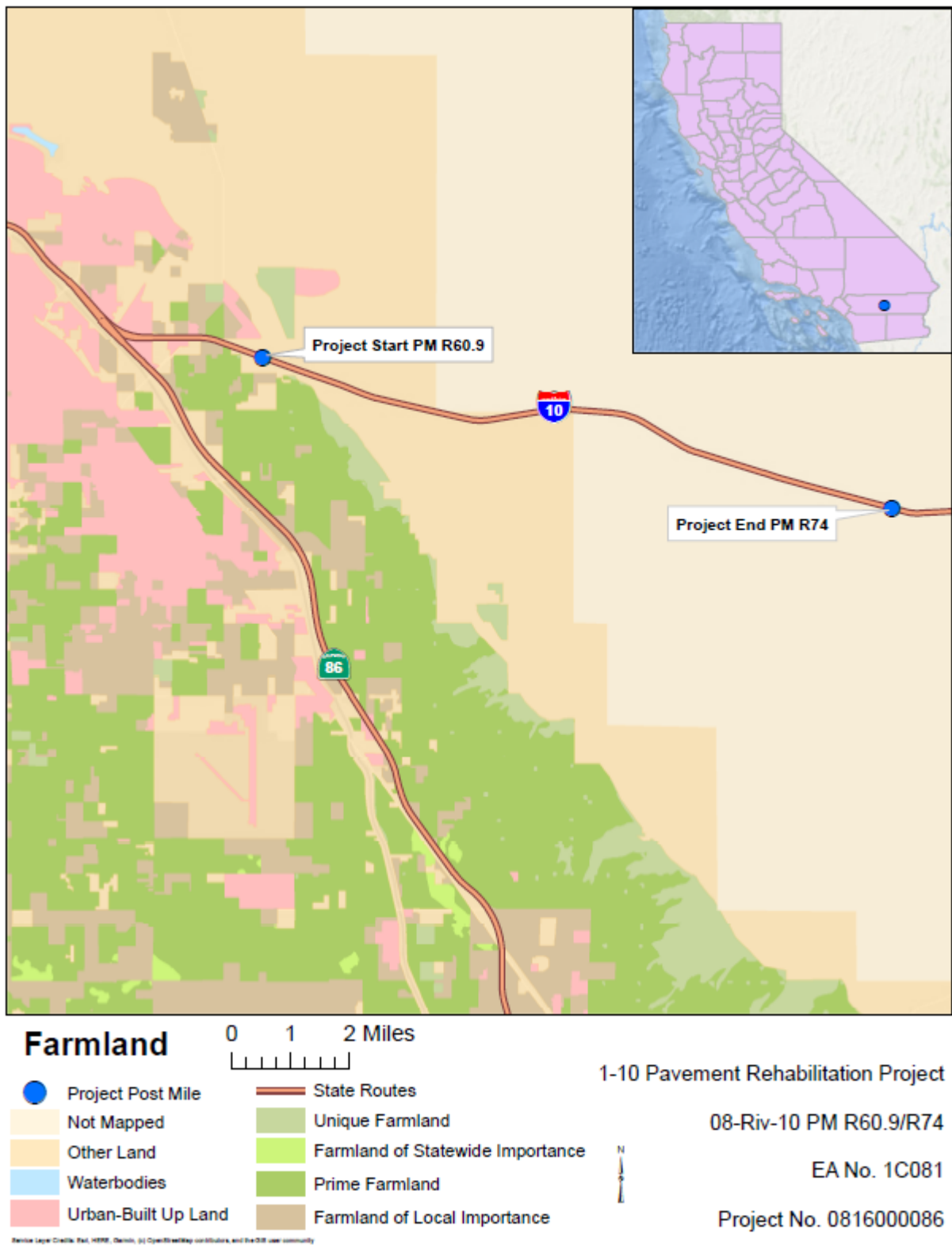


Figure 2.6. Farmland.

### 2.1.3.3 Environmental Consequences

The proposed build alternative would require no acquisition of farmland or vacant land. Although 0.6 mile, of the almost 14-mile-long project, is located near farmland, the project footprint and construction area is outside of the farmland designated area. Rehabilitating the mainline pavement, shoulders, and ramps will allow for reliable travel for all goods and people in the region. There will be no conflict with agricultural land uses or operation due to the scope of the proposed activities.

### 2.1.3.4 Avoidance, Minimization, and Mitigation

Within the project scope, there are no impacts to farmlands. Therefore, no measures are required.

## 2.1.4 Growth

### 2.1.4.1 Regulatory Setting

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

### 2.1.4.2 Affected Environment

#### First-Cut Screening

There is a continuum of transportation projects that range from those having little likelihood of growth-related impacts to those having a high likelihood of growth-related impacts. The first-cut screening is used to determine whether the potential for growth-related impacts is a project issue that needs to be evaluated in the environmental document. The first-cut screening asks the following questions to determine whether: (1) growth-related impacts as a result of the project are not reasonably foreseeable; or (2) further investigation or analysis is required.

1. *To what extent would travel times, travel cost, or accessibility to employment, shopping, or other destinations be changed? Would this change affect travel behavior, trip patterns, or the attractiveness of some areas to development over others?*

The proposed project involves rehabilitation of an existing facility. Therefore, the project does not anticipate any changes in travel times, travel cost, or accessibility to employment,

shopping, or other destinations. In addition, the project does not anticipate any affect to existing trip patterns, or the attractiveness of some areas in the vicinity to development over others.

*2. To what extent would change in accessibility affect growth or land use change - its location, rate, type, or amount?*

The proposed project does not anticipate any changes to the existing accessibility to I-10 or any surrounding areas. The project does not require any permanent right of way acquisitions since the proposed work is only to rehabilitate the existing transportation facility.

*3. To what extent would resources of concern be affected by this growth or land use change?*

The proposed rehabilitation efforts would require soil disturbance and, therefore, temporarily affect biological resources of concern. Although the project does not require acquisition of new right of way, construction activities are anticipated to require vegetation removal. For an extended discussion regarding impacts to biological resources of concern, please see Section 2.3. However, because the project would not improve accessibility, nor would it require land use changes, growth-related impacts are not reasonably foreseeable.

#### **2.1.4.3 Environmental Consequences**

Growth related impacts are not reasonably foreseeable for this project.

#### **2.1.4.4 Avoidance, Minimization, and Mitigation**

Considering the project scope and the results of the First Cut Screening; no measures are proposed since growth is not reasonably foreseeable

### **2.1.5 Community Impacts**

#### **Community Character and Cohesion**

##### **2.1.5.1 Regulatory Setting**

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project



would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

### **2.1.5.2 Affected Environment**

#### **Land Use Characteristics**

The project limits fall within the Eastern Coachella Valley Area Plan (Riverside County 2016) and the City of Coachella General Plan Update 2035 (City of Coachella 2015).

##### Eastern Coachella Valley, Riverside County

The majority of the project limits, approximately 10 miles, are within the sparsely populated area of the Eastern Coachella Valley Area. The Eastern Coachella Valley Area Plan, last updated on December 6, 2016, comes from the County of Riverside General Plan. The Eastern Coachella Valley Area Plan designates the land use space within the plan area as Open Space Rural and Conservation Habitat (see Figure 2.1). There are several identified small, unincorporated communities in this area plan: Thermal, Mecca, North Shore, Vista Santa Rosa, Valerie Jean, Oasis, Chiriaco Summit, and Indian Lands. However, the project vicinity and location lie outside of these unincorporated communities. The area plan also identifies one incorporated city, the City of Coachella. The City of Coachella has its own general plan.

##### City of Coachella

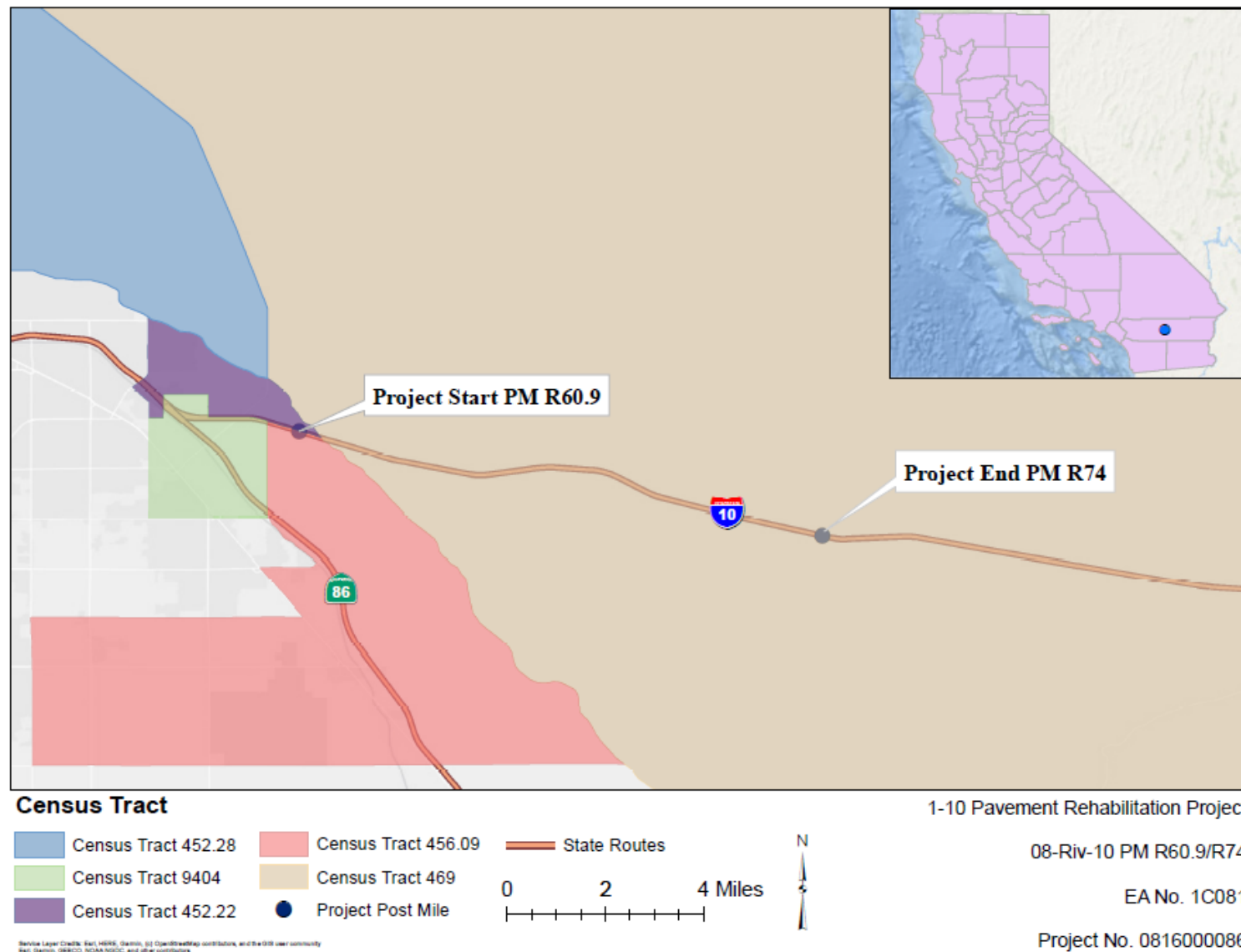
The first 3.5 miles of the project limits, beginning at the Dillon Road Interchange traveling eastbound on the I-10, fall within the City of Coachella General Plan boundary. The City of Coachella General Plan was last updated on April 22, 2015. The land use plan for this area intends to accommodate future growth while preserving unique features indigenous to the general plan boundary. The City's General Plan organizes designations into six base designations—Ranchos, Neighborhoods, Centers, Districts, Specific Plans, and Public—providing allowed land use and intensity of development, as well as each with its own general plan character designations with more detailed information on the built form and character of the uses.

In addition, the city's general plan is also subdivided into 17 subareas (see Figure 2.2). The project location is within Subarea 13 – Desert Lakes to the north and Subarea 14 – La Entrada to the south.

The Policy Direction of the general plan states that Subarea 13 shall facilitate good roadway connectivity to Dillon Road. In Subarea 13, the land designations are:

- 20 to 30 percent Open Space
- Up to 25 percent Agricultural Rancho and Open Space
- Up to 50 percent Rural Rancho
- Up to 10 percent General Neighborhood
- Up to 3 percent Suburban Retail District
- Up to 5 percent Neighborhood Center
- Up to 60 percent Resort (limited to a density of no more than 4 Dwelling Units per Acre (DU/AC)).

For Subarea 14, the vision is to develop Regional Commercial and Mixed-Use areas. The area will contain residential neighborhoods, walkable neighborhoods, retirement communities, open-space land, with the final designation being determined through the preparation of Specific Plans (City of Coachella 2015).



**Figure 2.7.** Census Tract.

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## Race and Ethnicity

The U.S. Census Bureau, in the Year 2012-2016 American Community Survey 5-Year Estimates, provides race and ethnicity data for California, Riverside County, and for the Census Tract level. The project is located within Census Tract 469.0 (see Figure 2.7).

Table 2.4 shows both race and ethnicity characteristics for California, County of Riverside, and for Census Tract 469.0. It is noted that “Hispanic” is considered an ethnic group, not a race category. Thus, if a person is identified as “Hispanic,” they must also be identified by at least one of the six race categories, not including the “Two or more races” category. The numbers provided in the “Percent” column have been rounded up to the nearest tenth, which may cause some columns to add up to a number greater than 100 percent.

Approximately 95 percent of individuals in California identify themselves in one of the six race categories listed in the table. Furthermore, 96 percent of individuals in Riverside County and 97 percent of individuals in Census Tract 469.0 identify themselves as one of the six race categories listed in the table. The remaining population in California, County of Riverside, and Census Tract 469.0 identify themselves as the category of “Two or more races.”

As the demographic data level scales down from the state to the Census Tract, the percent of individuals classified as Hispanic or Latino increases. The population in California with individuals classifying as Hispanic or Latino is estimated to be 39 percent, whereas the Riverside County estimates are higher, at 47 percent. Census Tract 469.0 estimates show that more than half, approximately 56.9 percent, of individuals classify themselves as Hispanic or Latino. Demographic data for Census Tract 469.0 shows the highest percent of individuals classified as Hispanic or Latino.

**Table 2.4. Race and Ethnicity Characteristics**

	California		Riverside County		Census Tract 469.0	
	No.	Percent	No.	Percent	No.	Percent
<b>Total:</b>	<b>38,654,206</b>	<b>100%</b>	<b>2,323,892</b>	<b>100%</b>	<b>1,632</b>	<b>100%</b>
White	23,680,584	61%	1,470,294	63%	1,048	64%
Black or African American	2,261,835	6%	145,025	6%	109	7%
American Indian and Alaska Native	285,512	1%	20,205	1%	6	0%
Asian	5,354,608	14%	143,067	6%	7	0%
Native Hawaiian and Other Pacific Islander	150,908	0%	6,915	0%	0	0%
Some other race	5,133,600	13%	436,022	19%	410	25%
Two or more races	1,787,159	5%	102,364	4%	52	3%
Ethnicity:						
Hispanic or Latino	14,903,982	39%	1,102,968	47%	929	57%
Note: Percentages may not add to 100 due to rounding.						
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, B02001 Race - Universe: Total Population.						

## Age Distribution

Based on the U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, Table 2.5 provides age distribution data for California, Riverside County, and Census Tract 469.0.

The age distribution in Table 2.5 is categorized in three age groups: School Age (0-17), Labor Force (18-54), and Retired (55-85+). The data shows that the Labor Force age group makes up the largest percentage of individuals within California, County of Riverside, and Census Tract 469.0. The percentage of individuals in the retired age group for Census Tract 469.0 is slightly higher at 31 percent compared to California and Riverside County at 25 percent and 24 percent, respectively. The age distribution data for the state, County, and Census Tract are fairly similar to each other. From the data provided, the age distribution of the three demographic data levels have a similar pattern.

**Table 2.5. Age Distribution Data for California, Riverside County, Census Tract 469.0**

Age	California		Riverside County		Census Tract 469.0	
	No.	Percent	No.	Percent	No	Percent
0-17 years	9,140,283	24%	613,547	26%	412	25%
18-54 years	20,034,903	52%	1,154,776	50%	713	44%
55-85+ years	9,479,020	25%	555,569	24%	507	31%
<b>Total</b>	<b>38,654,206</b>	<b>100%</b>	<b>2,323,892</b>	<b>100%</b>	<b>1,632</b>	<b>100%</b>
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, S0101.						

### Gender Distribution

Table 2.6 provides gender demographic information for California, County of Riverside, and Census Tract 469.0. The state and County show a similar distribution with only a 0.6 percent difference between male and females. Census Tract 469.0, however, shows a greater female population representing 54.1 percent of the overall population in the census tract. In all cases, the female population is greater than the male population, representing consistency between the three demographic data levels.

**Table 2.6. Gender Population Demographics**

	California		Riverside County		Census Tract 469.0	
	No.	Percent	No.	Percent	No.	Percent
Male:	19,200,970	49.7%	1,156,126	49.7%	749	45.9%
Female:	19,453,236	50.3%	1,167,766	50.3%	883	54.1%
<b>Total:</b>	<b>38,654,206</b>	<b>100.0%</b>	<b>2,323,892</b>	<b>100.0%</b>	<b>1,632</b>	<b>100.0%</b>
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, S0101.						

### Income Distribution

The official State of California income limits are based on the limits established by the federal Department of Housing and Urban Development (HUD). The Adopted October 3, 2017 County of Riverside General Plan Housing Element chapter (H-45)<sup>8</sup> uses five income categories that are consistent with various federal and state housing programs as shown below:

- Extremely Low <30 percent of the median income
- Very Low 31-50 percent of the median income
- Low 51-80 percent of the median income
- Moderate 80–120 percent of the median income
- Above Moderate 120+ percent of the median income

<sup>8</sup> County of Riverside General Plan, Chapter 8, Housing Element 2017-2021, Adopted October 3, 2017, Page H-45

The very low and low-income limits are the same as those used by the U.S. Department of Housing and Urban Development (HUD)<sup>9</sup> to determine eligibility for federally assisted housing programs.

Table 2.7 provides income demographics for the State of California, County of Riverside, and for Census Tract 469.0. The data indicates the household median income for the County and Census Tract are lower than the State of California. The greatest number of households of all the comparable income brackets for the State of California and the County of Riverside fall within \$50,000 and \$74,999; which the median income for the corresponding demographic area falls within. In contrast, the mean household income for Census Tract 469.0, fall within the \$25,000 to \$34,999 bracket, which is below the median income (\$40,809) for the Census Tract.

**Table 2.7. Annual Household Income (dollars)**

	California		Riverside County		Census Tract 469.0	
	No.	Percent	No.	Percent	No.	Percent
Total Households	12,807,387	100.0%	705,716	100.00%	567	99.9%
Less than \$10,000	730,021	5.7%	39,520	5.6%	51	9.0%
\$10,000 to \$14,999	627,561	4.9%	33,874	4.8%	36	6.3%
\$15,000 to \$24,999	1,165,472	9.1%	70,572	10.0%	75	13.2%
\$25,000 to \$34,999	1,114,242	8.7%	69,866	9.9%	94	16.6%
\$35,000 to \$49,999	1,511,271	11.8%	93,860	13.3%	83	14.6%
\$50,000 to \$74,999	2,113,218	16.5%	128,440	18.2%	67	11.8%
\$75,000 to \$99,999	1,549,693	12.1%	91,743	13.0%	61	10.8%
\$100,000 to \$149,999	1,946,722	15.2%	103,035	14.6%	84	14.8%
\$150,000 to \$199,999	934,939	7.3%	42,343	6.0%	16	2.8%
\$200,000 or more	1,114,242	8.7%	32,463	4.6%	0	0.0%
<b>Total Households</b>	<b>12,807,387</b>	<b>100.0%</b>	<b>705,716</b>	<b>100.00%</b>	<b>567</b>	<b>99.9%</b>
Median income (dollars)	\$ 63,783		\$ 57,972		\$ 40,809	
Note: Percentages may not add to 100 due to rounding.						
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, S1903.						

Table 2.8 shows the income limit categories in conjunction with the area median income. Because the median income of the State of California is higher than the median income for both the County of Riverside and Census Tract 469.0, the income limits are higher for all respective income categories. Thus, the household incomes under the State of California represent values that would be in a higher income limit category for Riverside County and Census Tract 469.0. For example, California's low-income limit of \$51,026 would fall within the median income limit for Riverside County and within the Above Moderate-income limit category under Census Tract 469.0. Further, the Census Tract 469.0 Moderate income of \$48,971 would fall in the Very Low to Low income categories when compared to the State of California as a whole.

<sup>9</sup> California Department of Housing and Community Development, Income Limits  
<http://www.hcd.ca.gov/grants-funding/income-limits/index.shtml>.



**Table 2.8. Calculated Income Limits**

	California	Riverside County	Census Tract 469.0
Extremely Low (<30 percent)	\$ 19,135	\$ 17,392	\$ 12,243
Very Low (31-50 percent)	\$ 31,892	\$ 28,986	\$ 20,405
Low (50-80 percent)	\$ 51,026	\$ 46,378	\$ 32,647
<b>Median</b>	<b>\$ 63,783</b>	<b>\$ 57,972</b>	<b>\$ 40,809</b>
Moderate (81-120 percent)	\$ 76,540	\$ 69,566	\$ 48,971
Note: (1) Calculated data represent the upper limit of each 'Income Limit' in reference to the area median income. (2) Median income referenced from Table 2.7 – Annual Household Income.			

### Community Services and Facilities

The project location falls within the Eastern Coachella Valley Area and the City of Coachella. Community services and facilities are provided by the County of Riverside and the City of Coachella. Police services are provided by the County of Riverside's Thermal Station, which serves communities in the eastern portion of the Coachella Valley and contracts police services for the cities of Coachella and La Quinta (Riverside County Sheriff's Department 2019).

In the City of Coachella, most of the residential areas are modest. Many of the City's neighborhoods suffer from an incomplete transportation network (outside of the I-10), unfinished subdivisions, poor access, and limited parks and neighborhood services (City of Coachella General Plan Update 2015).

#### 2.1.5.3 Environmental Consequences

##### **No-Build Alternative**

The No-Build Alternative would not impact community cohesion or create a social impact on existing communities. There will be no changes in access to community services or facilities.

##### **Build Alternative**

The Community Impacts analysis addresses multiple topics that may be impacted by the project. Land Use and Growth are discussed in Section 2.1.1 and Section 2.1.4 of this document. Utilities and Emergency Services are discussed in Section 2.1.6. The discussion on social impacts can best be understood from the definition in the Department's Community Impact Assessment Handbook:

*Social impacts are the effects of the project that disrupt the normal daily functions of a community or neighborhood. Effects generally analyzed under the heading of social impacts include effects on community cohesion, including community facilities and services, access and circulation, and parking.*

Analyzing social impacts requires the understanding of what defines community cohesion. Community cohesion, as described in the Department's Community Impact Assessment Handbook, indicates that:

*Community cohesion is the degree to which residents have a 'sense of belonging' to their neighborhood, a level of commitment, or a strong attachment to neighbors, groups, and institutions, usually a result of continued association over time. Cohesion refers to the degree of interaction among the individuals, groups, and institutions that make up a community. Cohesive communities are associated with specific social characteristics which may include long average lengths of residency, frequent personal contact, ethnic homogeneity, high levels of community activity, and shared goals.*

The proposed project and all improvements will be completed within the existing Caltrans ROW. Therefore, temporary easements for construction and property acquisitions will not be needed for this project. To handle traffic during project construction, a temporary detour will be constructed in the eastbound and westbound directions. The existing sparse communities outside and adjacent to the project limits would not be re-directed nor have limited access to highway I-10, facilities, and community services. The project will not decrease public access nor separate residences from community services or facilities. No impacts to community facilities or community services, that would affect community cohesion, would occur.

The entirety of the project is within Census Tract 469.0. Since all construction activities would occur within the existing ROW, there are no proposed property acquisitions. Therefore, there will be no impacts to nearby neighborhoods. The remoteness of the project location and the ample Open-Space and Rural land use designations in the area provide that there are no existing communities or neighborhoods that will be impacted in regard to community character and cohesion.

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

The proposed project would not result in any social impacts affecting community character or cohesion. No avoidance, minimization, and/or mitigation measures are proposed.

### **2.1.6 Environmental Justice**

#### **2.1.6.1 Regulatory Setting**

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President William J. Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services (HHS) poverty guidelines. For 2016, this was \$24,300 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. The Department's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

### 2.1.6.2 Affected Environment

The HHS 2016 poverty guidelines, versus the 2018 numbers, are used for a better comparison with the most recent Census data available. The most recent Census numbers available are the 2016 American Community Survey (ACS) 5-Year Estimates. Using the Census income estimates, approximately 28.5% of the households in Tract 469.0 lived below the HHS poverty guideline of \$24,300 in 2016 (see Table 2.9). It is important to note that the HHS guideline is for a family of four; whereas the data presented in Table 2.9 is for households regardless of size.

**Table 2.9. Median Household Income Estimates for Low-Income Populations**

	California		Riverside County		Census Tract 469.0	
	No.	Percent	No.	Percent	No.	Percent
Total Households	12,807,387	100.0%	705,716	100.00%	567	99.9%
Less than \$10,000	730,021	5.7%	39,520	5.6%	51	9.0%
\$10,000 to \$14,999	627,561	4.9%	33,874	4.8%	36	6.3%
\$15,000 to \$24,999	1,165,472	9.1%	70,572	10.0%	75	13.2%
<b>Total Households</b>	<b>2,523,054</b>	<b>19.7%</b>	<b>143,966</b>	<b>20.4%</b>	<b>162</b>	<b>28.5%</b>
Median income (dollars)	\$ 63,783		\$ 57,972		\$ 40,809	
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, S1903.						

As shown in Table 2.10, the average household size in the tract encompassing the project area is 2.83; which is close to the average household size in the state, but lower than the County average. According to the Census Bureau, the percent of those living below the poverty level in the project area, is 26.2%; which is substantially higher than the percent of those living under the poverty level in the state and county where the project is located.

**Table 2.10. Average Household Size & Percent Below Poverty**

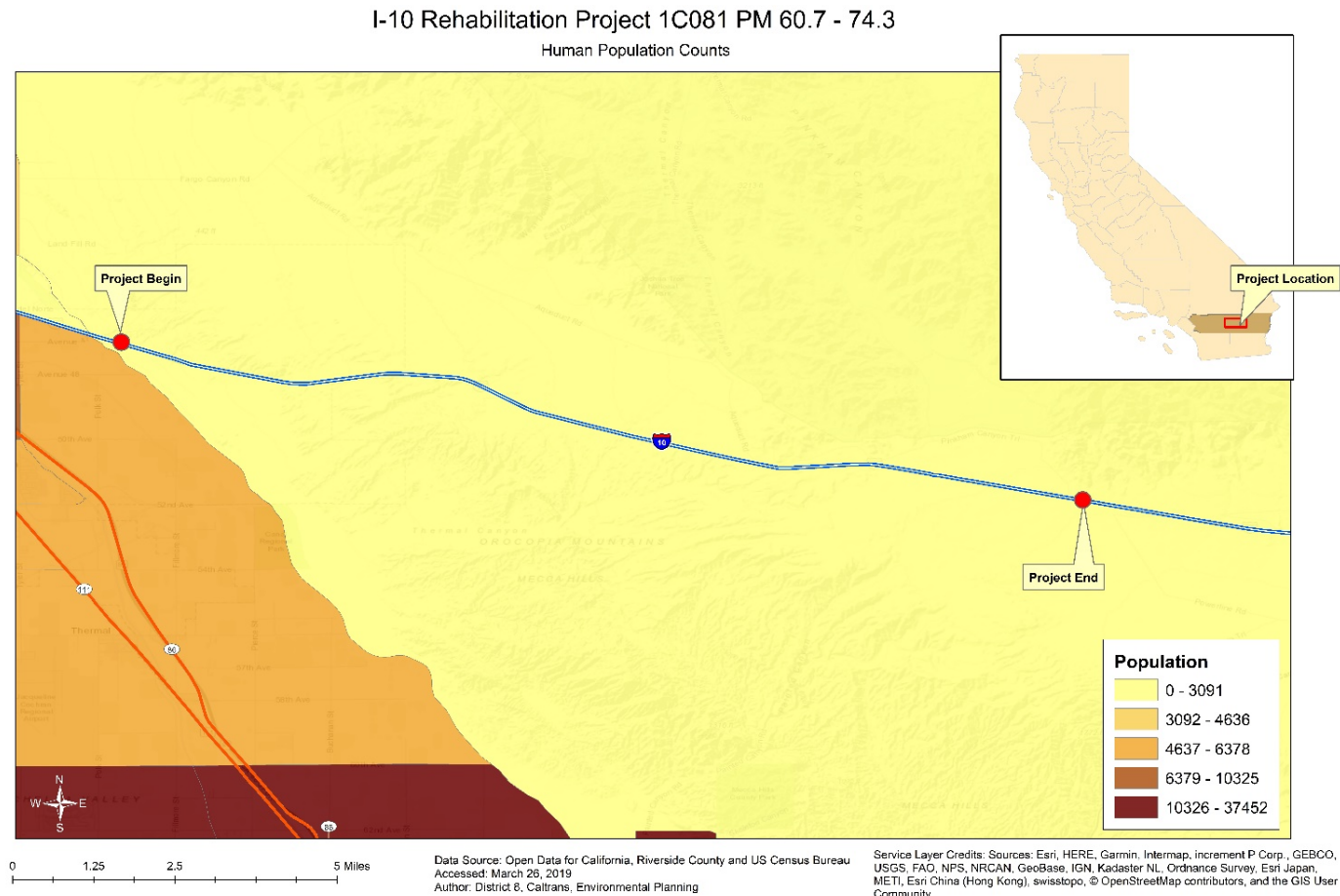
	Median Income	Average Household Size	Percent Below Poverty Level
California	\$ 63,783	2.95	15.8%
Riverside County	\$57,972	3.25	16.5%
Census Tract 469.0	\$ 40,809	2.83	26.2%
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates, Tables S1903, S1101, and S1701.			

Regarding race and ethnicity, Table 2.4 shows that 64% of the residents within Tract 469.0 are White; with 25% of the total population identifying as being of Some Other Race. Ethnically, 57% of the population is Hispanic or Latino; which is substantially higher than the county's 47% and the state's 39%.

### 2.1.6.3 Environmental Consequences

Although the project area is within a Census tract containing a majority ethnic population (Hispanic or Latino) and a high percentage of that population living below the Census Bureau's poverty threshold, neither is concentrated near the project footprint. As noted in section 2.1.1,

Land Use, properties surrounding the project are generally undeveloped. Figure 2.8 depicts population concentration in Tract 469.0; which confirms these environmental justice populations (as defined under Executive Order 12898) are not close to the project limits and therefore would not be impacted.



**Figure 2.8. Human Population Counts**

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

Based on the above discussion and analysis, the Build Alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898. No further environmental justice analysis is required.

No measures are proposed because the proposed project would not cause disproportionately high and adverse effects on any minority or low-income populations.

## **2.1.7 Utilities/Emergency Services**

### **2.1.7.1 Affected Environment**

#### **Utilities**

There are two (2) existing utilities within the project limits, namely, Southern California Edison (SCE) overhead electric and General Telephone Company (GTE) telephone lines. These utilities would not require relocation.

#### **Emergency Services**

##### *California Highway Patrol*

The California Highway Patrol (CHP) ensures safety and provides public services to those who use the State Highway System. The CHP also assists local government during emergencies when requested. The nearest CHP station is the Indio CHP station, located at 79650 Varner Road in the City of Indio, approximately eight miles west of the project area. This office patrols I-10, and State Routes 62, 86, and 177, as well as several unincorporated areas in between (*California Highway Patrol*). There are many cities in its jurisdiction, including the City of Coachella. The CHP has mutual assistance agreements with all local and state emergency, fire, and ambulance services.

##### *Riverside County Sheriff's Department*

The Riverside County Sheriff's Department (RCSD) Thermal Station, located at 86625 Airport Blvd. in the city of Thermal, is also responsible for providing law enforcement to the study area. The Thermal Station provides service to the eastern half of the Coachella Valley, including several unincorporated areas.

##### *Riverside County Fire Department*

The Riverside County Fire Department (RCFD) is responsible for fire protection within the study area. The nearest fire stations to the project site is the Terra Lago Station 87, located at 42900 Fold Center Parkway in the City of Indio. Station 79, Coachella, is also near the project site and provides services to Coachella residents.

##### *Hospitals*

John F. Kennedy (JFK) Memorial Hospital, located in the City of Indio, is the closest hospital to the project study area. JFK Memorial Hospital is located at 47111 Monroe Street in the city of Indio. JFK Memorial Hospital is a 145-bed acute-care hospital and is part of Tenet Healthcare California (Desert Care Network 2018).

**Table 2.11. Emergency Service Providers**

<b>Facility</b>	<b>Address</b>	<b>Distance from Project Area</b>
<b>Fire</b>		
Riverside County Fire Department Station 87	42900 Golf Center Parkway, Indio, CA 92201	3.8 miles
Riverside County Fire Department Station 79	1377 6 <sup>th</sup> Street, Coachella, CA 92236	2.9 miles
<b>Police</b>		
California Highway Patrol	79650 Varner Road, Indio, CA 92203	8.10 miles
Riverside County Sheriff – Coroner Department, Thermal Station	86625 Airport Blvd, Thermal, CA 92274	4.77 miles
<b>Hospitals</b>		
John F. Kennedy Memorial Hospital	47111 Monroe St., Indio, CA 92201	5.35 miles

### 2.1.7.2 Environmental Consequences

#### Permanent Impacts

##### **No-Build Alternative**

The No-Build Alternative would not involve any modifications to the current highway or surrounding roadways. Due to the absence of these improvements to this stretch of I-10, safety and mobility for the traveling public would not be improved; therefore, potential benefits to emergency response services associated with access and circulation improvements would not occur. The absence of benefits under the No-Build Alternative, however, would not constitute an adverse impact on community facilities and/or services. No long-term impacts to utilities are anticipated under the No-Build Alternative.

##### **Build Alternative**

Under this alternative utility relocations are not anticipated. Therefore, no permanent impacts to utilities are expected. The Utility Notification Center would be contacted before beginning any excavation to prevent damage to underground facilities, service interruptions, and bodily injury.

Safety and mobility to the traveling public, including to emergency service vehicles, would be enhanced due to the upgrade of guardrail, bridge rails, and drainage facilities.

Alternative 2 would not involve construction of any habitable structures, nor would it increase population growth in the project area. Therefore, no impacts would occur as there would be no demand for new or expanded emergency facilities or services.

#### Temporary Impacts

##### **No-Build Alternative**

This alternative would not involve construction activities, therefore temporary, adverse impacts on community facilities and services are not anticipated.

### **Build Alternative**

Although limited, due to the rural setting, construction activities would result in temporary, localized, site-specific disruptions to the utilities and emergency services in the project area. These disruptions would be primarily related to construction-related traffic changes from trucks and equipment. In addition, non-fire-related medical emergencies could temporarily increase with the presence of construction workers and heavy machinery during construction of the project. A Construction Management Plan and Transportation Management Plan (TMP) would be prepared for the project and include measures to minimize construction-period traffic and access/circulation impacts.

To minimize construction-related impacts, two (2) detour lanes would be constructed. The detour lanes would be installed prior to rehabilitation activities of the existing system.

The project construction activities would be temporary and would be implemented in a manner that minimizes the effects on utilities and emergency services, no adverse effect is expected to result.

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

Potential temporary impacts related to emergency services during the construction period would be minimized through the implementation of a TMP required by Measure T-1, which will detail efforts to minimize any temporary traffic disruptions for emergency services.

**T-1:** Prepare a detailed TMP during the design phase with the following elements as major components:

- Public Awareness Campaign (PAC) particularly related to the scheduling of construction activities and their impacts on the traveling public and surrounding community.
- Construction Zone Enforcement Enhancement Program (COZEEP).
- Utilization of Portable Changeable Message Signs (PCMS).
- Advance information signing pertaining to date, time, and duration of intersection closure as well as detour alternatives.

### **2.1.8 Traffic and Transportation/Pedestrian and Bicycle Facilities**

#### **2.1.8.1 Regulatory Setting**

The Department, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all Federal-aid projects that include pedestrian facilities. When current or anticipated

pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to federal-aid projects, including Transportation Enhancement Activities.

### 2.1.8.2 Affected Environment

I-10 is a major freeway that begins at State Route 1 (SR-1) in the city of Santa Monica in Los Angeles County. Crossing the United States, I-10 terminates on the East Coast in the state of Florida. In District 8, I-10 is 194.8 miles long. Beginning as a ten-lane freeway at the San Bernardino/Los Angeles County Line, it traverses easterly through cities and terminates at the Arizona/California State Line. Within the project limits, I-10 is a four-lane divided highway and serves as a major corridor for commuters and goods movement.

According to the Caltrans Traffic Accident Surveillance and Analysis System (TASAS), Traffic Selective Accident Retrieval (TSAR), and Selective Accident Rate Calculation, the three-year traffic accident history for this eastbound segment of I-10 resulted in the actual fatal, fatal plus injury, and total rate higher than the statewide average. For the westbound segment the actual fatal rate is higher than the statewide average, fatal plus injury and total rate are lower than the statewide average; the major types of collisions are Hit-Object, Rear-End and Sideswipe.

The existing average daily traffic (ADT) and design hour volumes (DHV), as well as forecasted design hour volumes have been developed and analyzed to assess existing operating conditions and the impacts of the proposed improvements. Existing (2015) and forecasted (2021, 2041, and 2061) traffic data on I-10, within the project limits, are provided in Table 2.12. The average daily traffic is expected to increase by over 95% by 2066.

**Table 2.12. Existing and Forecasted Traffic**

Years	2020 (Existing)	2026 (Opening)	2046 20-Year)	2066 (40-Year)
Annual Average Daily Traffic (AADT)	28,900	32,100	45,300	59,700
2-way Peak Hour Volume (PHV)	3,700	4,110	5,790	7,630
One-way PHV	2,000	2,220	3,130	4,120
Directional Split	54%	54%	54%	54%
Truck % in AADT	51%	51%	51%	51%
Truck % in PHV	30%	30%	30%	30%

There are no pedestrian facilities in this segment of I-10. Within the project limits, bicycles are allowed on the shoulders. However, there are no designated bike trails in the project area.



### 2.1.8.3 Environmental Consequences

#### ***Permanent Impacts***

The existing two-lane configuration in each direction will remain. Proposed rehabilitation would not change existing bicycle access. Rumble strips will be installed just outside the travel lanes, but a minimum of four feet within the shoulder will allow for bicycles.

Collision Analysis was performed for this project. During the analysis, it was determined that the major types of collisions on this stretch of the I-10 are Hit-Object, Rear-End and Sideswipe. A reduction to the number of Sideswipe and Rear-End collisions on the eastbound is anticipated from the constructing a truck climbing lane on the eastbound. In addition, the Clear Recovery Zone (CRZ) would improve by shifting the mainline three feet to the left and re-grading the median slopes to 4:1 or flatter. It's anticipated that the severity and number of these types of collisions would be reduced.

#### ***Temporary Impacts***

Potential temporary impacts related to safety and traffic operations during construction may occur. To minimize impacts during construction, one detour lane along the inside shoulder of both the eastbound and westbound directions would be installed prior to rehabilitation of the mainline pavement. The full two-lane facility, in either direction, would be closed to the public during the rehabilitation activities and traffic shifted to one or both detour lanes.

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

Potential temporary impacts related to safety and traffic operations during the construction period would be minimized through the implementation of a Transportation Management Plan (TMP) and a staging area plan; which would detail efforts to minimize any temporary traffic disruption to drivers.

**T-1:** Prepare a detailed TMP during the design phase with the following elements as major components:

- Public Awareness Campaign (PAC) particularly related to the scheduling of construction activities and their impacts on the traveling public and surrounding community.
- Construction Zone Enforcement Enhancement Program (COZEEP).
- Utilization of Portable Changeable Message Signs (PCMS).
- Advance information signing pertaining to date, time, and duration of intersection closure as well as detour alternatives.

**T-2:** Prior to construction start, prepare a staging and storage area plan and submit to Environmental for review and approval

## 2.1.9 Visual/Aesthetics

### 2.1.9.1 Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the Federal Highway Administration (FHWA), in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities” (CA Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible, and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

### 2.1.9.2 Affected Environment

The Visual and Aesthetics section was synthesized from the Visual Impact Assessment (VIA) prepared for the proposed project (Caltrans 2019k).

The project site is a 13.6-mile stretch in the Colorado Desert section of the Sonoran Desert in California. The landscape at the site is characterized mostly by flat, open land with sparse vegetation, including creosote bush, tamarisk, and palo verde. The land within the project corridor is primarily rural. Remote mountain ranges are visible to the north and south from the I-10, however, the project is not within a designated State Scenic Highway.

Viewer groups of the proposed project area are neighbors (people with views to the road) and highway users (people with views from the road). Views of the project area are available to those that live, work, or pass through the area. The project area is a sparsely populated area, with highway users being the primary viewer group.

### 2.1.9.3 Environmental Consequences

#### Permanent Impacts

##### **No-Build Alternative**

The existing facility would remain as is and no soil or vegetation disturbance would occur. The No-Build Alternative, however, would not preclude Caltrans from engaging in maintenance activities or implementation of other smaller rehabilitation projects, as necessary.

##### **Build Alternative**

This alternative involves grading on the outside shoulders and on the median. The project proposes temporary detour lanes within the median. Pavement for the detour lanes would remain after the completion of the project. This additional pavement changes traveler's view from an earthen median to an enlarged AC pavement median. The visual impacts resulting from the additional pavement would be low. Also, the visual impact from widening the bridges would be low. The bridges are typically not seen by neighbors or highway users, due to the mountainous terrain and distance from viewer groups.

Under the Build Alternative, the visual character will be compatible with the existing visual character because the project involves rehabilitating pavement in an already existing facility and the widening will occur within the median; which does not increase the overall width of the corridor. Proposed materials for the rehabilitation and bridge widening will match those of the existing facility, thus providing a compatible visual character with that of the existing character.

The visual quality of the existing corridor will not be altered by the proposed project. The alignment and elevation of the I-10 will remain the same and will not change the current views of the traveler. Nor would it affect the views of neighbors due to the extensive distance from the facility. Introduction of new elements has been minimized and limited to those necessary to meet the project's purpose.

### **Temporary Impacts**

#### ***No-Build Alternative***

There would be no visual impacts associated with the No-Build Alternative because there would be no construction activities associated with this project. Therefore, the No-Build Alternative would result in no temporary visual effects.

#### ***Build Alternative***

Potential temporary visual impacts would result from earth moving activities, limited removal of vegetation, and other construction activities (e.g., staging/stockpiling construction materials, the presence of construction equipment, and temporary traffic barricades). Construction activities would include grading work, bridge work, road widening, grinding, other routine construction activities, and truck shipments. The resulting temporary impact would have no adverse effect to the viewers because the proposed project location is within a sparsely populated area. There are no incorporated cities along the highway, therefore, viewer exposure and viewer sensitivity is low.

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

The proposed project would not adversely affect the visual setting and therefore, would not require the implementation of any avoidance or minimization measures. However, BIO-17 for Biological Resources, would restore disturbed vegetation.

**BIO-17: Hydroseeding.** After completion of detour-lane construction, disturbed soil will be hydroseeded with a native-plant seed mix to restore the PIA.

## 2.1.10 Cultural Resources

### 2.1.10.1 Regulatory Setting

The term “cultural resources,” as used in this document, refers to the “built environment” (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including “historic properties,” “historic sites,” “historical resources,” and “tribal cultural resources.” Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing in the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA’s responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term “tribal cultural resources” to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU)<sup>10</sup> between the Department and SHPO,

<sup>10</sup> The MOU is located on the SER at [http://www.dot.ca.gov/ser/vol2/5024mou\\_15.pdf](http://www.dot.ca.gov/ser/vol2/5024mou_15.pdf)

effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

### **2.1.10.2 Affected Environment**

Information from this section was drawn from the Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR) and the Finding of Effect (FOE) documents approved for the project by Caltrans in April 2019. Caltrans uses a single process to fulfill both its NHPA Section 106, PRC 5024 and CEQA responsibilities.

The standard industry practices were utilized to draft and complete studies regarding the cultural resources within the Project area, and to assess the effects of the Proposed Undertaking on these resources. The standard industry studies and consultation completed for this Undertaking (EA: 1C081) included: the delineation of the Area of Potential Effects (APE); A records search of the Project area and one half mile radius around the Project area at the Eastern Information Center (EIC) University of California, Riverside (September 2018); an intensive pedestrian survey which encompassed the entire APE and Caltrans right of way (September 2018 and October 2018); a Historic Property Survey Report (HPSR) for the Blythe Pavement Rehabilitation Project (March 2019); an Archaeological Survey Report (ASR) for the Blythe Pavement Rehabilitation Project (March 2019); a Finding of Effect (FOE) for the Blythe Pavement Rehabilitation Project (March 2019); and consultation with associated Native American Tribes (Ongoing), Native American Heritage Commission (NAHC) (March 2018 ), Caltrans Cultural Studies Office (CSO) (September 2018), and the State Historic Preservation Office (SHPO)(April 2019).

Additional sources consulted during the records search include the National Register of Historic Places (NRHP); California Register of Historic Resources (CRHR); CHRIS; California Inventory of Historic Resources; California Points of Historical Interest; California Historic Landmarks; published literature, and historical topographic maps and aerial photographs depicting various time periods in Coachella Valley, and Shaver's Valley.

### **Area of Potential Effects (APE)**

In accordance with Section 106 PA Stipulation VIII.A, the Area of Potential Effects (APE) for the project was established in consultation with Caltrans' Co-Principal Investigator-Prehistoric Archaeology, and the Project Manager, on February 14, 2019.

The APE was established to include all direct /indirect impacts within the project's horizontal and vertical construction footprint. The projected construction foot print length consists of the proposed work between PM R60.7 to PM R74.3 totaling 13.6 miles, as described in the Environmental Study Request (ESR). The width of the APE fluctuates between 30 to 50 feet from the edge of pavement, and the entire median throughout the length of the Project. The vertical component reaches down between 2 to 12 inches below ground level, for pavement replacement and a maximum depth of 3.5 feet below grade in areas where guardrail will be replaced. The APE extends a maximum 2.5 feet above grade for replaced guard railing, and 4 inches above grade for pavement replacement. It is important to note that new guard rail posts will be placed in the same post holes previously excavated during the original guard rail installation. The project will take place within an existing transportation corridor, as such, extension of the APE, to account for indirect effects, was not warranted.

## Consultation Efforts

After a review of the Caltrans Cultural Resource Database (CCRD), previous studies, and considering that the project is essentially a maintenance project through a well-established transportation corridor within Caltrans' R/W, it was determined that consultation with Local Government, Local Historical Society/Historic Preservation Groups, and Public Information Meetings were not warranted. However, consultation with associated/interested tribal groups has occurred and is ongoing.

A request was made to the Native American Heritage Commission (NAHC) for a Sacred Land File (SLF) search on March 29, 2018. The NAHC responded on March 30, 2018, with negative SLF results, and provided a Native American contact list. Consultation with the District Native American Coordinator (DNAC) further truncated the contact list, as such the following Native American tribes were contacted: Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Morongo Band of Mission Indians, 29 Palms Band of Mission Indians, Ramona Band of Cahuilla Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, and Torres-Martinez Desert Cahuilla Indians.

While Native American consultation is an ongoing process throughout the life of the project, there was no new information obtained from the consulting tribes that was not already identified during the study. Several tribes requested the documentation generated by the study and or Tribal Monitoring during ground disturbing activities. Tribal monitoring is supported by the current study at one location; the ESA /AMA. Interested tribes will be contacted prior to construction of the project to confirm Tribal Monitoring.

## Identification Efforts

Record searches and background research conducted for the project identified four (4) previously recorded cultural resources within the APE. However, one was exempted under Caltrans's Section 106 PA Attachment 4-Historical Property Type 1; resulting in a total of three (3) previously recorded resources. The pedestrian survey identified eleven (11) cultural resources; however, they are all exempt from further evaluation under the Caltrans Section 106 PA. Only one property in the APE was determined by Caltrans to be a Historic Property; (CHL)-985: DTC/C-AMA.

The Desert Training Center/ California-Arizona Maneuver Area (DTC/C-AMA) is an extremely large historic landscape composed of numerous site types (i.e., maneuver areas, divisional camps, small unit training areas, air facilities and crash sites, campsites, ranges, railroad sidings and deposits, hospitals and medical facilities depots, airfields, ranges, and bivouacs) and features (i.e., anti-tank ditches, camouflage areas, foxholes, minefields, observation positions, obstacles, refuse scatter and dumps, roads, rock features, rock insignias or cairns, rock walls, slit trenches, tank tracks, and tank traps) spread out over an extensive and discontinuous 18,000 square mile area. The property was determined to be significant at a state level and is listed on the California Register of Historic Places (CHRP) as: California Historical Landmark (CHL)-985: DTC/C-AMA on June 12, 1989 but has not been formally evaluated for the NRHP. For the purposes of this project only, on September 7, 2018, the DTC/C-AMA was assumed eligible for listing on the NRHP per Stipulation VIII.C.4 of the Caltrans Section 106 PA, with significance under Criterion A for its association with World War II; Criterion B for its association with General George S. Patton; Criterion C for the design and layout of the individual camps, tactical maneuver areas, firing ranges, and other associated features; and Criterion D for the data potential of the entirety of the DTC/C-AMA. The period of significance is 1942 to 1944.

### 2.1.10.3 Environmental Consequences

Caltrans identification and effect finding efforts determined that tank tracks, contributing elements of the larger DTC/C-AMA, are located in the project APE. As part of its analysis of effects, Caltrans determined that further disturbances to the portion of the DTC/AMA (tank tracks) located within the I-10 right of way, which constitute only a small minute portion of the overall DTC/C-AMA (<0.01%), would not rise to the level of being considered an adverse effect. Caltrans, in applying the Criteria of Adverse Effect [36 Code of Federal Regulations (CFR) 800.5(a)(b)], has determined that a *Finding of No Adverse Effect (FNAE) without standard conditions* is appropriate for the proposed Undertaking. Pursuant to Section 106 PA Stipulation X.B.2, and 5024 MOU Stipulation X.B.2, the proposed finding was transmitted to SHPO for consultation and concurrence on April 8, 2019. SHPO concurrence regarding Caltrans' proposed finding was received May 16, 2019. (See SHPO response in Appendix D Required Consultation/Concurrence Documentation).

### Section 4(f) resources

The DTC/C-AMA was assumed eligible for listing on the NRHP under Criterion A, B, C, and D, and is therefore a Historic Property necessitating evaluation relative to the requirements of a Section 4(f) resource (See Appendix A). While implementation of the Undertaking will further disturb a very minute portion of the Historic Property that has experienced previous disturbances and partial destruction by preceding projects, including US-60/70 and I-10 construction, the proposed Undertaking will not adversely affect the overall integrity or NRHP/CRHR eligibility of the DTC/C-AMA as a whole. The comprehensive finding for this Undertaking as stated previously is: Finding of No Adverse Effect (FNAE) without standard conditions, thus a *de minimis* Section 4(f) impact finding regarding the use of the DTC/C-AMA is appropriate for this Undertaking (refer to Appendix A for Section 4(f) expanded information).

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

**CR-1: Inadvertent Discoveries** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

**CR-2: Discovery of Human Remains** If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner be contacted. If the remains are thought by the coroner to be Native American, the coroner shall notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, would then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Gary Jones, Principal Investigator, Prehistoric Archaeology, so that he may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

## 2.2 Physical Environment

### 2.2.1 Water Quality and Storm Water Runoff

#### 2.2.1.1 Regulatory Setting

##### **Federal Requirements: Clean Water Act**

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source<sup>11</sup> unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE’s Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and

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<sup>11</sup> A point source is any discrete conveyance such as a pipe or a man-made ditch.



whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent<sup>12</sup> standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause “significant degradation” to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

### **State Requirements: Porter-Cologne Water Quality Control Act**

California’s Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of “waste” as defined, and this definition is broader than the CWA definition of “pollutant.” Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

### **State Water Resources Control Board and Regional Water Quality Control Boards**

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are

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<sup>12</sup> The U.S. EPA defines “effluent” as “wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall.”

responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

- **National Pollutant Discharge Elimination System (NPDES) Program**

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water.” The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department’s MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department’s MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014) and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);
2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. The Department’s storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities on State highways throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

### **Construction General Permit**

Construction General Permit, Order No. 2009-0009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with the Department's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

### **Section 401 Permitting**

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

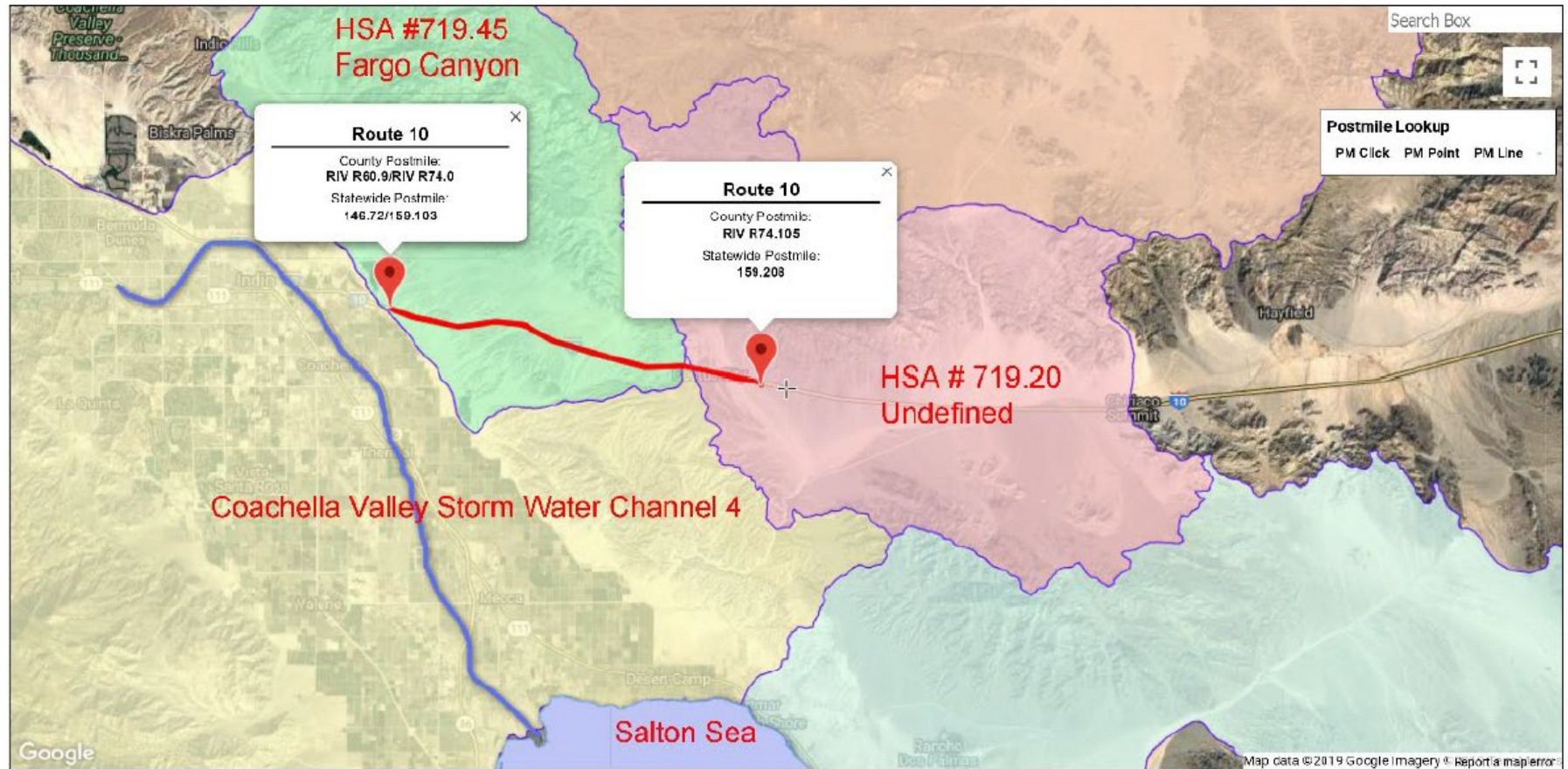
#### **2.2.1.2 Affected Environment**

The following section is based on information in the Water Quality Assessment Report (Caltrans 2019f) prepared for the proposed project. Refer to Section 2.3.2 for further discussion on Waters, including 404 Permits.

The climate within the project location is arid, with an annual precipitation of about four inches. There are no surface waters that could be potentially affected by the project. The proposed project is located within two Hydrologic Sub-Areas (HSAs), 719.45 and 719.20. The receiving water body for potential discharge from the project is the Coachella Valley Stormwater Channel 4, which has the following established beneficial uses: fresh water replenishment (FRSH), preservation of rare and endangered species (RARE), water contact recreation (REC1), noncontact water recreation (REC2), warm freshwater habitat (WARM), and wildlife habitat (WILD). In addition, the project area is not located within a 100-year floodplain. There are no drinking water and water recharge facilities within a mile of the project impact area.

The project is situated in Coachella Groundwater Basin, which underlies the northeastern portion of the Coachella Valley. The boundaries are as follows:

- Northeast Boundary: contact with non-permeable rocks of the Little San Bernardino Mountains from Little Morongo Canyon southeast to Thermal Canyon.
- Southwest Boundary: contact with the semi-permeable rocks of the Indio Hills along with the Banning and Mission Creek faults.



**Figure 2.9.** Local Hydrologic Sub-areas from: (Water Quality Assessment Report. Caltrans 2019d).

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### 2.2.1.3 Environmental Consequences

#### Permanent Impacts

##### ***No-Build Alternative***

Under the No-Build Alternative, there would be no changes made to I-10 within the project limits. There would be no increase in impermeable surfaces and therefore no anticipated potential to increase runoff or adversely affect water quality in the area. This, however, would not preclude the Department from conducting other necessary maintenance.

##### ***Build Alternative***

The Build Alternative could result in pollutants such as suspended solids/sediments, nutrients, pesticides, heavy metals, oil and grease, toxic organic compounds, and trash and debris to be generated during the operational life of the facility.

The build alternative proposes a one-lane temporary detour and crossovers in the EB and WB directions. This could result in a maximum of 90.12 acres of Net New Impervious (NNI) area and 137.23 acres of Replaced Impervious Surface (RIS), for a total of 227.35 New Impervious Surface. The total New Impervious Surface (NIS) is calculated using the following equation:

- $NIS = NNI + RIS = 90.12 \text{ acres} + 137.23 \text{ acres} = 227.35 \text{ acres}$

NNI is the total impervious area added to a project, after reduction for any impervious areas that have been permanently removed from the project. Replaced Impervious Surface (RIS) includes any activity that removes impervious surface and exposes the underlying soil or pervious subgrade during the construction. New Impervious Surface is the addition of the NNI and the RIS.

As discussed above, the Build Alternative would result in maximum of 90.12 acres of NNI area. An increase in impervious surface area would increase the volume of runoff during a storm, which would more effectively transport pollutants to receiving waters. In addition, an increase in impervious surface area could also increase the total amount of pollutants in the stormwater runoff and non-stormwater runoff, which could increase the amount of pollutants traveling to on-site drainages and downstream receiving waters.

Consistent with the Caltrans' NPDES permit and the Construction General Permit, BMPs would be incorporated into the proposed project to avoid and/or minimize the discharge of pollutants during construction and operation to the maximum extent practicable. These BMPs are described below under "Avoidance, Minimization, and/or Mitigation Measures."

#### Temporary Impacts

##### ***No-Build Alternative***

Under the No-Build Alternative, there would be no changes made to I-10. As such, there would be no potential for construction-related impacts to adversely affect water quality in the area.

### **Build Alternative**

The Build Alternative could create pollutants of concern during construction including sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. In addition, construction activities often result in an increased potential for soil erosion.

During construction, there is also a potential for construction-related pollutants to be spilled, leaked, or transported via storm runoff into drainages adjacent to the project area and into downstream receiving ditches. The following construction-related pollutants have potential to impact water quality: chemicals, liquid products, petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste. These pollutants may be spilled or leaked and would then have the potential to be transported via storm runoff into receiving waters.

Caltrans would identify the location of post-construction BMPs in the contract plans. The contractor would be responsible for preparing a Stormwater Pollution Prevention Plan (SWPPP) according to Caltrans' standards, incorporating all BMPs in the contract plans, and amending the SWPPP during the course of construction as necessary. Caltrans' resident engineer (Resident Engineer) reviews and approves the SWPPP. The contractor would also implement, inspect, and maintain all measures, with oversight by the Caltrans Resident Engineer.

Construction of the proposed project would involve the use of construction equipment and associated fuels, solvents, lubricants, and other petroleum-based pollutants. There is the potential for accidental direct or indirect release of these substances into the environment where they may adversely affect surface and/or groundwater. In addition, concrete, soap, trash, and sanitary wastes are other common sources of potentially harmful materials on construction sites that could be accidentally introduced into a nearby waterway. The impact of toxic, construction-related materials on water quality varies depending on the duration and time of activities. A SWPPP will be developed and implemented to address discharges of stormwater runoff. The SWPPP includes a sampling and analysis plan for non-visible pollutants (contaminants).

The project would comply with the provisions of Statewide NPDES permit, issued to Caltrans by the SWRCB, Order No. 2012-0011-DWQ. The BMPs as described in Section 3 of the Caltrans' Statewide SWMP Caltrans' Statewide Stormwater Management Plan, and the Project Planning and Design Guide, would be evaluated during project design. Design pollution prevention BMPs are selected to reduce post-construction discharges. Treatment BMPs are designated to remove certain pollutants. Construction Site BMPs are incorporated in the SWPPP and implemented during the construction period. The SWPPP would also include post-construction erosion control measures such as re-vegetation of disturbed soil areas. At the completion of all work, Caltrans and contractor will confirm that all disturbed soil areas are stabilized.

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

**WQ-1: Construction General Permit.** Prior to commencement of construction activities, the contractor shall obtain coverage under the State Water Resources Control Board's *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (Construction General Permit), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-DWQ, NPDES No. CAS000002, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including Notice of Intent (NOI) for coverage under the permit to the State Water Resources



Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number (WDID) is obtained from SMARTS. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality.

**WQ-2: Caltrans MS4 Permit.** This project shall comply with the provisions of the *National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit, Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation Order No. 2012-0011-DWQ (Caltrans MS4 Permit)*, as amended by Order No. 2014-0006-EXEC, Order No. 2014-0077-DWQ, and Order No. 2015-0036-EXEC, *NPDES No. CAS000003*, or any subsequent permit. Caltrans-approved Design Pollution Prevention BMPs and Treatment BMPs shall be implemented to the maximum extent practicable (MEP) consistent with the requirements of the Caltrans MS4 Permit as implemented by the SWMP.

## 2.2.2 Geology/Soils/Seismic/Topography

### 2.2.2.1 Regulatory Setting

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using the Department’s Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge’s category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Department’s Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

### State Regulations

#### Alquist-Priolo Earthquake Fault Zoning Act

California’s Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code Section 2621 et seq.), originally enacted in 1972 as the Alquist-Priolo Special Studies Zones Act and renamed in 1994, is intended to reduce the risk to life and property from surface fault rupture during earthquakes. The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults (referred to as earthquake fault zones). It defines criteria for identifying active faults, giving legal weight to terms such as active, and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. It also encourages and regulates seismic retrofits of some types of structures.

## Seismic Hazards Mapping Act of 1990

The Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 2690-2699.6) is intended to avoid or reduce damage resulting from earthquakes. While the Alquist-Priolo Earthquake Fault Zoning Act addresses surface fault rupture, the Seismic Hazard mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Earthquake Fault Zoning Act (i.e., the state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards, and cities and counties are required to regulate development within mapped seismic hazard zones.)

Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

### 2.2.2.2 Affected Environment

#### Regional Geology

The project site lies between Coachella Valley and Shavers Valley, surrounded by the Cottonwood Mountains and the Mecca Hills. This area is characterized by isolated mountain ranges with broad, coalescing alluvial fans terminating at dry lake beds. Many faults lie around this region due to the several surrounding mountain ranges, as well as the two major southern California faults, the San Andreas fault and the San Jacinto fault. Additionally, the start of this project is located within the Salton Trough province. Here, the plates are separating and spreading centers exist. At present, the Salton Trough is cut off from the Gulf of California by an accumulation of sediment at the mouth of the Colorado River. The Trough is filled with sediment three miles thick. Periodically during the last 10,000 years, the Trough has been inundated with water; the most recent inundation formed the Salton Sea in 1905.

#### Site Geology

Between PM 60.9 and 62.9, as well as between PM 72.8 and 74.0, the proposed project passes through undifferentiated deposits (Q) which are mostly marine or nonmarine alluvium<sup>13</sup>, lake, playa, and terrace deposits of the Quaternary<sup>14</sup> age.

Between PM 62.9 and 72.8, the proposed project passes through alluvial-valley deposits (Q<sub>oa</sub>) from the Pleistocene. This material is composed of various gravel, sand, silt, and clay and is shown on the geologic map of the project area (see Figure 2.10).

Between PM 69.5 and 70.3, the proposed project passes through plutonic rocks (grMz), which are described as Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite.

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<sup>13</sup> Alluvium is loose, unconsolidated (not cemented together into a solid rock), soil or sediments, eroded, deposited and reshaped by water in some form in a non-marine setting,

<sup>14</sup> The Quaternary Period, which includes the Pleistocene and Holocene epochs, is the most recent of the three periods of the Cenozoic Era in the geologic time scale. The Cenozoic Era is the most recent of the three classic geological eras and covers the period of 65.5 million years ago to the present.

### Topography

The topography of the project site is relatively flat, with some areas containing a slope percent grade of 10-20. Elevation at the project start (PM 60.9) is about 377 feet above sea-level and elevation at project end (PM 74.0) is about 934 feet above sea-level.

### Groundwater

The project is situated in Coachella Valley Groundwater Basin (7-021.03). According to Department of Water Resources (DWR) Bulletin 118, the basin is within the Colorado Desert Region which is characterized by low precipitation (5.66 inches) and a wide range of temperatures. The sub-basin underlies the northeastern portion of the Coachella Valley. The northeasterly boundary of the sub-basin is the contact with non-permeable rocks of the Little San Bernardino Mountains from Little Morongo Canyon southeast to Thermal Canyon. The southwest boundary of the sub-basin is defined by the contact of the semi-permeable rocks of the Indio Hills along with the Banning and Mission Creek faults.

### Surface and Groundwater Quality

The project is located mostly within Coachella Hydrologic Unit of Colorado River Hydrologic Region. The east end of the project limit is located within Whitewater Hydrologic Unit in an Undefined HSA (HSA 719.20). The annual precipitation in the HSAs is 4.0 inches. There are 30 water bodies in the HSAs; however, according to the CWA Section 303(d) List, no surface waters in the project are impaired. Also, there are no established beneficial uses for the local water bodies. All the water bodies are not sensitive to sediment.

Groundwater quality in the Coachella Valley Groundwater Basin is typically characterized as sodium sulfate type groundwater. Total Dissolved Solids (TDS) content across the basin were high and ranged from 800 to 1,000 mg/l. Chloride levels of 100 to 150 mg/l were also noted (USGS 1978).

### Seismicity

The Coachella Valley area is exposed to risk from multiple types of earthquake-producing faults, the highest risk is from the movement of the San Andreas Fault. Seismic events that are likely to produce the greatest accelerations could be a moderate or large event on the active San Andreas fault zone or a large event on another more distant fault. A fault is considered active by the State of California if geologic evidence indicates that movement on the fault has occurred in the last 11,000 years, and potentially active if movement is demonstrated to have occurred in the last two million years.

The project location is in a very high to high ground shaking risk area. The most significant fault near the project area would be the San Andreas Fault, which the I-10 crosses over about 0.5 miles from the project start location. It should also be noted that several other fault zones cross under the I-10 in the project limits. Those two fault zones are the Coachella Fan Fault Zone and the Mecca Hills Fault Zone.

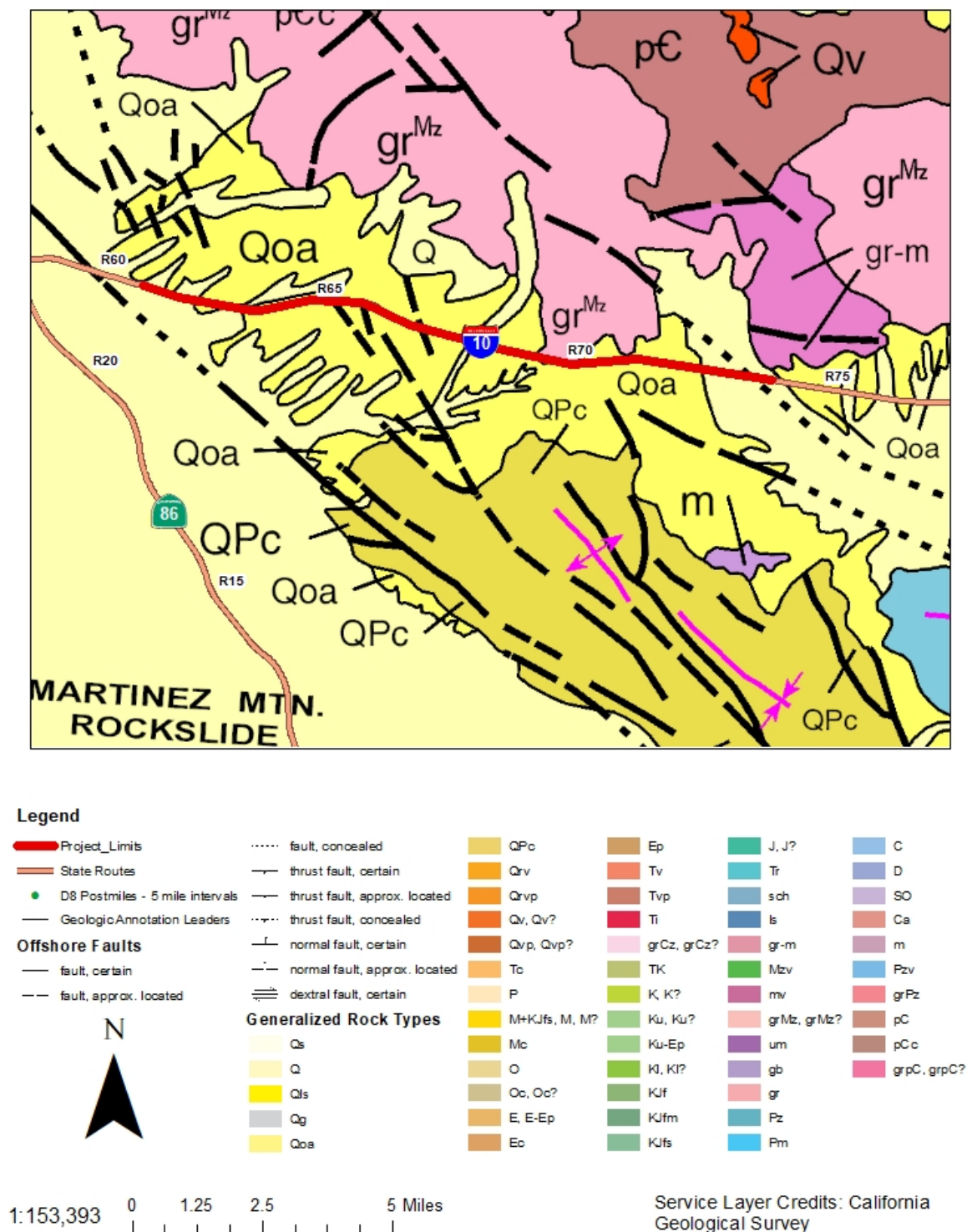


Figure 2.10. Geologic Map.

### Liquefaction

Liquefaction is a process by which water-saturated materials, including soil, sediment and certain types of volcanic deposits lose strength and may fail during strong ground shaking. According to the Riverside County General Plan (County of Riverside, 2015), liquefaction is a moderate threat within much of the area, due to location sediments being susceptible to liquefaction. The use of special building techniques, the enforcement of setbacks, and practical avoidance measures will help to mitigate these potentially dangerous circumstances.

### Scour

The project area is characterized by desert climatic conditions associated with the Sonoran Desert in southeastern California. The area receives about three inches of rainfall annually. The majority of the drainages in the region convey water runoff from surrounding mountain ranges to the Colorado River. Some drainages flow west and terminate at dry lakes. The volume of water conveyed is dependent on the magnitude and duration of storm events. The project location is not in a flood-prone area. The climate conditions within the region are arid and precipitation is low, however flash floods can still occur and are unpredictable, therefore scour may be an issue.

### Landslides

Landslides are not a major problem because the topography in the project region is subdued.

## **2.2.2.3 Environmental Consequences**

### **Permanent Impacts**

#### **No-Build Alternative**

Under the No-Build Alternative, no permanent effects involving geology, erosion, soils, seismicity, topography, or mineral resources would occur.

#### **Build Alternative**

### Liquefaction, Ground Shaking, and Surface Rupture

Neither ground shaking, nor fault rupture can be avoided in the design of highways crossing active faults. Accordingly, the currently proposed design is favorable for accommodating future ground shaking or surface rupture. Compliance with Caltrans' procedures regarding seismic design, as detailed in Section 19 Earthwork of Caltrans' Standard Specifications 2018 Manual, is also anticipated to prevent any adverse effects related to seismic ground shaking. Seismic design would also meet County requirements for near-source design parameters under the Uniform Building Code.

### Groundwater

Groundwater in the area is recharged by Desert Water Agency's (DWA) Groundwater Replenishment and Assessment Program and by percolation from runoff from the surrounding mountains and precipitation to the valley floors. Therefore, runoff from the net impervious

surface of the finished project will contribute to the recharge of the basin. Based on the amount of new impervious surface created by the project, post construction treatment BMPs are required by Caltrans MS4 permit. Hence, impact to groundwater will be negligible.

## **Temporary Impacts**

### **Alternative 1 – No-Build Alternative**

Under the No-Build Alternative, no temporary effects involving geology, erosion, soils, seismicity, topography, or mineral resources would occur.

### **Alternative 2 – Build Alternative**

#### **Soils**

Due to the sandy nature of the on-site soils, the soils are easily erodible, and erosion could occur during construction. Development of the detour lanes would cause groundbreaking and vegetation removal during construction. As a result, soil could be exposed to rain and wind, potentially causing accelerated erosion and deposition from the project site. Federal and State jurisdictions require that an approved SWPPP be prepared for projects that involve greater than one acre of disturbance. A SWPPP specifies BMPs that would prevent construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters (see Measures WQ-1 and WQ-2 in Section 2.2.1, Water Quality and Storm Water Runoff. Earthwork in the project area would be performed in accordance with Section 19 Earthwork of the Caltrans' Standard Specifications 2018 Manual and/or the requirements of applicable government agencies.

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

As is standard, earthwork in the project area would be performed in accordance with the latest edition of Caltrans' Standard Specifications. No additional measures for geology and soils are proposed.

## **2.2.3 Paleontology**

### **2.2.3.1 Regulatory Setting**

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils.

A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

- 23 United States Code (USC) 1.9(a) requires that the use of federal-aid funds must be in conformity with federal and state law.
- 23 United States Code (USC) 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

Section 5097.5 of the California Public Code protects historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological sites, or any other archaeological, paleontological, or historical feature that is situated on land owned by, or in the jurisdiction of, the State of California, or any city, county, district, authority, or public corporation, or any agency thereof.

### **2.2.3.2 Affected Environment**

Geologic mapping (see Figure 2.10) indicates that the project site traverses the following deposits:

- Between PM 60.9 and 62.9, and between PM 72.8 and 74.0, the proposed project passes through undifferentiated deposits (Q) which are mostly marine or nonmarine alluvium<sup>15</sup>, lake, playa, and terrace deposits of the Quaternary<sup>16</sup> age.
- Between PM 62.9 and 72.8, the proposed project passes through alluvial-valley deposits (Q<sub>oa</sub>) from the Pleistocene. This material is composed of various gravel, sand, silt, and clay and is shown on the geologic map of the project area.
- Between PM 69.5 and 70.3, the proposed project passes through plutonic rocks (grMz), which are described as Mesozoic granite, quartz monzonite, granodiorite, and quartz diorite.

Background research indicated numerous fossil localities could occur directly adjacent to, or within, the project site.

### **2.2.3.3 Environmental Consequences**

#### **Build Alternative**

Ground-disturbing activities would occur during project construction. A significant impact may occur if grading or excavation activities associated with the project disturb unique paleontological resources or unique geologic features. Proposed excavation within the boundaries of the proposed project, in areas that are not previously disturbed, has the potential to affect nonrenewable fossil resources. Highly sensitive geological formations could be affected by the project. The abundance of fossils from this area and the proximity of localities to the build-alternative demonstrate the high paleontological sensitivity of the region. Additionally, numerous paleontological resource localities are known in the formations that occur within the project area.

Most of the area that would be affected by the proposed project has been affected by substantial disturbance with the initial construction of the I-10. Although the impact is not considered substantial, implementation of Paleontological Mitigation Plan (PMP) for recovery

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<sup>15</sup> Alluvium is loose, unconsolidated (not cemented together into a solid rock), soil or sediments, eroded, deposited and reshaped by water in some form in a non-marine setting,

<sup>16</sup> The Quaternary Period, which includes the Pleistocene and Holocene epochs, is the most recent of the three periods of the Cenozoic Era in the geologic time scale. The Cenozoic Era is the most recent of the three classic geological eras and covers the period of 65.5 million years ago to the present.

and preservation of fossil remains exposed by project-related earth-moving activities would protect against impacts to important resources. With the PMP and other measures described in the following section, the project impacts on paleontological resources would be minor. Therefore, the build alternative would not result in direct or indirect impacts on paleontological resources.

### **No-Build Alternative**

Under the no-build alternative, there would be no ground disturbance or excavation. Therefore, there would be no potential for impacts on unique paleontological resources or unique geologic features under the No-Build Alternative.

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

The following paleontological measures will be implemented:

- P-1:** A Paleontological Mitigation Plan (PMP) will be prepared and will include, but not limited to, the following measures. The non-standard special provisions will ensure that the proposed project will not have an adverse impact on paleontological resources.
- A. Mandatory preconstruction paleontological sensitivity training for earthmoving personnel.
  - B. A signed repository agreement.
  - C. Field and laboratory methods proposed (must be consistent with repository requirements).
  - D. Required Paleontological Mitigation Report upon completion of project earthmoving.
  - E. PMP developed consistent with Caltrans format as detailed in the Caltrans Standard Environmental Reference (SER).
- P-2:** Implementation of a Paleontological Monitoring Program shall be required where cuts exceed five feet in depth below the natural surface in previously undisturbed areas and/or where sensitive strata are currently at grade or less than five feet deep.
- P-3:** A qualified Principal Paleontologist shall be retained to be present at pre-grading meetings to consult with grading and excavation contractors. At the direction of the Project Paleontologist, Paleontological Monitors shall be on site to inspect cuts for fossils at all times during original grading involving sensitive geologic formations. If fossils are discovered, the Paleontologist (or Paleontological Monitor) shall recover them. If necessary, construction work in these areas shall be halted or diverted to allow recovery of fossil remains in a timely manner.
- P-4:** Fossil remains collected during the monitoring and salvage portion of the program as a result of processing samples will be cleaned, prepared, sorted, and identified to the lowest taxonomic level possible by knowledgeable paleontologists, and cataloged. Prepared fossils, along with copies of all pertinent field notes, photos, and maps will then be deposited in an approved scientific institution with paleontological collections. A final report will be completed that outlines the results of the program.



## 2.2.4 Hazardous Waste/Materials

### 2.2.4.1 Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA, often referred to as “Superfund,” is to identify and cleanup abandoned contaminated sites so that public health and welfare are not compromised. The RCRA provides for “cradle to grave” regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order (EO) 12088, *Federal Compliance with Pollution Control Standards*, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

#### **2.2.4.2 Affected Environment**

Unless otherwise noted, the information below was synthesized from the Initial Site Assessment (ISA) Checklist (Caltrans 2019i) and the Asbestos Containing Materials and Lead-Based Paint Survey Report (Caltrans 2019l) prepared for this project. References used in the reports are not carried over to this section. The ISA Checklist concludes that the project's risk for hazardous waste involvement is "Low Risk." According to the ISA Checklist, the ADL findings are based on previous ADL reports for Caltrans projects on I-10 within the proposed project's limits: Project 4612U0, located at PM 60.9-81.5, and Project 452100, located at PM 62.3-63.7.

Reasonable and safe efforts were made to locate, sample, and identify suspect Asbestos Containing Lead (ACM) and Lead-Based Paint (LBP) associated with the bridges, which may potentially be present in structures. The purpose of the ACM/LBP surveys is to evaluate ACM and/or LBP concentration on materials that may be disturbed during planned bridge widening activities, and to provide recommendations for handling such materials during construction.

#### **Asbestos Containing Materials**

Asbestos has been used historically in thousands of different structural materials to increase fire resistance, insulate against heat, insulate against cold and sound, resist corrosion, and increase textile strength. Common structural materials that may contain asbestos include, but are not limited to: concrete, shims, sealants, adhesives, coating, floor tile, floor sheeting, ceiling tile, mastics, roofing materials, and fireproofing. Adverse health effects have been associated with the inhalation of airborne asbestos. Asbestos fibers that are tightly bound in structural materials, however, may not pose an exposure hazard, unless disturbed in such a way that releases airborne fibers, like cutting, drilling, sanding, and other abrasive methods.

The California Department of Toxic Substances Control (DTSC) regulates "hazardous wastes" as generated wastes containing more than one percent (>1%) asbestos that have been determined "friable." The Division of Occupational Safety and Health (DOSH) follows the California Health and Safety Code definition of Asbestos Containing Construction Materials (ACCMs), defined as any materials with asbestos content greater than one-tenth of one percent (>0.1%).

ACM field activities consisted of visual inspection and sampling (laboratory testing) of accessible representative suspect materials near bridge abutments. Materials sampled from the bridges includes concrete, asphalt, felt, adhesives, sealants, and shims. Based on the analysis, asbestos minerals were identified in the samples presented in Table 2.13.

#### **Lead Based Paint**

Lead was a common ingredient in paint prior to 1978 because it added strength, shine and extended the life of the paint. Lead-based paint is recognized as a potential health risk due to the known toxic effects of lead exposure. The Department of Housing and Urban Development (HUD) and the US EPA define LBP as: paint, varnish, shellac, or other coating on surfaces that contain equal or greater than 1.0 milligrams per square centimeter (mg/cm<sup>2</sup>), 5,000 milligrams per kilogram (mg/Kg) parts per million (ppm), or 0.5 percent lead by weight. The DOSH, however, regulates all materials containing lead for the purposes of worker safety regardless of the concentration identified.

Lead containing wastes may be classified as hazardous in California based on toxicity characteristics by any of the following Federal or State thresholds:

- Federal:
  - Toxicity Threshold = 5 milligrams per liter (mg/L)
- California:
  - Total Threshold Limit Concentration (TTLC)=1,000 mg/Kg
  - Soluble Threshold Limit Concentration (STLC)= 5 mg/L

### **2.2.4.3 Environmental Consequences**

#### **No-Build Alternative**

Under the No-Build Alternative, no improvements would be implemented, and thus no effects involving hazardous waste/materials would occur.

#### **Build Alternative**

##### *Asbestos Containing Materials*

Based on the analysis, asbestos minerals were identified in the samples presented in Table 2.13.

Per the avoidance and minimization measures, an asbestos-compliance plan would be prepared prior to renovation, refurbishing, or demolition activities to ensure safety. In addition, all work shall be done in compliance with federal, state, and local regulations.

##### *Lead-based Paint*

Based on laboratory analysis, of the paint samples analyzed the results are as follows:

- None of the samples exceeded the California TTLC of 1,000 mg/kg.
- None of the samples meet the definition of LBP (greater or equal to 0.5% by weight).
- None of the samples exceeded the soluble threshold limit concentration of 5 mg/L.
- No samples reported Cal WET soluble lead in excess of 5 mg/L.

The LBP survey concludes that none of the bridges report lead concentrations above LBP or hazardous waste thresholds. In general, leaded paints may pose a hazard to workers during removal, scraping, cutting, or torching leaded paint components. During construction, the contractor is responsible for implementing monitoring and protective measures to protect workers and the public from exposure to leaded materials.

Following construction of the proposed project, operations are not expected to result in the creation of any new health hazards or expose people to potential new health hazards because the proposed project involves rehabilitation of an existing roadway. No storage of hazardous materials or chemicals would occur, and the proposed project is not anticipated to increase the potential hazardous materials in the project area. As such, the proposed project would not result in adverse effects.

**Table 2.13. ACM Survey Results**

<b>Material Location/ Sample Location on Bridge</b>	<b>Material Description</b>	<b>Asbestos Percentage</b>
<b>Polaris Wash; Bridge #56-0476R</b>		
NE	Handrail post bolt Sealant, Silver	5%
NE	Handrail post bolt Sealant, Silver	7%
NE	Handrail post bolt Sealant, Silver	5%
NW	Shim (leveling shims, handrail posts), Gray	65%
NE	Shim (leveling shims, handrail posts), Gray	65%
SW	Shim (leveling shims, handrail posts), Gray	65%
<b>Echo Ditch; Bridge #56-0475R</b>		
NW	Handrail post bolt Sealant, Silver	5%
NW	Handrail post bolt Sealant, Silver	5%
SE	Handrail post bolt Sealant, Silver	5%
NW	Shim (leveling shims, handrail posts), Black/White	65%
NE	Shim (leveling shims, handrail posts), Black/White	75%
SW	Shim (leveling shims, handrail posts), Black/White	75%
<b>Smokey Gulch; Bridge #56-0201R</b>		
SW	Handrail post bolt Sealant, Silver/Gray	5%
SW	Handrail post bolt Sealant, Silver/Gray	5%
SW	Handrail post bolt Sealant, Silver/Gray	5%

SW	Shim (leveling shims, handrail posts), Black/White	80%
SW	Shim (leveling shims, handrail posts), Black/White	75%
SW	Shim (leveling shims, handrail posts), Black/White	75%
<b>Sunny Gulch; Bridge #56-0202R</b>		
NW	Handrail post bolt Sealant, Silver	5%
NW	Handrail post bolt Sealant, Silver	5%
SW	Handrail post bolt Sealant, Silver	5%
SE	Shim (leveling shims, handrail posts), Gray	65%
SE	Shim (leveling shims, handrail posts), Gray	65%
SE	Shim (leveling shims, handrail posts), Gray	65%
<b>Brown Arroyo; Bridge #56-0204R</b>		
SW	Handrail post bolt Sealant, Silver Gray	2%
SW	Handrail post bolt Sealant, Silver Gray	3%
SW	Handrail post bolt Sealant, Silver Gray	2%
NW	Shim (leveling shims, handrail posts), Lt. Gray	75%
NW	Shim (leveling shims, handrail posts), Lt. Gray	75%
NW	Shim (leveling shims, handrail posts), Lt. Gray	75%
<b>West Cactus Wash; Bridge #56-0460R</b>		
NW	Shim (leveling shims, handrail posts), Gray/Black	85%
NW	Shim (leveling shims, handrail posts), Gray/Black	75%

NW	Shim (leveling shims, handrail posts), Gray/Black	80%
<b>Cactus Wash; Bridge #56-0461R</b>		
SW	Shim (leveling shims, handrail posts), Gray/Black	65%
SW	Shim (leveling shims, handrail posts), Gray/Black	75%
SW	Shim (leveling shims, handrail posts), Gray/Black	65%
<b>East Cactus Wash; Bridge #56-0462R</b>		
SW	Shim (leveling shims, handrail posts)	65%
SW	Shim (leveling shims, handrail posts)	75%
SW	Shim (leveling shims, handrail posts), Gray	75%
<b>Hazy Gulch; Bridge #56-0463R</b>		
NW	Shim (leveling shims, handrail posts), Gray/Black	65%
NW	Shim (leveling shims, handrail posts), Gray/Black	75%
NW	Shim (leveling shims, handrail posts), Gray/Black	75%

### *Aerially Deposited Lead*

Historical ADL reports within the project limits found the soil within the project limits to be non-hazardous. For ADL purposes, the soil in the project area is suitable for re-use without restriction.

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

- HAZ-1:** Any generated ACM waste during demolition, renovation, and/or construction shall be dispensed as hazardous asbestos waste. All renovation and demolition activities shall be conducted in accordance with local, state, and federal requirements and regulations, including those of the local air quality management district.
- HAZ-2:** This project involves the removal and management of ACCM. An asbestos compliance plan is required in accordance with Caltrans SSP 14-11.16, prior to renovation, refurbishing, or demolition activities on bridges.
- HAZ-3:** In accordance with Caltrans SSP 14-9.02, SCAQMD must be notified of all renovation and demolition activities at least 15 days before starting demolition or rehabilitation activities, unless except from notification requirements.
- HAZ-4:** The contractor shall follow Caltrans SSP 7-1.02K(6)(j)(iii), which includes specifications for handling, removing, and disposing of earth material containing lead. Excavated material on the job site is not considered hazardous waste, and therefore does not require disposal at a permitted landfill or solid waste disposal facility. All excavated material could be reused on the ROW. SSP 7-1.02K(6)(j)(iii) requires a lead compliance plan.
- HAZ-5:** The contractor shall follow Caltrans SSP 14-11.14A, for the removal and disposal of Treated Wood Waste from sign posts and/or MBGR posts.
- HAZ-6:** The contractor shall follow Caltrans SSP 84-9.03B. Residue from the removal of painted or thermoplastic traffic stripes and pavement markings contains lead from the paint or thermoplastic. The average lead concentrations are less than 1,000 mg/kg total lead and 5 mg/L soluble lead. Per Caltrans SSP 84-9.03B, management of this material must be addressed in the lead compliance plan.

### 2.2.5 Air Quality

#### 2.2.5.1 Regulatory Setting

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM<sub>10</sub>) and particles of 2.5 micrometers and smaller (PM<sub>2.5</sub>)—and sulfur dioxide (SO<sub>2</sub>). In addition, national and state standards exist for lead (Pb), and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H<sub>2</sub>S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air

toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

## Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 Code of Federal Regulations (CFR) 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and in some areas (although not in California), sulfur dioxide (SO<sub>2</sub>). California has nonattainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO<sub>2</sub>, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and 4 years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope<sup>17</sup> that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control

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<sup>17</sup> "Design concept" means the type of facility that is proposed, such as a freeway or arterial highway. "Design scope" refers to those aspects of the project that would clearly affect capacity and thus any regional emissions analysis, such as the number of lanes and the length of the project.



measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

### 2.2.5.2 Affected Environment

The discussion and analysis in this section are based on the Air Quality Checklist (Caltrans 2019e) prepared for this project.

The proposed project is in the Salton Sea Air Basin, within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (ARB). The project area is in nonattainment of California Ozone and PM<sub>10</sub> standards. The Coachella Valley area of the Salton Sea Air Basin is nonattainment for 2015 8-hour Ozone NAAQS. Table 2.14 summarizes State and Federal attainment status for criteria pollutants. The proposed project is located outside of the urbanized area (see Figure 2.11).

**Table 2.14. State and Federal Criteria Air Pollutant Standards, Effects, and Sources**

Pollutant	Averaging Time	State <sup>i</sup> Standard	Federal <sup>ii</sup> Standard	Principal Health and Atmospheric Effects	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status
Ozone (O <sub>3</sub> )	1 hour	0.09 ppm <sup>iii</sup>	--- <sup>iv</sup>	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NO <sub>x</sub> ) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.	Nonattainment	Nonattainment
	8 hours	0.070 ppm	0.070 ppm (4 <sup>th</sup> highest in 3 years)				
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.	Attainment	Attainment
	8 hours	9.0 ppm <sup>1</sup>	9 ppm				
	8 hours (Lake Tahoe)	6 ppm	---				
Respirable Particulate Matter (PM <sub>10</sub> ) <sup>v</sup>	24 hours	50 µg/m <sup>3</sup> <sup>vi</sup>	150 µg/m <sup>3</sup> (expected number of days above standard <	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased	Dust- and fume-producing industrial and agricultural operations; combustion smoke	Nonattainment	Attainment

			or equal to 1)	cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic & other aerosol and solid compounds are part of PM <sub>10</sub> .	& vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.		
	Annual	20 µg/m <sup>3</sup>	--- <sup>5</sup>				
Fine Particulate Matter (PM <sub>2.5</sub> ) <sup>5</sup>	24 hours	---	35 µg/m <sup>3</sup>	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the PM <sub>2.5</sub> size range. Many toxic & other aerosol and solid compounds are part of PM <sub>2.5</sub> .	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NO <sub>x</sub> , sulfur oxides (SO <sub>x</sub> ), ammonia, and ROG.	Attainment	Attainment
	Annual	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>				
	24 hours (conformity process <sup>vii</sup> )	---	65 µg/m <sup>3</sup>				
	Secondary Standard (annual; also for conformity process <sup>5</sup> )	---	15 µg/m <sup>3</sup> (98 <sup>th</sup> percentile over 3 years)				
Nitrogen Dioxide (NO <sub>2</sub> )	1 hour	0.18 ppm	0.100 ppm <sup>viii</sup>	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain & nitrate contamination of stormwater. Part of the “NO <sub>x</sub> ” group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.	Attainment	Attainment
	Annual	0.030 ppm	0.053 ppm				
Sulfur Dioxide (SO <sub>2</sub> )	1 hour	0.25 ppm	0.075 ppm <sup>ix</sup> (99 <sup>th</sup> percentile over 3 years)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.	Attainment	Attainment
	3 hours	---	0.5 ppm <sup>x</sup>				
	24 hours	0.04 ppm	0.14 ppm (for certain areas)				
	Annual	---	0.030 ppm (for certain areas)				
Lead (Pb) <sup>xi</sup>	Monthly	1.5 µg/m <sup>3</sup>	---	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.	Attainment	Attainment
	Calendar Quarter	---	1.5 µg/m <sup>3</sup> (for certain areas)				
	Rolling 3-month average	---	0.15 µg/m <sup>3</sup> <sup>xii</sup>				

<sup>1</sup> State standards are “not to exceed” or “not to be equalled or exceeded” unless stated otherwise.

<sup>2</sup> Federal standards are “not to exceed more than once a year” or as described above.

<sup>1</sup> ppm = parts per million

<sup>1</sup> Prior to 6/2005, the 1-hour ozone NAAQS was 0.12 ppm. Emission budgets for 1-hour ozone are still be in use in some areas where 8-hour ozone emission budgets have not been developed, such as the S.F. Bay Area.

<sup>1</sup> Annual PM<sub>10</sub> NAAQS revoked October 2006; was 50 µg/m<sup>3</sup>. 24-hr. PM<sub>2.5</sub> NAAQS tightened October 2006; was 65 µg/m<sup>3</sup>. Annual PM<sub>2.5</sub> NAAQS tightened from 15 µg/m<sup>3</sup> to 12 µg/m<sup>3</sup> December 2012 and secondary annual standard set at 15 µg/m<sup>3</sup>.

<sup>1</sup> µg/m<sup>3</sup> = micrograms per cubic meter

<sup>1</sup> The 65 µg/m<sup>3</sup> PM<sub>2.5</sub> (24-hr) NAAQS was not revoked when the 35 µg/m<sup>3</sup> NAAQS was promulgated in 2006. The 15 µg/m<sup>3</sup> annual PM<sub>2.5</sub> standard was not revoked when the 12 µg/m<sup>3</sup> standard was promulgated in 2012. The 0.08 ppm 1997 ozone standard is revoked FOR CONFORMITY PURPOSES ONLY when area designations for the 2008 0.75 ppm standard become effective for conformity use (7/20/2013). Conformity requirements apply for all NAAQS, including revoked NAAQS, until emission budgets for newer NAAQS are found adequate, SIP amendments for the newer NAAQS are approved with a emission budget, EPA specifically revokes conformity requirements for an older standard, or the area becomes attainment/unclassified. SIP-approved emission budgets remain in force indefinitely unless explicitly replaced or eliminated by a subsequent approved SIP amendment. During the “Interim” period prior to availability of emission budgets, conformity tests may include some combination of build vs. no-build, build vs. baseline, or compliance with prior emission budgets for the same pollutant.

<sup>1</sup> Final 1-hour NO<sub>2</sub> NAAQS published in the Federal Register on 2/9/2010, effective 3/9/2010. Initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause re-designation to nonattainment in some areas after 2016.

<sup>1</sup> EPA finalized a 1-hour SO<sub>2</sub> standard of 75 ppb (parts per billion [thousand million]) in June 2010. Nonattainment areas have not yet been designated as of 9/2012.

<sup>1</sup> Secondary standard, set to protect public welfare rather than health. Conformity and environmental analysis address both primary and secondary NAAQS.

<sup>1</sup> The ARB has identified vinyl chloride and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM<sub>10</sub> and, in larger proportion, PM<sub>2.5</sub>. Both the ARB and U.S. EPA have identified lead and various organic compounds that are precursors to ozone and PM<sub>2.5</sub> as toxic air contaminants. There are no exposure criteria for adverse health effect due to toxic air contaminants, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

<sup>1</sup> Lead NAAQS are not considered in Transportation Conformity analysis.

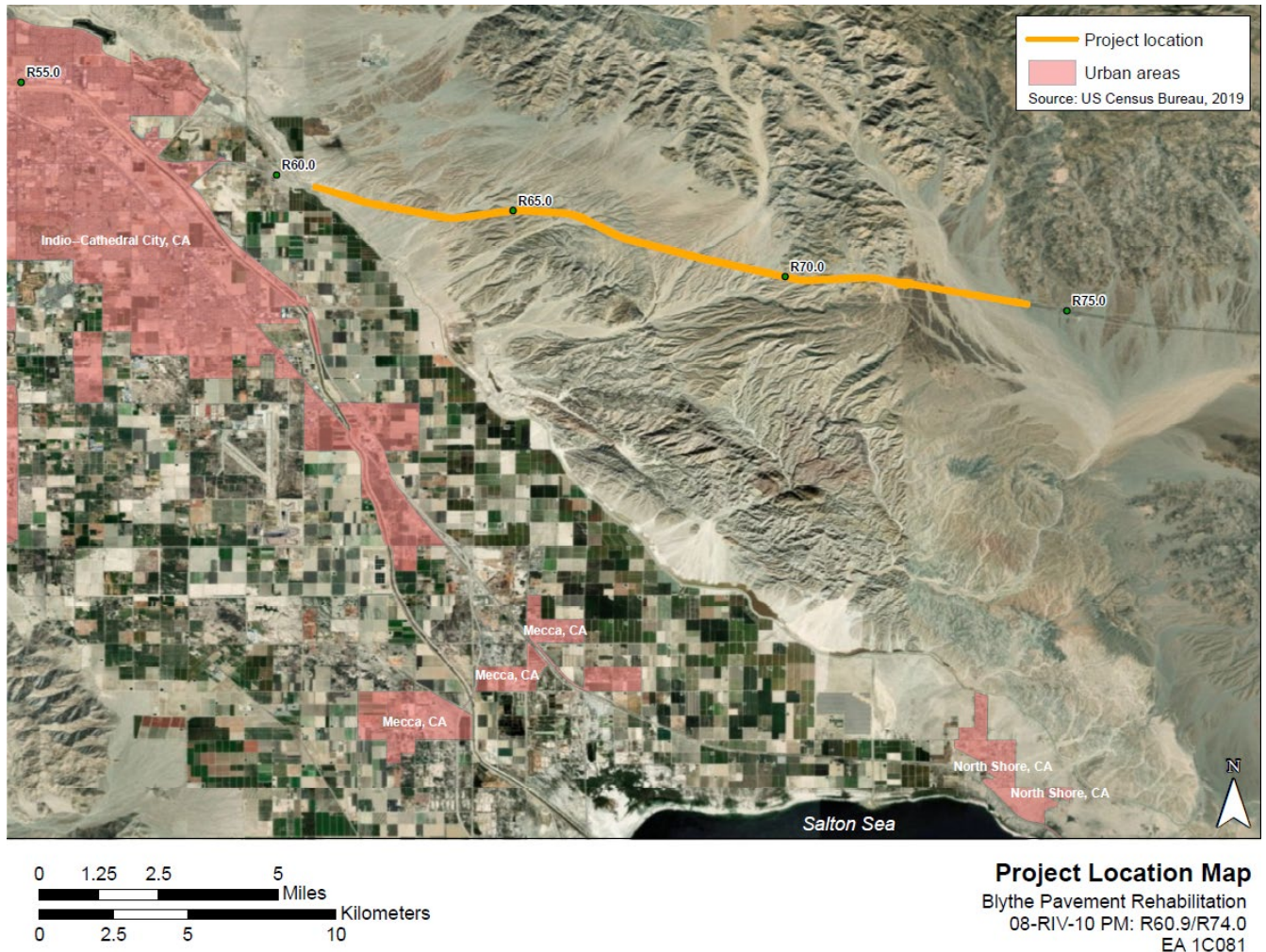


Figure 2.11. Urbanized Area.

### 2.2.5.3 Environmental Consequences

The proposed project is included in SCAG's 2016 RTP/SCS (page 74, FTIP ID RIVLS02) and 2019 FTIP (Appendix E), and in Amendment #19-09 (Appendix E) both of which were found to be conforming. Therefore, the proposed project will not conflict with the Air Quality Management Plan (AQMP), violate any air quality standard, result in a net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations.

As documented in the Air Quality Checklist (December 2019) this project is exempt from air quality conformity per 40 CFR 93.126 under the category of Project Type of "Pavement resurfacing and/or rehabilitation." The project is also except under the category of "Truck climbing lane outside the urbanized area."

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Emissions from construction equipment also are expected and would include carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), directly-emitted particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and toxic air contaminants such as

diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO<sub>x</sub> and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involves clearing, cut-and-fill activities, grading, removing or improving existing roadways, building bridges, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM<sub>10</sub>, PM<sub>2.5</sub>, and small amounts of CO, SO<sub>2</sub>, NO<sub>x</sub>, and VOCs to be of concern. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM<sub>10</sub> emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM<sub>10</sub> emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the United States Environmental Protection Agency (U.S. EPA) to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emissions can be reduced by up to 50 percent. The Department's Standard Specifications (Section 18 of 2018 Caltrans Standard Specifications) on dust minimization require use of water or dust palliative compounds and would reduce potential fugitive dust emissions during construction.

In addition to dust-related PM<sub>10</sub> emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO<sub>2</sub>, NO<sub>x</sub>, VOCs and some soot particulate (PM<sub>10</sub> and PM<sub>2.5</sub>) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO<sub>2</sub> is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 ppm sulfur), so SO<sub>2</sub>-related issues due to diesel exhaust will be minimal.

Some phases of construction, particularly asphalt paving, may result in short-term odors in the immediate area of each paving site(s). Such odors would quickly disperse to below detectable levels as distance from the site(s) increases.

Most of the construction impacts to air quality are short-term in duration and, therefore, will not result in long-term adverse conditions. Implementation of the Caltrans standardized measures, some of which may also be required for other purposes such as storm water pollution control, will reduce any air quality impacts resulting from construction activities.

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)). Construction is scheduled to begin at the end of 2021 and conclude at the end of 2024.

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

**AQ-1:** During construction, the contractor shall follow Caltrans Standard Specification 14-9.02 for exhaust and particulate matter emissions control to comply with air-pollution-control rules, regulations, ordinances, and statutes that apply to work performed under the Contract, including those provided in Govt Code § 11017 (Pub Cont Code § 10231) and SCAQMD Rule 403.

### **2.2.5.5 Climate Change**

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

## **2.2.6 Noise**

### **2.2.6.1 Regulatory Setting**

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

#### ***CALIFORNIA ENVIRONMENTAL QUALITY ACT***

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/23 Code of Federal Regulations Part 772 (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

#### ***NATIONAL ENVIRONMENTAL POLICY ACT AND 23 CFR 772***

For highway transportation projects with Federal Highway Administration (FHWA) involvement (and the Department, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 Code of Federal Regulations [CFR] 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the

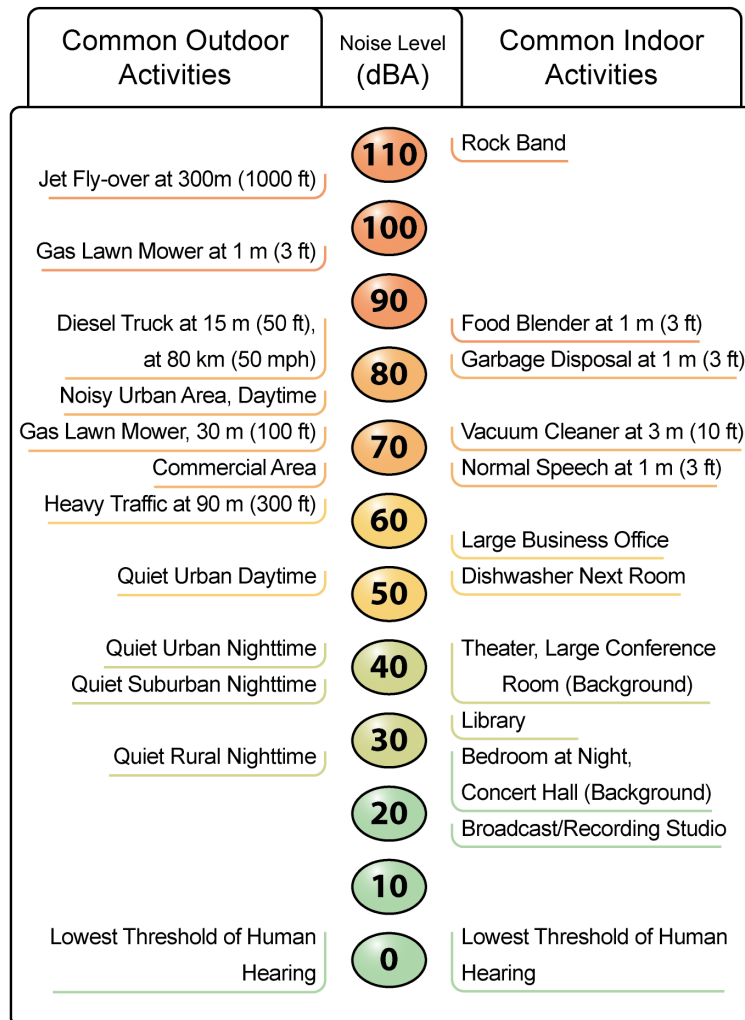
NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). Table 2.15 lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

**Table 2.15. Noise Abatement Criteria**

<b>Activity Category</b>	<b>NAC, Hourly A- Weighted Noise Level, Leq(h)</b>	<b>Description of activity category</b>
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B <sup>1</sup>	67 (Exterior)	Residential.
C <sup>1</sup>	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.
<sup>1</sup> Includes undeveloped lands permitted for this activity category.		

Figure 2.12 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.





**Figure 2.12.** Noise Levels of Common Activities.

According to the Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011*, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. A noise level is considered to approach the NAC if it is within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications.

The Department's Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of



local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

### **2.2.6.2 Affected Environment**

The discussion that follows is based on the Noise Study Report (NSR) (Caltrans, 2019h) prepared for this project and approved on December 2, 2019.

A field investigation was conducted to identify existing land uses that could be subject to traffic and construction noise impacts from the proposed project. Land uses in the project area consist mostly of undeveloped land, referred to as Activity Category G for purposes of noise assessments. Also, roadside rest areas on both eastbound and westbound I-10 were identified at Cactus City, close to Postmile R72. For Activity Category G land uses, activities are generally not sensitive to highway noise. Per 23 CRF 772, a noise analysis is not required for this category. However, the proposed project is categorized as Type I project, therefore a noise analysis was conducted for informational purposes only.

The primary source of noise within the project area is traffic from eastbound and westbound I-10. As part of the noise study, noise measurements were taken at representative land uses along the project alignment. Short-term (10-minute) measurements were obtained at several locations within the project limits. Table 2.16 summarizes the results of the short-term noise monitoring conducted in the project area (see Figure 2.12 for reference of noise levels of common activities). To be consistent with the 2011 Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects, all land uses were considered in the NSR. Traffic counts were conducted during short-term measurements for use in calibrating the Traffic Noise Model (TNM). Per the methodology described in Caltrans' Technical Noise Supplement (TeNS), since each of the field measurements were within the accepted three-decibel range of the model, the model is considered applicable for use in analysis of noise levels within the study area. Therefore, existing noise levels for the receivers within the study area were calculated with TNM for comparison with the Build and No-Build alternatives.

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Table 2.16. Summary of Short-Term Noise Measurements

Receiver	Address	Land Uses/ Activity Category	Duration (minutes)	L <sub>eq</sub> (dBA)	Roadway Segment [Lane: Speed] <sup>1</sup>	Autos	Medium Trucks	Heavy Trucks	Buses	Motorcycles
FR-01	I-10	Vacant land	10	76.5	I-10 West Bound	306	24	162	0	0
					I-10 Eastbound	432	30	264	0	0
FR-02	I-10	Vacant land	10	72.2	I-10 West Bound	402	66	174	6	6
					I-10 Eastbound	438	48	198	12	18
FR-03	I-10	Vacant land	10	70.7	I-10 West Bound	436	48	106	0	0
					I-10 Eastbound	504	28	252	4	0
FR-04	I-10	Vacant land	10	72.2	I-10 West Bound	492	36	246	0	0
					I-10 Eastbound	408	24	192	36	0
FR-05	I-10	Vacant land (Caltrans Safety Rest Area)	10	68.8	I-10 West Bound	414	54	216	6	6
					I-10 Eastbound	390	66	216	6	0
FR-06	I-10	Vacant land	10	73.5	I-10 West Bound	438	42	234	0	12
					I-10 Eastbound	594	54	300	0	12
<b>Notes:</b> 1. All vehicle volumes are normalized to 1 hour, as required for input into TNM.										

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### 2.2.6.3 Environmental Consequences

The proposed project is categorized as a Type 1 project. 23CFR772 defines a Type 1 project as a project that involves the addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a high-occupancy vehicle (HOV) lane, high-occupancy toll (HOT) lane, bus lane, or truck climbing lane. If a project is determined to be a Type I project under this definition, the entire project, area as defined in the environmental document, is a Type I project.

Table 2.17 summarizes the traffic noise modeling results for existing conditions and design-year conditions with the project (Build) and without the project (No-Build), based on the traffic volumes. Predicted design-year traffic noise levels under the Build conditions are compared to existing conditions and to design-year conditions under the No-Build Alternative. The comparison to existing conditions is included in the analysis to identify traffic noise impacts as defined under 23 CFR 772. The comparison to the No-Build conditions indicates the direct effect of the project.

The traffic noise modeling results in Table 2.17 indicate existing noise levels at the modeled receivers range from 64 to 77 dBA Leq(h). For No-Build conditions, noise levels are projected to range from 67 to 80 dBA Leq(h). For Build conditions, the noise level would range from 65 to 75 dBA Leq(h). The increase/decrease in noise levels under No-Build conditions relative to existing conditions is predicted to be 3 dB. The change in noise levels under Build conditions relative to No-build conditions is predicted to be in the range of -6 dB to -1 dB.

The Protocol defines a noise increase as *substantial* when the predicted noise levels with project implementation exceeds existing noise levels by 12 dBA or more. The Protocol also states that a sound level is considered to approach a NAC level when the sound level is within 1 dB of the NAC identified in 23 CFR 772. This project would not result in substantial increase in noise, nor would the noise approach or exceed the NAC. Furthermore, this project does not have the potential to impact sensitive receptors. No noise barriers would be required for this project.

During construction, noise from construction would intermittently dominate the noise environment in the vicinity of construction activities. Table 2.18 summarizes noise levels produced by construction equipment that is anticipated to be used for the project. Standard construction equipment is expected to generate maximum noise levels ranging from 74 to 90 dBA at a distance of 50 feet, while pile driving would generate maximum noise levels of approximately 101 dBA at 50 feet. Noise produced by construction equipment would be reduced at a rate of about 6 dB per doubling of distance.

**Table 2.17. Predicted Future Noise Analysis**

Receptor I.D.	Land Use	Existing Noise Level $L_{eq}(h)$ , dBA	Predicted Noise Level without Project $L_{eq}(h)$ , dBA	Predicted Noise Level with Project $L_{eq}(h)$ , dBA	Predicted Noise Level without Project minus Existing Conditions $L_{eq}(h)$ , dBA	Predicted Noise Level with Project Minus No Project Conditions $L_{eq}(h)$ , dBA	Noise Impact Requiring Abatement Considerations
ST-01	Vacant Land	70	73	71	3	-2	None
ST-02	Vacant Land	72	75	75	3	0	None
ST-03	Vacant Land	68	71	69	3	-2	None
ST-04	Vacant Land	72	75	75	3	0	None
ST-05	Vacant Land	69	71	70	3	-2	None
ST-06	Vacant Land	64	67	65	3	-2	None
ST-07	Vacant Land	69	72	73	3	1	None
ST-08	Vacant Land	70	72	72	3	0	None
ST-09	Vacant Land	65	68	69	3	1	None
ST-10	Vacant Land	72	75	75	3	0	None
ST-11	Vacant Land	67	70	70	3	0	None
ST-12	Vacant Land	72	74	74	3	0	None
ST-13	Vacant Land	74	77	77	3	0	None
ST-14	Vacant Land	67	70	66	3	-3	None
ST-15	Vacant Land	70	72	71	3	-1	None
ST-16	Vacant Land	77	80	74	3	-6	None
ST-17	Vacant Land	69	72	72	3	0	None
ST-18	Vacant Land	66	69	68	3	-1	None
ST-19	Vacant Land	74	76	76	3	0	None
ST-20	Vacant Land	73	75	75	3	0	None
ST-21	Vacant Land	72	75	70	3	-5	None
ST-22	Vacant Land	73	75	75	3	0	None
ST-23	Vacant Land	69	72	72	3	0	None
ST-24	Vacant Land	72	75	75	3	0	None
ST-25	Vacant Land	72	75	72	3	-3	None
ST-26	Vacant Land	71	73	74	3	0	None

**Table 2.18. Construction Equipment Noise**

<b>Equipment</b>	<b>L<sub>max</sub> at 50 feet (dBA, slow)</b>
Asphalt paver	77
Backhoe	78
Bulldozer	82
Compactor	83
Crane	81
Drill rig	79
Hoe rams	90
Loader	79
Man lift	75
Pile hammer	101
Road grader	85
Roller/sheeps foot roller/vibrating roller	80
Scraper	84
Sweeper	82
Trencher	80
Trucks (concrete, dump, flat bed, pickup, vacuum, water)	74–85
Source: FHWA 2008. <a href="http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf">http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf</a> <a href="http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf">http://www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/rcnm.pdf</a>	

#### **2.2.6.4 Avoidance, Minimization, and/or Abatement Measures**

No measures are proposed or required because there are no impacted sensitive receptors in the area.

### **2.2.7 Energy**

#### **2.2.7.1 Regulatory Setting**

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

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

### 2.2.7.2 Affected Environment

I-10 is a major interstate freeway that begins at State Route 1 (SR-1) in the city of Santa Monica in Los Angeles County and terminates on the east coast in the state of Florida. Within District 8, I-10 is 194.8 miles in length, beginning at the Los Angeles County line and ending at the Arizona State line; it varies from four to ten lanes of traffic.

As discussed in Section 2.1.8, the average daily traffic in this segment of the I-10 is expected to increase by over 95% by 2041. It is estimated that 40% of the average daily traffic is in the form of trucks. Existing (2015) and forecasted (2021, 2041, and 2061) traffic data on I-10, within the project limits, are provided in Table 2.19.

**Table 2.19. Existing and Forecasted Traffic**

Year	2015 (Existing)	2021 (Opening)	2041 (20-Year)	2061 (40-Year)
Annual Average Daily Traffic (AADT)	24,000	27,100	50,700	98,800
Design Hour Volume (DHV)	2,230	2,470	4,410	8,590
One-Way Peak Hour Volume (PHV)	1,200	1,340	2,380	4,640
Truck % in Average Daily Traffic (ADT)	40%	40%	40%	40%
Truck % in DHV	20%	20%	20%	20%
Directional Split	54%	54%	54%	54%

Source: 1C080 Project Initiation Report, June 2017.

Under heavy and continuous traffic, over a period of time, existing pavement has shown signs of distress and deterioration at various locations along this stretch of the I-10. A poor driving surface can contribute to an increase in fuel consumption. Within the proposed project limits, there are areas of cracking, rutting, bleeding, and poor ride quality that are beyond routine maintenance repairs and treatments. The existing pavement condition is indicated to be “fair” to “poor” with approximately 14.66% Alligator A cracking and 5.29% Alligator B cracking. By the year 2020, the predicted Alligator A and Alligator B cracking would be 17.30% and 7.02%, respectively. In early 2019, field reviews show that following winter storms the eastbound pavement condition deteriorated significantly compared to the westbound pavement.

There are fourteen information signs, and eleven regulatory signs within the project limits. There are no bicycle paths within the project limits, however, this section of I-10 is open to bicycle traffic along the outside shoulders.

### 2.2.7.3 Environmental Consequences

As discussed in Section 2.2.5, the proposed project is included in SCAG’s 2016 RTP/SCS and 2019 FTIP both of which were found to be conforming. Therefore, the proposed project would not obstruct or conflict with a state or local plan for renewable energy or energy efficiency.

As discussed Chapter 3 *California Environmental Quality Act (CEQA) Evaluation*, the construction GHG emissions for the proposed project would total 7677 tons of CO<sub>2</sub> during the estimated 750 working days of construction. All construction contracts include Caltrans



Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which 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.

A poor driving surface can contribute to increase in fuel consumption. The proposed non-capacity increasing project consists of pavement rehabilitation on this portion of the I-10, which could potentially contribute to reducing emissions. Smoother pavement surfaces would improve vehicle operations, reduce emissions, and reduce energy consumption.

After construction, the eastbound outside lane would be designated as a truck climbing lane and the eastbound detour lane would be converted to a general-purpose lane. The addition of a truck climbing lane would separate slow moving trucks that are climbing the steep grade along the project from the general traffic lanes. The improved traffic flow resulting from the addition of a truck climbing lane would, in turn, improve vehicles' fuel economies, and thus reduce energy consumption.

Within the project limits, bicycles are allowed on the shoulders. Rumble strips would be designed to be bicycle-friendly. Minimum of 4 feet clear shoulder will be provided between rumble strip and the outer edge of shoulders. To increase public awareness about the presence of cyclists, signage along the highway would be installed.

Other indirect energy savings through reduced maintenance needs (roadway, culverts, bridges etc.) could also be expected following construction of the proposed project.

The proposed project would not result in wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources. The proposed project primarily consists of the rehabilitation of existing asphalt concrete in order to address further deterioration and extend the life of the existing pavement. The proposed project is being implemented through the State Highway Operation and Protection Program (SHOPP). The selection process for SHOPP projects is specified in the Transportation Asset Management Plan (TAMP) created by Caltrans, in consultation with the California Transportation Commission (CTC), pursuant to Senate Bill 486. The TAMP assesses the health and condition of the state highway system with which Caltrans is able to determine the most effective way to apply state's limited resources. The goals and objectives established in the TAMP for SHOPP includes conserving natural resources and reducing GHG and other pollutants. As the proposed project is a part of the SHOPP, it has been identified by Caltrans, and approved by the CTC, as necessary to preserve and protect the assets of the state highway system. It will not result in a wasteful, inefficient, or unnecessary consumption of energy.

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

The following measures, from Section 3.2 Climate Change and Section 2.1.8 Traffic and Transportation/Pedestrian and Bicycle Facilities, respectively, would avoid and/or minimize potential energy impacts.

**CC-1:** During construction, implement Caltrans' Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction; which require contractors to comply with all laws

applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations.

- CC-2:** During construction, implement Caltrans' Standard Specifications Section 14-9.02, Air Pollution Control, which 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.
- CC-3:** To reduce construction emissions, limit vehicle idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.
- CC-4:** To reduce construction emissions, equipment shall be maintained in proper tune and working condition.
- CC-5:** To reduce the need for transport of earthen materials, re-use excavated materials on-site whenever possible.
- T-1:** Prepare a detailed TMP during the design phase with the following elements as major components:
- Public Awareness Campaign (PAC) particularly related to the scheduling of construction activities and their impacts on the traveling public and surrounding community.
  - Construction Zone Enforcement Enhancement Program (COZEEP).
  - Utilization of Portable Changeable Message Signs (PCMS).
  - Advance information signing pertaining to date, time, and duration of intersection closure as well as detour alternatives.

## 2.3 Biological Environment

### Biological Study Area

The Biological Study Area (BSA) consists of the I-10, which is a 4-lane divided freeway with graded median separating the roadbeds and graded shoulders. The BSA encompass a total of 1,030.90 acres and the field surveys included the median and graded shoulders to the Caltrans Right of Way (ROW).

The BSA is located within the Caltrans ROW on lands managed by the Bureau of Land Management (BLM), in proximity to several types of management and natural areas. The proposed BSA is located entirely within the BLM's Coachella Valley unit of the California Desert Conservation Area (CDCA) and 473.00 acres are located within the Desert Wildlife Management Areas (DWMA).

The BSA is also entirely within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with the western portion of the project located outside of a CVMSHCP Conservation Area and the eastern portion of the project within the CVMSHCP Desert Tortoise and Linkage Conservation Area. The CVMSHCP aims to conserve over 240,000 acres of open space and protect 27 plant and animal species. By providing comprehensive compliance with federal and state endangered species laws, the CVMSHCP safeguards the desert's natural heritage for future generations and it allows for more timely construction of roads and other infrastructure that is essential to improving quality of life in the Coachella Valley. Caltrans as a signatory to the CVMSHCP is obligated through CVMSHCP Section 6.6.2 to contribute funds to CVCC for the acquisition of conservation lands, management and monitoring.

The BSA is surrounded by lands consisting of the National Wilderness Preservation System (NWPS) including Joshua Tree Wilderness, Mecca Hills Wilderness, Orocopia Mountains Wilderness, and Santa Rosa Wilderness. It is within the Whitewater hydrologic unit, Coachella and Shavers hydrologic area, Indio, Fargo Canyon, and undefined hydrologic sub area, and undefined planning watershed all under the jurisdiction of the Colorado River RWQCB.

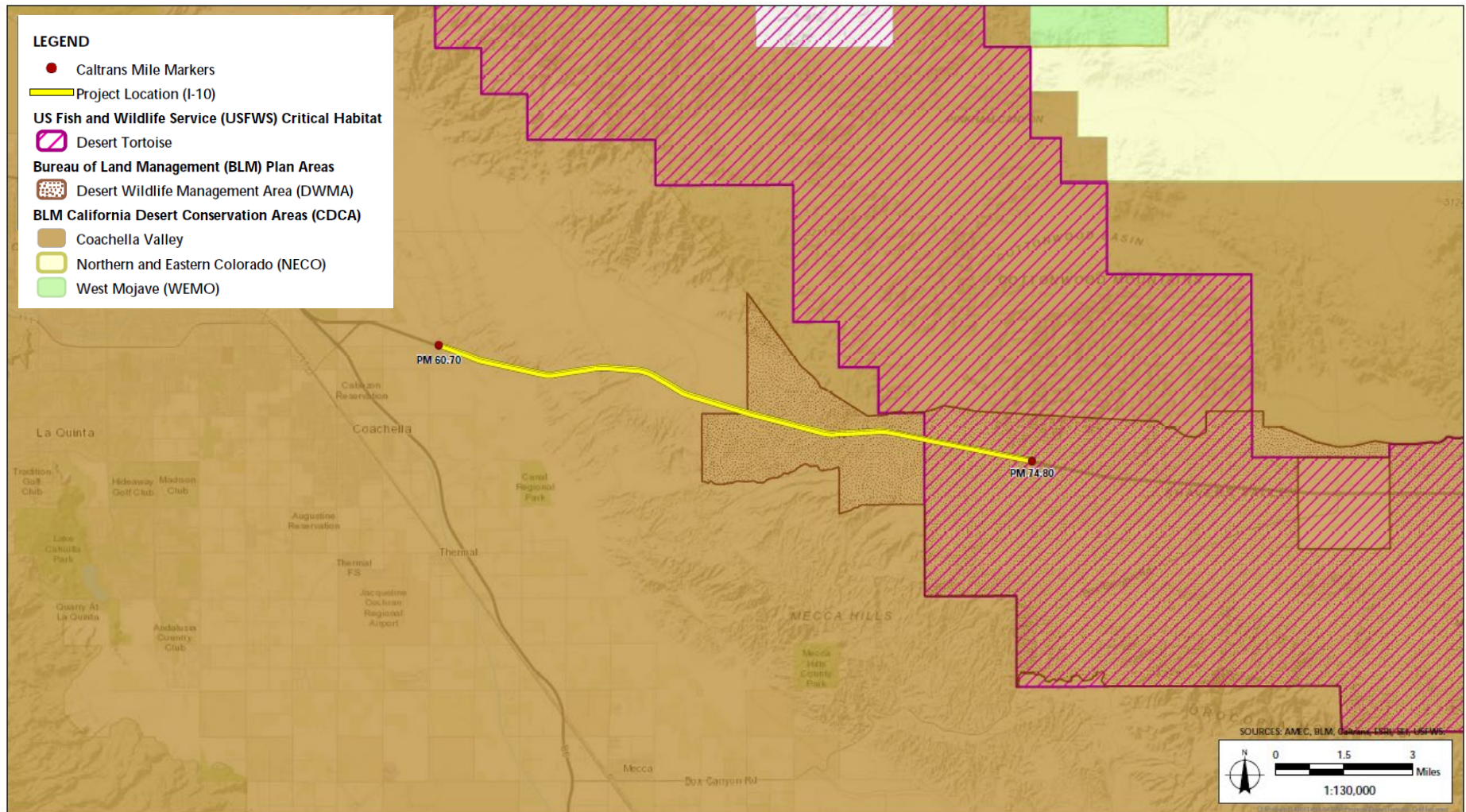
The land surrounding the BSA consists of undeveloped open space characterized by desert scrub with large intershrub spaces, rocky desert terrain, and washes. The topographic elevation of the BSA varies between flat areas to areas with a 0 to 13.01-degree slope. Elevation varies between 17 meters (57 feet) and 525 meters (1,723 feet) above mean sea level. The BSA escalates in elevation from west to east from the edge of the city of Coachella toward Cactus City and Desert Center.

The BSA is characterized by desert climatic conditions associated with the Colorado Desert in southeastern California. The area receives less than 3 inches of rainfall annually. The project is located adjacent to undeveloped land and desert wilderness.

The Biological Environment section of the environmental document is divided into the following subsections:

- Natural Communities
- Wetlands and Other Waters

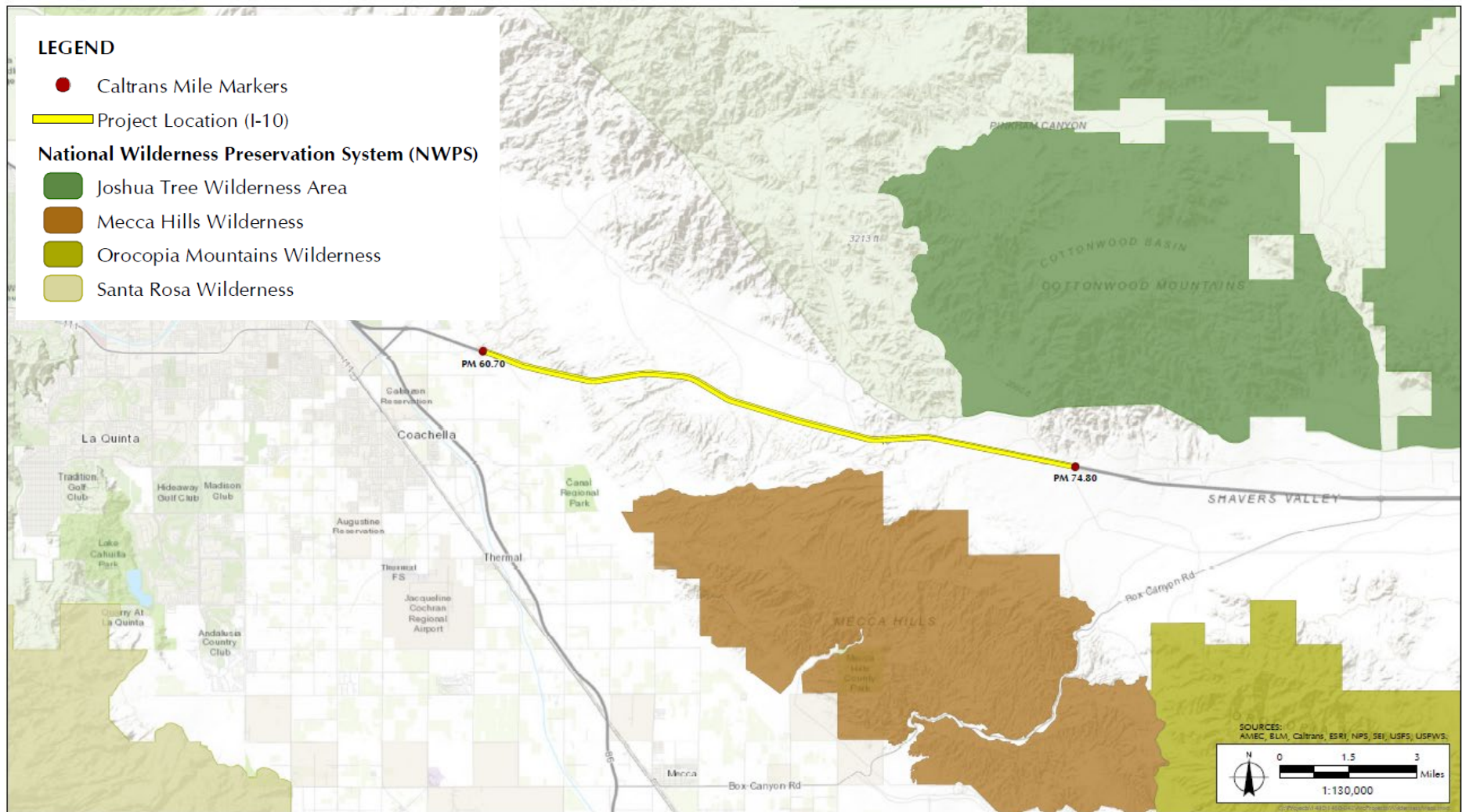
- Plant Species
- Animal Species
- Threatened and Endangered Species
- Invasive Species



**Figure 2.13.** Management and Natural Areas in the Project Vicinity – BLM Plan Areas and Desert Tortoise Critical Habitat

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**Figure 2.14.** Management and Natural Areas in the Project Vicinity – Wilderness Areas

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### 2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

#### 2.3.1.1 Affected Environment

The information from this section was synthesized from the Natural Environmental Study (NES) prepared for the proposed project (Caltrans 2019g). References used in the NES are not carried over into this section.

The BSA supports five distinct natural communities, which are described by both; the Manual of California Vegetation 2009, and the CVMSHCP designated as “natural communities” and are further detailed in Table 2.20. This table indicates both nomenclatures for these natural communities.

There are two California Sensitive Natural Communities in the BSA, blue palo verde – ironwood woodland and desert-willow – smoke tree wash woodland. The California Department of Fish and Wildlife (CDFW) assigns rankings of S1, S2, S3, S4, and S5 to natural communities, with S1 being the rarest and of most concern and S5 being common and of least concern. CDFW considers natural communities ranked S1, S2, and S3 as being of special concern. Communities ranked as S4 and S5 are not included as habitats of special concern. Table 2.20 depicts information on the vegetation communities and land cover types found in the biological field survey area including rarity and location (CDFW).

The desert dry wash woodland community is described by the CVMSHCP as an open-to-dense, drought deciduous, microphyllous thorn scrub woodland 30 - 60 feet tall, dominated by any of several members of the bean family including blue palo verde, ironwood, and smoke tree. Associated species include desert lavender (*Condea emoryi*), cheesebush, catclaw acacia, and desert-willow. It occurs in washes subject to intermittent flooding, but without perennial water. These washes are associated with canyon mouths and alluvial fans in the Santa Rosa, San Bernardino, Little San Bernardino, Cottonwood, Eagle, and Orocopia Mountains, and the Mecca Hills. The margins of arroyos in the Colorado Desert support a relatively dense growth of trees. It occurs in washes associated with canyon mouths and alluvial fans in the Santa Rosa, Little San Bernardino, Cottonwood, Eagle, and Orocopia Mountains, and the Mecca Hills. In the BSA, blue palo verde – ironwood woodland (*Parkinsonia florida/Olneya tesota* woodland association) is characterized by stands composed primarily of blue palo verde and ironwood in the tree canopy. This woodland is found in washes and sometimes in upland sites where conditions are suitable. With a State rank of S3.2, it is considered a natural community of special concern and may be subject to CDFW jurisdiction in washes. Blue palo verde – ironwood woodland covers 44.41 acres of the BSA. This community makes up 4.31 percent of the total BSA and is located throughout the BSA in desert wash areas.

Desert-willow – smoke tree wash woodland (*Chilopsis linearis – Psorothamnus spinosus* Woodland Alliance) is characterized by an open to intermittent canopy reaching up to 8 meters in height. This community occurs in washes, intermittent channels, canyon bottoms, arroyos,

along floodplains, and in wash terraces where flooding is infrequent, but subterranean water is available. With a State rank of S3.3, it is considered a natural community of special concern and may be subject to CDFW jurisdiction in washes. Desert-willow – smoke tree wash woodland covers 2.34 acres of the BSA. This community makes up 0.23 percent of the total BSA and in three washes near PM 68.90, PM 72.90, and PM 73.40.

Table 2.20. Vegetation Communities and Land Cover Types within the BSA

Vegetation Community/ Land Cover Type		Rarity	Total Acreage	Percent of Total	Description	Location within the BSA
<p>Creosote bush scrub (<i>Larrea tridentata</i> Shrubland Alliance).</p> <p>Sonoran creosote bush scrub under the CVMSHCP</p>		G5 S5	459.36	44.56	<p><i>Larrea tridentata</i> is dominant or co-dominant in the shrub canopy. Shrubs &lt;3 m; canopy is intermittent to open with seasonal annuals or perennial grasses. Found in alluvial fans, bajadas, upland slopes, and minor intermittent washes. Soils are well drained, sometimes with desert pavement. Within the BSA, other species present included <i>Ambrosia dumosa</i>, <i>A. salsola</i>, <i>Atriplex confertifolia</i>, <i>A. polycarpa</i>, <i>Encelia farinosa</i>, <i>Ephedra californica</i>, and <i>Prosopis glandulosa</i>.</p>	Dominant community; found throughout the BSA
<p>Allscale saltbush scrub (<i>Atriplex polycarpa</i> Shrubland Alliance).</p> <p>Desert saltbush scrub under the CVMSHCP</p>		G5 S4	26.70	2.59	<p><i>Atriplex polycarpa</i> is dominant or co-dominant in the shrub canopy. Shrubs &lt;3 m; canopy is open to continuous. Herbaceous layer is variable, including seasonal annuals and <i>Bromus madritensis</i> ssp. <i>rubens</i>. Found in washes, playa lake beds and shores, dissected alluvial fans, rolling hills, terraces and edges of large, and low gradient washes. Soils may be carbonate rich, alkaline, sandy, or sandy clay loams. Within the survey are other species include <i>A. salsola</i>, <i>Atriplex canescens</i>, <i>Larrea tridentata</i>, and <i>Prosopis glandulosa</i>.</p>	Found in the westernmost portion of the BSA
<p>Cheesebush - sweetbush scrub (<i>Ambrosia salsola</i> – <i>Bebbia juncea</i> Shrubland Alliance).</p> <p>Desert dry wash woodland under the CVMSHCP</p>		G5 S4	250.36	24.29	<p><i>Ambrosia salsola</i>, <i>Bebbia juncea</i>, <i>Brickellia incana</i>, and <i>Senna armata</i> is dominant or co-dominant in the shrub canopy. Shrubs &lt;2 m; canopy is open to intermittent. Found in valleys, flats, rarely-flooded low-gradient deposits, arroyos, washes, and intermittently flooded channels. Soils are alluvial, sandy and gravelly, and disturbed pavement. Within the BSA, other species present include <i>Cylindropuntia echinocarpa</i>, <i>Encelia farinosa</i>, <i>Olneya tesota</i>, <i>Parkinsonia florida</i>, and <i>Larrea tridentata</i>.</p>	Found throughout the BSA

Table 2.20. Vegetation Communities and Land Cover Types within the BSA, *continued*

Vegetation Community/ Land Cover Type	Rarity	Total Acreage	Percent of Total	Description	Location within the BSA
Blue palo verde – ironwood woodland ( <i>Parkinsonia florida</i> – <i>Olneya tesota</i> Alliance).  Desert dry wash woodland under the CVMSHCP	G4 S3.2	44.41	4.31	<i>Olneya tesota</i> and/or <i>Parkinsonia florida</i> are co-dominant, or either species is dominant, in the tree or tall shrub canopy. Trees < 14 m tall; canopy is open to continuous. Shrub layer is intermittent or open. Herbaceous layer is sparse with seasonal annuals. Found in desert arroyo margins, seasonal watercourses and washes, bottomlands, middle and upper bajadas and alluvial fans, and lower slopes. Soils are sandy, well drained, and derived from alluvium or colluvium. Within the BSA, the association <i>Parkinsonia florida</i> / <i>Condea emoryi</i> of this alliance is present. Other species present included <i>Psorothamnus spinosus</i> , <i>Senegalia greggi</i> , <i>Larrea tridentata</i> .	Found intermittently throughout the BSA; most common in wash areas
Desert-willow - smoke tree wash woodland ( <i>Chilopsis linearis</i> - <i>Psorothamnus spinosus</i> Woodland Alliance).  Desert dry wash woodland under the CVMSHCP	G4 S3.3	2.34	0.23	<i>Chilopsis linearis</i> and/or <i>Psorothamnus spinosus</i> is dominant or co-dominant in the tree or tall shrub canopy. Trees < 8 m tall; canopy is open to intermittent. Herbaceous layer is sparse to seasonally abundant with annuals. Found washes, intermittent channels, canyon bottoms, arroyos, along floodplains, and in wash terraces where flooding is infrequent, but subterranean water is available. Soils are well-drained sands and gravels that are moderately acidic to slightly alkaline. Elevation: 0–1,000 m. Other species present within the BSA include <i>Olneya tesota</i> , <i>Parkinsonia florida</i> , <i>Ambrosia salsola</i> , <i>Encelia farinosa</i> , and <i>Larrea tridentata</i> .	Found within 3 washes near PM 68.90, 72.90, and 73.40
Barren/ruderal	N/A	111.13	10.78	This land cover type indicates areas where over 90 percent of the native vegetation has been removed. These areas usually consist of staging areas and gravel or dirt crossings.	Found throughout the BSA
Road (I-10)	N/A	130.79	12.69	This land cover type consists of any paved areas including I-10 east and west-bound lanes, on-ramps, and frontage roads within the BSA.	Extends through the BSA

**Table 2.20. Vegetation Communities and Land Cover Types within the BSA, *continued***

<b>Vegetation Community/ Land Cover Type</b>	<b>Rarity</b>	<b>Total Acreage</b>	<b>Percent of Total</b>	<b>Description</b>	<b>Location within the BSA</b>
Riprap	N/A	1.31	0.13	This land cover types consists of rock or other materials used to armor streambeds and bridge abutments within the BSA.	Found in washes and on roadsides throughout the BSA
Developed	N/A	4.51	0.44	This land cover type consists of developed areas such as buildings, paved frontage roads, and any other man-made disturbances within the BSA.	Found at a rest area near PM 72.10
<p>m = meters.</p> <p><i>CDFW Global and State Rarity Rankings:</i></p> <p>G3 S3 - 21–100 viable occurrences worldwide/statewide, and/or more than 2,590 12,950 hectares</p> <p>G4 S4 - greater than 100 viable occurrences worldwide/statewide, and/or more than 12,590 hectares</p> <p>G5 S5 - demonstrably secure because of its worldwide/statewide abundance</p> <p><i>Threat Ranks:</i></p> <p>0.2 threatened; 0.3 no current threat known</p> <p>Source: Caltrans (2019g)</p>					

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### 2.3.1.2 Environmental Consequences

#### **No-Build Alternative**

Under the No-Build Alternative, there would be no permanent or temporary impacts to natural communities.

#### **Build Alternative**

Direct impacts are expected to occur within the desert washes for the bridge widenings. These direct impacts would result in permanent impact to a maximum of 44.41 acres blue palo verde - ironwood woodland. Permanent Impacts to blue - palo verde - ironwood woodland would be revised during the design phase, where the project footprint would be minimized to the maximum extent possible. Blue palo verde - ironwood woodland was mapped in desert washes located underneath bridges of I-10, which, under the Build Alternative, would be paved and provided with rock slope, resulting in permanent impacts to the woodland in these areas. Under the Build Alternative, materials in culverts and areas with rock slope protection would be removed and replaced with like features, resulting in temporary impacts to those drainages and associated vegetation.

It is anticipated the project would have direct, indirect, permanent, and temporary impacts to the desert willow-smoke tree wash woodland because of the bridge widenings and construction of the truck-climbing lane. As contouring will be performed from each shoulder to a distance of five feet, permanent impacts to desert- willow – smoke tree wash woodland are anticipated. A maximum of 2.34 acres of desert willow-smoke tree wash woodland would be permanently impacted. Acres of temporary and permanent impacts to willow-smoke tree wash woodland would be redefined and minimized to the maximum extent possible during the design phase. These small patches of woodland are located south of the I-10 east within the Caltrans ROW.

Implementing avoidance and minimization measures would assist in minimizing impacts to blue palo verde – ironwood woodland and desert-willow – smoke tree wash woodland communities. Included in the measures, a qualified biologist would perform a pre-construction plant survey no more than three days prior to ground breaking activities. Any rare plant individuals found would be flagged or fenced. In addition, impacts would be fully mitigated pursuant to state and federal requirements.

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

Natural community avoidance and minimization measures will include the following. Avoidance and Minimization measures may require revisions during the final development of design plans.

**BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01)  
Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.

- BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- BIO-3: Compliance Documentation** (2018 Caltrans Standard Specification 14-1.01) Caltrans will require all contractors to comply with the Natural Resource Protection Plan in the performance of work necessary for project completion. Evidence of compliance is required prior to Caltrans accepting or receiving materials or goods produced from outside of the ROW or using facilities located outside of the ROW, including but not limited to, noncommercial batch plants, haul roads, quarries, and similar operations. Copies of the compliance documents will be maintained at the work-site by the resident engineer.
- BIO-4: Contractor-Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D) The Contractor will hire, with the approval and authorization by the Caltrans Biologist, a well-qualified Contractor-Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologist and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.
- BIO-5: Predation Prevention** (2018 Caltrans Standard Specification 14-10.01) To preclude attracting predators, such as the common raven and coyote, food-related trash items will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife.
- BIO-18:** Construction Staging Areas will be analyzed, approved, and delineated prior to construction and outlined on the construction plan sheets for the purpose to limit construction areas.

#### 2.3.1.4 Compensatory Mitigation

Compensatory mitigation is not required for these impacts. Caltrans will consult with CVCC to ensure the project is a covered activity, particularly within the Desert Tortoise and Linkage Conservation Area and that the project is consistent with the CVMSHCP, Section 7.0 where transportation projects identified in Tables 7-1 through 7-3 are Covered Activities. Additional measures to minimize impacts from human activity during construction would be determined



during future project phases in coordination with CDFW, as applicable.

## 2.3.2 Wetlands and Other Waters

### 2.3.2.1 Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for

new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the [Water Quality section](#) for more details.

### **2.3.2.2 Affected Environment**

Unless otherwise noted, the information from this section was synthesized from the NES (Caltrans 2019g) and Draft Delineation of Jurisdictional Waters (Caltrans 2018a) prepared for the proposed project. References used in the NES and Jurisdictional Delineation are not carried over to this section.

A draft Jurisdictional Delineation (JD) was conducted, utilizing data derived from desktop review and detailed evaluation based on field surveys from October 29–31 and November 1, 2018. The desktop review identified waters, blueline drainages, soils, and other features potentially jurisdictional to the USACE, CDFW, and/or the RWQCB pursuant to Sections 401 and 404 of the CWA and the State Fish and Game Code Section 1602. Field surveys entailed visits to major drainages intersecting the BSA as identified during the desktop reviews and the field surveys documents changes in vegetation, hydrology, and location of culverts.

The results of the jurisdictional delineation determined that 51 ephemeral drainages in the BSA were jurisdictional pursuant to Section 404 of the CWA and Section 1602 of the California Fish and Game Code. This evaluation should not be considered final until concurrence is obtained by the agencies with jurisdiction over the resources, including the USACE, CDFW, and the RWQCB. For project work anticipated to occur in those drainages, the following permits are anticipated: Section 404 Individual Permit from the USACE, a Section 401 Water Quality Certification Permit from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW. Coordination for these jurisdictional drainages is ongoing.

The project area lies within the Salton Sea Watershed. Drainages west of Cactus City generally flow to the Coachella Canal. Drainages east of Cactus City generally flow south into the Pinkham Wash, to Shavers Well, and then to the Coachella Canal. The Coachella Canal carries water from the Colorado River to the Salton Sea. The Salton Sea was declared a traditionally navigable waterway in 200 because of the interstate and intrastate commerce and recreational uses. No wetlands were identified in the BSA.

### **2.3.2.3 Environmental Consequences**

#### ***No-Build Alternative***

Under the No-Build Alternative, no impacts would occur to wetlands and other waters.

#### ***Build Alternative***

The project area includes center medians, shoulders, areas beneath all bridges and culverts. The area beneath all bridges and culverts includes the crossings. Contouring will be performed from each shoulder to a distance of five-feet along the entire project area. The project impact areas currently include bridge widening at all the nine bridges and construction of truck-climbing lane. Materials in culverts and areas with rock slope protection will be removed and replaced with like features, resulting in temporary impacts to those drainages.

The project would impact Waters of the State (WSC) and Waters of the US (WOTUS). There would be no impact to wetlands. The BSA supports 51 drainages that have a connection with waters of the Colorado River via the Coachella Canal and/or flow into the Salton Sea, and thus, are under the jurisdiction of the USACE. The proposed project would have the following impacts to waters:

- Permanent impacts to WSC and WOTUS: 6 acres
- Temporary impacts to WSC and WOTUS: 12 acres

The project footprint would be revised during the final design phase. Project impacts would be fully compensated by compliance with state regulations such that no net loss of habitat functions or values occurs. Also, the proposed project would minimize and/or offset potential impact by limiting construction activities to the smallest footprint possible within drainage features and by installing temporary fencing along the construction footprint to avoid disturbances to additional areas within the drainage.

The project area occurs within the jurisdiction of the Colorado River RWQCB (Region 7). Under Section 401 of the CWA, the project would need certification from RWQCB to ensure the discharge of dredged or fill material into WUS does not violate State water quality standards. Additionally, the RWQCB regulates WSC impacts under the Porter Cologne Water Quality Control Act with a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending on the characteristics of the waterway and the level of impact. Caltrans will need to obtain a Water Quality Certification. The process requires the inclusion of the appropriate CEQA documentation with the formal application materials and fee (based on area of impact). It is anticipated that the project will need a Section 1602 Streambed Alteration Agreement from CDFW.

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

In addition to the best management practices in the Storm Water Pollution Prevention Plan and new measure devised during the regulatory permit process, the following avoidance and minimization measures efforts will be implemented to minimize potential impacts:

**BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01)

Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.

**BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

**BIO-4: Contractor-Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D) The Contractor will hire, with the approval and authorization by the Caltrans Biologist, a well-qualified Contractor-Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologist and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.

**BIO-6: De-Water Plan** (2018 Caltrans Standard Specification 13-4.01 and 13-4.03G) For all bridges that cross blue lines and are susceptible to the presence of water, a de-watering/water control plan must be created and implemented in accordance with Caltrans Water Control Standard Specifications, if water is present or could be present during construction activities.

**BIO-18:** Construction Staging Areas will be analyzed, approved, and delineated prior to construction and outlined on the construction plan sheets for the purpose to limit construction areas.

**BIO-25:** The project will impact jurisdictional Waters of the State (WSC) and Waters of the US (WOTUS). The impact analysis and mitigation ratios will be determined during the permitting process, in coordination with the US Army Corp of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW). Mitigation for permanent and temporary impacts will be calculated in coordination with the regulatory agencies.

### **2.3.2.5 Compensatory Mitigation**

Project impacts to jurisdictional areas would be mitigated and coordinated with USACE, RWQCB, and CDFW during the permitting process.

## **2.3.3 Plant Species**

### **2.3.3.1 Regulatory Setting**

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species section 2.3.5 in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

### **2.3.3.2 Affected Environment**

Unless otherwise noted, the information from this section was synthesized from the NES prepared for the proposed project (Caltrans 2019g). References used in the NES are not carried over into this section.

The results of the literature search and general habitat assessment indicated that 24 special status plant species were of potential occurrence in the BSA (Table 2.21). However, it was not possible to conduct a focused survey for most of those species, due to the timing of the field surveys as it was not the right time of year to detect them. It is possible that October blooming species would have been detected by the general habitat assessment and desert tortoise focused survey had they been present, but 2018 did not have sufficient rainfall for an appropriate survey of listed and special-status plant species. Therefore, botanical surveys were

postponed.

The BSA does not support USFWS designated critical habitat for listed plant species. Although, no focused surveys for rare and listed plant species were completed, plant species observed during the general habitat assessment are: cheesebush scrub, creosote bush scrub, palo verde, saltbush scrub, and smoke tree. No rare or listed species were observed during these surveys.

Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Chaparral sand-verbena ( <i>Abronia villosa</i> var. <i>aurita</i> )	BLM:S CRPR: 1B.1	Annual herb. Bloom period: (January) March-September. Sandy places in coastal scrub, chaparral, and desert dunes; Elevation: -60 - 1600 m	A	No suitable habitat exists within the BSA. This species was not observed.
Parish's onion ( <i>Allium parishii</i> )	CRPR: 4.3	Perennial bulbiferous herb. Bloom period: April-May. Rocky places in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland. Elevation: 900-1735 m.	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Singlewhorl burrobush ( <i>Ambrosia monogyra</i> )	CRPR: 2B.2	Perennial shrub. Bloom period: August-November. Chaparral and Sonoran desert scrub in sandy soils. Elevation: 5-500 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
San Bernardino milk-vetch ( <i>Astragalus bernardinus</i> )	BLM:S CRPR: 1B.2	Perennial herb. Bloom period: April-June. Joshua tree woodland, Pinyon and Juniper woodland on granitic or carbonate substrates. Elevation: 290-2290 m.	A	No suitable habitat exists within the BSA. This species was not observed.
Borrego milk-vetch ( <i>Astragalus lentiginosus</i> var. <i>borreganus</i> )	CRPR: 4.3	Annual herb. Bloom period: February-May. Mojave and Sonoran Desert Scrub. Sandy; Elevation: 30 to 895 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Coachella valley milk-vetch ( <i>Astragalus lentiginosus</i> var. <i>coachellae</i> )	FE CRPR: 1B.2 CVMSHCP	Annual / perennial herb. Bloom period: February-May. Desert dunes and Sonoran desert scrub on sandy flats, washes, and outwash fans. Elevation: 35-695 m.	A	The CVMSHCP has not mapped modeled habitat for the species in the BSA and project appears to be out of the range of the species. Although, this species was not observed Caltrans will implement conservation measures if necessary to maintain population viability.
Lancaster milk-vetch ( <i>Astragalus preussi</i> var. <i>laxiflorus</i> )	CRPR: 1B.1	Perennial herb. Bloom period: March-May. Chenopod scrub in alkaline clay flats or sandy washes and along draws in gullied badlands. Elevation: 700-735 m.	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.

Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued*

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Gravel milk-vetch ( <i>Astragalus sabulonum</i> )	CRPR: 2B.2	Annual / perennial herb. Bloom period: February-June. Desert dunes, Mojave & Sonoran Desert scrub. Usually sandy, sometimes gravelly flats, washes, & roadsides; Elevation: -60 to 930 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Triple-ribbed milk vetch ( <i>Astragalus tricarinatus</i> )	FE CRPR: 1B.2 CVMSHCP	Perennial herb. Bloom period: February-May. Sandy or gravelly Joshua tree woodland, and Sonoran desert scrub. Hot, rocky slopes in canyons and along edge of boulder-strewn washes with <i>Larrea</i> and <i>Encelia</i> . Elevation: 450-1585 m.	A	The CVMSHCP has not mapped modeled habitat for the species in the BSA and project appears to be out of range. Although, this species was not observed Caltrans will implement conservation measures if necessary to maintain population viability.
California ayenia ( <i>Ayenia compacta</i> )	CRPR: 2B.3	Perennial herb. Bloom period: March-April. Mojave and Sonoran Desert scrub. Sandy, gravelly washes, dry canyons. Elevation: 60-1,830 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Little-leaf elephant tree ( <i>Bursera microphylla</i> )	CRPR: 2B.3	Perennial deciduous tree. Bloom period: June-July. Rocky Sonoran desert scrub on hillsides, washes, and canyon sides. Elevation: 200-700 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Peninsular spineflower ( <i>Chorizanthe leptotheca</i> )	CRPR: 4.2	Annual herb. Bloom period: May-August. Found in chaparral, coastal scrub, and lower montane coniferous forest in alluvial fan and granitic substrates. Elevation: 300-1900 m.	A	No suitable habitat exists within the BSA, this species was not observed.
California sawgrass ( <i>Cladium californicum</i> )	CRPR: 2B.2	Perennial rhizomatous herb. Bloom period: June-September. Found in meadows and seeps, marshes and swamps in alkaline or freshwater. Elevation: 60-1600 m.	A	No suitable habitat exists within the BSA, this species was not observed.



Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued*

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Las Animas colubrina ( <i>Colubrina californica</i> )	CRPR: 2B.2	Perennial deciduous shrub. Bloom period: April-June. Mojave and Sonoran Desert scrub in narrow, steep rocky ravines or washes. Elevation: 10-1000 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Alverson's foxtail cactus ( <i>Coryphantha alversonii</i> )	CRPR: 4.2	Perennial stem succulent. Bloom period: April-June. Mojave and Sonoran Desert scrub. Sandy or rocky usually granitic on gravelly slopes and dissected alluvial fans. Elevation: 75-1525 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Glandular ditaxis ( <i>Ditaxis claryana</i> )	CRPR: 2B.2	Perennial herb. Bloom period: October, December-March. Mojave and Sonoran Desert scrub. Sandy places in dry washes and rocky hillsides. Elevation: 0-465 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
California ditaxis ( <i>Ditaxis serrata</i> var. <i>californica</i> )	CRPR: 1B.3	Perennial herb. Bloom period: March-December. Sonoran Desert scrub in sandy washes and alluvial fans of foothills and lower desert slopes. Elevation: 30-1000 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Booth's evening primrose ( <i>Eremothera boothii</i> ssp. <i>boothii</i> )	CRPR: 2B.3	Annual herb. Bloom period: April-September. Found in Joshua tree woodland and pinyon and juniper woodland. Elevation: 285-2400 m.	A	No suitable habitat exists within the BSA, this species was not observed.
Harwood's eriastrum ( <i>Eriastrum harwoodii</i> )	BLM:S CRPR: 1B.2	Annual herb. Bloom period: March-June. Desert dunes. Elevation: 15-1100 m	A	No suitable habitat exists within the BSA, this species was not observed.
Joshua tree poppy ( <i>Escholzia androuxii</i> )	CRPR: 4.3	Annual herb. Bloom period: February-June. Found in Joshua tree woodland and Mojave desert scrub. Elevation: 585-1685 m	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Abrams' spurge ( <i>Euphorbia abramsiana</i> )	CRPR: 2B.2	Annual herb. Bloom period: August-November. Sandy Mojave and Sonoran desert scrub. Elevation: -45 to 1445 m	HP	Suitable habitat exists within the BSA. This species was not observed.

Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued*

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Arizona spurge ( <i>Euphorbia arizonica</i> )	CRPR: 2B.3	Perennial herb. Bloom period: March-April. Found in Sonoran desert scrub on sandy soils. Elevation: 50-900 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Flat-seeded spurge ( <i>Euphorbia platysperma</i> )	BLM:S CRPR: 1B.2	Annual herb. Bloom period: February-September. Found in desert dunes and Mojave and Sonoran desert scrub in sandy places or shifting dunes. Elevation: 60-960 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Wavyleaf twinevine ( <i>Funastrum crispum</i> )	CRPR: 2B.2	Perennial herb. Bloom period: May-August. Found in chaparral and pinyon juniper woodlands. Elevation: 1165-1850 m.	A	No suitable habitat exists within the BSA, BSA is outside of elevational range of the species. This species was not observed.
Prickle-leaf ( <i>Hecastocleis shockleyi</i> )	CRPR: 3	Perennial evergreen shrub. Bloom period: May-July. Found in chenopod scrub and Mojavean desert scrub on rocky slopes, washes, often on carbonate or slate substrates. Elevation: 1200-2200 m.	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Shaggy-haired alumroot ( <i>Heuchera hirsutissima</i> )	CRPR: 1B.3	Perennial rhizomatous herb. Bloom period: May-July. Found in subalpine and upper montane coniferous forests on rocky and granitic substrates. Elevation: 1520 -3500 m.	A	No suitable habitat exists within the BSA; BSA is outside of elevational range of the species. This species was not observed.
Rau's jaffueliobryum moss ( <i>Jaffueliobryum raii</i> )	CRPR: 2B.3	Moss. No blooming period. Found in dry openings, rock crevices, and carbonate substrate in alpine dwarf scrub, chaparral, Mojavean desert scrub, and Sonoran desert scrub. Elevation: 490-2100 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Wright's jaffueliobryum moss ( <i>Jaffueliobryum wrightii</i> )	CRPR: 2B.3	Moss. No blooming period. Desert dunes, Alpine dwarf scrub, pinyon juniper woodland, Mojave and Sonoran Desert scrub. Dry openings, rock crevices, carbonate; Elevation: 160–2500 m	HP	Suitable habitat exists within the BSA. This species was not observed.

Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued*

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Ribbed cryptantha ( <i>Johnstonella costata</i> )	CRPR: 4.3	Annual herb. Bloom period: February-May. Mojave and Sonoran Desert scrub. Sandy. Elevation: -60-500 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Winged cryptantha ( <i>Johnstonella holoptera</i> )	CRPR: 4.3	Annual herb. Bloom period: March-April. Mojave and Sonoran Desert scrub. Elevation: 100-1690 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Southwestern spiny rush ( <i>Juncus acutus</i> ssp. <i>leopoldii</i> )	CRPR: 4.2	Perennial rhizomatous herb. Bloom period: March, May-June. Found in coastal dunes (where mesic), meadows and seeps (alkaline), and marshes and swamps coastal salt). Elevation: 3-900 m	A	No suitable habitat exists within the BSA, this species was not observed.
Santa Rosa Mountains leptosiphon ( <i>Leptosiphon floribundus</i> ssp. <i>hallii</i> )	CRPR: 1B.3	Perennial herb. Bloom period: May-July, November. Found in pinyon juniper woodland and Sonoran desert scrub in desert canyons. Elevation: 1000-2000 m	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Torrey's box-thorn ( <i>Lycium torreyi</i> )	CRPR: 4.2	Perennial shrub. Bloom period: January-June, September-November. Mojave and Sonoran Desert scrub. Sandy, rocky, washes, streambanks, and desert valleys. Elevation: -50-1220 m	HP	Suitable habitat exists within the BSA. This species was not observed.
California marina ( <i>Marina orcutti</i> var. <i>orcutti</i> )	CRPR: 1B.3	Perennial herb. Blooming period: May-October. Found in chaparral, pinyon juniper woodland, and Sonoran desert scrub. Gravelly hillsides, rocky soil. Elevation: 365-1160 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Spear-leaf matelea ( <i>Matelea parvifolia</i> )	CRPR: 2B.3	Perennial herb. Blooming period: March-May, July. Found in rocky areas in Mojave and Sonoran desert scrub on ledges and slopes. Elevation: 440-1440 m.	HP	Suitable habitat exists within the BSA. This species was not observed.

**Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued***

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Spiny-hair blazing star ( <i>Mentzelia tricuspidis</i> )	CRPR: 2B.1	Annual herb. Blooming period: March-May. Found in Mojavean desert scrub on sandy or gravelly slopes and washes. Elevation: 150-1280 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Creamy blazing star ( <i>Mentzelia tridentata</i> )	BLM:S CRPR: 1B.3	Annual herb. Blooming period: March-May. Found in Mojave desert scrub in sandy, rocky, or gravelly substrate. Elevation: 700-1175 m.	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Slender cottonheads ( <i>Nemacaulis denudata</i> var. <i>gracilis</i> )	CRPR: 2B.2	Annual herb. Blooming period: March-May. Found in coastal dunes, desert dunes, and Sonoran desert scrub in sand. Elevation: -50 - 400 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Narrow-leaf sandpaper plant ( <i>Petalonyx linearis</i> )	CRPR: 2B.3	Perennial shrub. Bloom period: Year-round. Mojave and Sonoran Desert scrub. Sandy or rocky canyons. Elevation: -30 to 1115 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Slender-stem bean ( <i>Phaseolus filiformis</i> )	CRPR: 2B.1	Annual herb. Bloom period April. Found in Sonoran desert scrub in gravelly washes bordered by creosote bush dominated rocky slopes. Elevation: 125 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Thorny milkwort ( <i>Polygala acanthoclada</i> )	CRPR: 2B.3	Perennial shrub. Bloom period: May-August. Found in chenopod scrub, Joshua tree woodland, pinon juniper woodland. Elevation: 760-2,285 m.	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Deep Canyon snapdragon ( <i>Pseudorontium cyathiferum</i> )	CRPR: 2B.3	Annual herb. Bloom period: February-August. Found in Sonoran desert scrub on rocky sites. Elevation: 0-800 m.	HP	Suitable habitat exists within the BSA. This species was not observed.

**Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued***

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Latimer's woodland-gilia ( <i>Saltugilia latimeri</i> )	BLM:S CRPR: 1B.2	Annual herb. Bloom period: March-June. Found in chaparral, Mojavean desert scrub, and pinyon juniper woodland on rocky or sandy substrate. Sometimes in washes, often granitic, sometimes limestone substrate. Elevation: 120-2200 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Orocopia sage ( <i>Salvia greatae</i> )	BLM:S CRPR: 1B.3 CVMSHCP	Perennial evergreen shrub. Bloom period: March–April. Mojave and Sonoran Desert scrub on broad bajadas and fans adjacent to desert washes in gravelly or rocky soil. Also rocky slopes of canyons. Elevation: –45 to 825 m	HP	Suitable habitat exists within the BSA. This species was not observed. This species is a covered species per the CVMSHCP, Section 9.0 Species Accounts and Conservation Measures. Caltrans will implement conservation measures to ensure to maintain population viability. Caltrans will comply with the species avoidance and minimization measures per Section 9.0 of the CVMSHCP.
Desert spike-moss ( <i>Selaginella eremophila</i> )	CRPR: 2B.2	Perennial rhizomatous herb. Bloom period: May-July. Chaparral, Sonoran Desert scrub. Shaded sites, rocky, gravelly substrates among rocks or in crevices; Elevation: 200-1570 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Cove's cassia ( <i>Senna covesii</i> )	CRPR: 2B.2	Perennial herb. Bloom period: March–June, August. Sonoran Desert scrub. Dry, sandy desert washes and slopes; Elevation: 225-1295 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Purple stemodia ( <i>Stemodia durantifolia</i> )	CRPR: 2B.1	Perennial herb. Bloom period: December-January, April, June, August-October. Found in Sonoran desert scrub, often sandy and mesic. Elevation: 35-385 m.	HP	Suitable habitat exists within the BSA. This species was not observed.
Hall's tetracoccus ( <i>Tetracoccus hallii</i> )	CRPR: 4.3	Perennial deciduous shrub. Bloom period: January-May. Found in Mojavean and Sonoran desert scrub. Elevation: 30-1,200 m.	HP	Suitable habitat exists within the BSA. This species was not observed.

**Table 2.21. Special Status Plant Species with the Potential to Occur in the Project Vicinity, *continued***

Common/Scientific Species Name	Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>Plant Species</b>				
Sonoran maiden fern ( <i>Thelypteris puberula</i> var. <i>sonorensis</i> )	CRPR: 2B.2	Perennial rhizomatous herb. Bloom period: January-September. Found in meadows and seeps. Elevation: 50-610 m.	A	No suitable habitat exists within the BSA, this species was not observed.
Palmer's jackass clover ( <i>Wislizenia refracta</i> ssp. <i>palmeri</i> )	CRPR: 2B.2	Perennial deciduous shrub. Bloom period: Year-round. Chenopod scrub, Sonoran Desert scrub, Sonoran thorn woodland, desert dunes. Elevation: 0-300 m	HP	Suitable habitat exists within the BSA. This species was not observed.
Jackass-clover ( <i>Wislizenia refracta</i> ssp. <i>refracta</i> )	CRPR: 2B.2	Annual herb. Bloom period: April–November. Mojave and Sonoran Desert scrub, playas, desert dunes in washes, roadsides, and alkaline flats. Elevation: 600-800 m	A	Suitable habitat exists within the BSA, but BSA is outside of elevational range of the species. This species was not observed.
Mecca aster ( <i>Xylorhiza cognata</i> )	BLM:S CRPR: 1B.2 CVMSHCP	Perennial herb. Bloom period: January-June. Found in Sonoran desert scrub on steep canyon slopes in sandstone and clay. Elevation: 20-400 m.	HP	Suitable habitat exists within the BSA. This species was not observed. This species is a covered species per the CVMSHCP, Section 9.0 Species Accounts and Conservation Measures. Suitable habitat exists within the BSA but this is covered species per CVMSHCP and Caltrans will comply with the species avoidance and minimization measures per Section 9.0 of the CVMSHCP.
<p>Habitat Presence: A = No Suitable habitat present; HP = Suitable habitat present, but species not observed; P = Suitable habitat present, species observed during field surveys.</p> <p>Status CRPR = California Rare Plant Rank; FE: Federally endangered; BLM:S = BLM sensitive; CVMSHCP:C = *Covered species under the CVMSHCP</p> <p>CNPS CRPR: 1B - Plants rare, threatened, or endangered in California and elsewhere. 2B - Plants rare, threatened, or endangered in California, but more common elsewhere. 3 - Plants about which more information is needed (Review List). 4 - Limited distribution (Watch List).</p> <p>Threat Ranks: 0.1 - Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) 0.2 - Moderately threatened in California (20–80% occurrences threatened / moderate degree and immediacy of threat) 0.3 - Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)</p> <p>CVMSHCP: Coachella Valley Multiple Species Habitat Conservation Plan: Covered Species and Take Authorized for Each Species Under the CVMSHCP</p> <p>Source: Caltrans (2019g)</p>				

### 2.3.3.3 Environmental Consequences

#### No-Build Alternative

No permanent or temporary impacts to plant species would occur under the No-Build Alternative.

#### Build Alternative

No special status plants have been identified in the BSA, therefore no impacts are known at this time.

To confirm presence or absence of special status plants, biological surveys will be conducted in the Spring of 2020, as stated in Measure BIO-22. In addition, to avoid potential permanent or temporary impacts to plant species that may be present in the BSA, a qualified biologist would perform a pre-construction plant survey. Should any rare plants be found, individuals will be flagged for clear identification to ensure they are visible to construction personnel for avoidance. If a special status plant species is found within the work area, the authorized, contractor-supplied biologist will contact the appropriate resource agency(s) to determine the time and suitable translocation area for the plant species to be moved. In addition, the avoidance and minimization measures listed below would be implemented to avoid or reduce impact to the plant species that could be present.

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

The following avoidance and minimization measures will be implemented:

**BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01)

Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.

**BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

**BIO-3: Compliance Documentation** (2018 Caltrans Standard Specification 14-1.01) Caltrans will require all contractors to comply with the Natural Resource Protection Plan the performance of work necessary for project completion. Evidence of compliance is

required prior to Caltrans accepting or receiving materials or goods produced from outside of the ROW or using facilities located outside of the ROW, including but not limited to, noncommercial batch plants, haul roads, quarries, and similar operations. Copies of the compliance documents will be maintained at the work-site by the resident engineer.

- BIO-4: Contractor-Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D) The Contractor will hire, with the approval and authorization by the Caltrans Biologist, a well-qualified Contractor-Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologists and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.
- BIO-5: Predation Prevention** (2018 Caltrans Standard Specification 14-10.01) To preclude attracting predators, such as the common raven and coyote, food-related trash items will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife.
- BIO-7: Pre-Construction Clearance Rare Plant Surveys** (2018 Caltrans Standard Specification 14- 6.03) Within 3 days prior to construction, special status and rare plant species individuals will be flagged for clear identification to ensure they are visible to construction personnel for avoidance. Should multiple plants in a single location be found, the groupings will be fenced with environmental sensitive temporary fencing.
- BIO-18:** Construction Staging Areas will be analyzed, approved, and delineated prior to construction and outlined on the construction plan sheets for the purpose to limit construction areas.
- BIO-22: Plant Surveys** Plant surveys shall be conducted during Spring of 2020 to confirm presence or absence of special status plants.

## 2.3.4 Animal Species

### 2.3.4.1 Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or



endangered are discussed in the Threatened and Endangered Species Section 2.3.5. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Local Regulations:

- **Riverside County General Plan:** The Multipurpose Open Space Element of the General Plan compiles regulations and guidelines for preserving and enhancing open space. The policies are set to achieve balance between urban uses and open space habitat in the unincorporated areas of the County and on public lands owned by the County. Policies include the permanent preservation of open space lands that contain important natural resources: oak trees, superior examples of native trees, forest resources, natural vegetation, and stands of established trees and other features for the ecosystem. Riverside County also values the preservation of aesthetic scenic recreational value, scenic highways, and water conservation. Multiple Species Habitat Conservation Plans have been adopted for the western Riverside County and Coachella Valley areas.
- **Caltrans Bat Policy:** The Caltrans Bat Policy states that Caltrans' projects will not interfere substantially with the movement of any bat species or with established migratory corridors. Projects and programs avoid, minimize, mitigate, and provide enhancement for potentially substantial adverse effects. This is done either directly or through habitat modifications, for any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Documentation of considerations and analysis for actions proposed to comply with these regulations shall be included in the environmental documentation prepared for the proposed action.
- **Coachella Valley Multiple Species Habitat Conservation Plan:** The CVMSHCP developed in 1996 by BLM, 9 Coachella Valley cities, Riverside County, and state and other federal agencies provides a regional vision for balanced growth that will help conserve the Coachella Valley's natural heritage while also building a strong economy that is vital to the future of the Valley. The CVMSHCP was developed in tandem with the Coachella Valley region of the CDCA to provide a framework for implementation actions supporting landscape-level approach to conservation. The CVMSHCP aims to conserve over 240,000 acres of open space and protect 27 plant and animal species. By providing comprehensive compliance with federal and state endangered species laws, the CVMSHCP safeguards the desert's natural heritage for future generations and it allows

for more timely construction of roads and other infrastructure that is essential to improving quality of life in the Coachella Valley.

#### **2.3.4.2 Affected Environment**

Unless otherwise noted, the information from this section was synthesized from the NES prepared for the proposed project (Caltrans 2019g). References used in the NES are not carried over into this section. In order to comply with the provisions of various state and federal environmental statutes and executive orders, the potential impacts to natural resources of the region were investigated and documented. A list of species and habitats within the project region was developed based on information compiled by the USFWS, CNDDDB, and other current publications. The project site was field reviewed to identify animal species.

The desert lands of Southern California support a diverse and rich collection of wildlife. Common species known to occur within the project vicinity include Colorado Desert sidewinder (*Crotalus cerastes laterorepens*), great-tailed grackle (*Quiscalus mexicanus*), cactus wren (*Campylorhynchus brunneicapillus*), red-tailed hawk (*Buteo jamaicensis*), Audubon's cottontail (*Sylvilagus audubonii*), coyote, black-tailed jackrabbit (*Lepus californicus*), darkling beetle (*Tenebrionidae sp.*), side-blotched lizard (*Uta stansburiana*), mourning dove (*Zenaida macroura*), kit fox/gray fox, coyote, tiger whiptail (*Aspidoscelis tigris*), and common raven (*Corvus corax*). The fall field surveys conducted detected individuals or evidence of 30 wildlife species within the BSA, including invertebrates, reptiles, birds, and mammals.

#### **State Species of Special Concern, Fully Protected, Watch List, State Ranking, and/or Take Prohibited**

The literature search identified 40 special-status animal species which have status other than threatened or endangered and have potential to occur in the project area. Habitat has been analyzed and of these 40 species, 22 have suitable habitat within the BSA, and four occurred: great egret, olive-sided flycatcher, black-tailed gnatcatcher, and gray / kit fox.

#### **Coachella Valley Multiple Species Habitat Conservation Plan**

The CVMSHCP covers 27 sensitive species. Habitat has been analyzed and of those 27 species, 22 were identified by the literature search as having the potential to occur within the project area, including 18 animals. Of those, six animal species have habitat in the BSA. Only the desert tortoise was detected within the BSA through the presence of scat and burrows. Refer to Section 2.3.5 for a discussion on desert tortoise. The BSA is located entirely within the CVMSHCP and Caltrans will consult with CVCC to ensure the project is a covered activity and consistent with CVMSHCP. Caltrans as a signatory to the CVMSHCP is obligated through CVMSHCP Section 6.6.2 to contribute funds to CVCC for the acquisition of conservation lands, management and monitoring. Additionally, Caltrans will comply with the applicable avoidance and minimization measures to avoid or reduce impact.

#### **Special Status Animal Species**

The results of the literature search and general habitat assessment indicated that 23 special status animal species were of potential occurrence in the BSA. One insect, one reptile, nine birds, and twelve mammals (including six bat species).

## Discussion of Special Status Insects

- **Cheeseweed Owlfly:** The only special status insect species found to be of potential occurrence in the BSA is the cheeseweed owlfly. Populations of this insect occur on or near bajadas and larvae are associated with the roots of creosote bush. Adults aggregate at local high topographic features to mate. Synchronized adult emergence occurs from mid-April to mid-May. The closest known occurrence of this species is a 1974 record from approximately 4.5 miles south of the BSA. The cheeseweed owlfly was not encountered during the general habitat assessment, focused tortoise survey, or JD. It spends most of its life underground as a larva. Potential habitat is present in the BSA.

## Discussion of Special Status Reptiles

**Desert Tortoise:** The only special status reptile species found to occur is the desert tortoise, detected through the presence of scat. The desert tortoise is listed as threatened under the FESA and CESA. The entire extent of the project lies in the historic range of the desert tortoise. The database searches identified seven records of desert tortoises within one mile of the BSA (Figure 2.15): four occurrences were within two miles of PM 74.00 on the north and south side of I-10, one occurrence was within one mile of PM 70.00 on the north side of I-10, one occurrence was within one mile of PM 59.00 on the south side of I-10, and one occurrence was recorded in CNDDB as PSOMAS Paradise Valley desert tortoise presence/absence surveys conducted in April and May 2003 on an 8.5-square mile property. These historic occurrences were documented between 1987 and 2005. Suitable desert tortoise habitat such as native desert scrub communities, flat terrain and sandy, fine soils was observed throughout the BSA. No live desert tortoise or signs were recorded in the BSA during the October 2018 protocol surveys. 21 burrows were observed within the BSA during field surveys, but none were definite tortoise burrows. The presence of scat established definite tortoise presence in the BSA, thus belt (zone of influence) transects around the project area were not required. Critical habitat was designated by the USFWS for the desert tortoise in 1994 and approximately 153.26 acres of the eastern-most part of the project area falls within USFWS designated critical habitat. Due to the area being located within the desert tortoise's historic range within the eastern portions of the BSA, suitable habitat, potential burrows identified and the presence of desert tortoise scat, it is presumed that the desert tortoise is present within the BSA. Section 2.3.5 includes further discussion on the desert tortoise.

## Discussion of Special Status Bird Species

During the field surveys, 2 special status bird species were observed in the BSA, great egret and olivesided flycatcher, were passing migrants. The great egret was observed flying over an area approximately 0.2 miles outside the western-most portion of survey area. Olivesided flycatcher was observed on October 15 and 16, 2018 during a transect survey on the north side of the westbound lanes of I-10. No nesting habitat exists for them in the BSA, so they will not be considered further. Likewise, ferruginous hawk may occur in the BSA in winter, but does not nest in the region and is not a concern to this project, as at most, it would require the bird to choose a different foraging spot. The region around the BSA contains ample foraging territory. Prairie falcon does nest in the region, but no nesting habitat was present in the BSA. Thus, like the ferruginous hawk, any prairie falcon would simply forage elsewhere during the project.

Ferruginous hawk and prairie falcon will not be considered further. Thus, 5 potentially occurring special status bird species remain to be considered:

- **Burrowing Owl:** This species is designated as Species of Special Concern (SSC) by CDFW, BLM Sensitive, a USFWS Bird of Conservation Concern. It is a species covered by the CVMSHCP. It is protected by the MBTA and state code. This species inhabits open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The burrowing owl is a subterranean nester, often dependent upon burrowing mammals for burrow sites. No burrowing owl individuals or other sign (pellets, feathers, or whitewash) were observed during the partial habitat assessment conducted in 2018. However, suitable habitat for burrowing owl was observed, including burrows scattered throughout the BSA which could potentially be occupied by burrowing owls. In addition, 7 CNDDDB records of burrowing owl occupancy and breeding pairs between 2006 and 2010 occur within 1 mile of the western portion of the project area, specifically PM 60.00 through 64.00. Thus, burrowing owl are presumed to be present within the BSA. Nesting season for the burrowing owl is generally defined as February 1 to August 31 in the protocol.
- **Loggerhead Shrike:** This species is classified as a CDFW SSC, a USFWS BCC, and is protected pursuant to the federal MBTA and state code. Loggerhead shrike is a resident and winter visitor of lowlands and foothills throughout California. Preferred habitats include broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, desert oases, scrub, and washes with perches and open country for hunting. They also use open cropland to forage, but rarely heavily urbanized areas. Breeding preferences often include fairly densely foliated shrubs or trees. Suitable habitat was observed throughout the BSA where shrubs and trees were present in open space. The nearest CNDDDB occurrence of this species is located 11.07 miles northwest of the western-most part of the BSA and was observed in 2005, but this species is often seen at the Cactus City Rest Area. No loggerhead shrikes were observed within the BSA during the October-November field visits.
- **Black-tailed Gnatcatcher:** This species is designated as a watch list (WL) species by CDFW. It is protected by the MBTA and state code. The species is a resident of the southern deserts. Black-tailed gnatcatcher inhabits desert washes and desert riparian habitat. The species requires mesquite, palo verde, ironwood, or acacia for nesting. Suitable habitat for this species was observed within the BSA in desert washes and other areas where palo verde and other trees and shrubs were observed. The nearest CNDDDB occurrence of this species is located 8.30 miles southwest of the western-most part of the BSA and was observed in 1984. It has also been reported from the Cactus City Rest Area. Black-tailed gnatcatchers were observed foraging near PM 71.90 and 73.00 during the surveys conducted in 2018.
- **Bendire's Thrasher:** This species is a designated SSC by CDFW, BCC by USFWS, and a BLM Sensitive Species. It is protected by the MBTA and state code. The species is a breeding season resident in flat areas of desert succulent shrub/Joshua tree habitats, primarily in the Mojave Desert. Bendire's thrasher nests in cholla, yucca, palo verde, thorny shrubs, or small trees. Suitable habitat for this species was observed within the BSA where appropriate nesting substrates were present. The nearest CNDDDB occurrence of this species is located 9.60 miles northeast of the eastern-most part of the BSA and was observed in 1986. No Bendire's thrasher individuals were observed during the surveys.

- **LeConte's Thrasher:** This species is a designated BCC by USFWS. It is a species covered by the CVMSHCP. It is protected by the MBTA and state code. The species is a resident of open desert wash and desert scrub habitat. LeConte's thrashers nest in dense, spiny shrub or densely-branched cactus in desert wash habitat. Suitable habitat for this species was observed within the BSA in the open desert wash and scrub habitats that were present. CVMSHCP modeled habitat for the species is present in the BSA. The nearest CNDDDB occurrence of this species (occurrence number 26) is located 4.52 miles west of the western-most part of the BSA and was observed in 1924. No LeConte's thrasher individuals were observed during the surveys.

### Discussion of Special Status Bat Species

Six species of special status bats were found to be of potential occurrence. Four of these, the spotted bat, western mastiff bat, western yellow bat, and pocketed free-tailed bat only potentially occur as foragers. The project, surrounded by undeveloped open space, would have minimal impacts on those four species.

- **Pallid Bat:** This species is a CDFW SSC and a BLM sensitive species. This species ranges from roosting alone to groups of hundreds of individuals. Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees, and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings. Roosts generally have unobstructed entrances/exits, and are high above the ground, warm, and inaccessible to terrestrial predators. However, this species has also been found roosting on or near the ground under burlap sacks, stone piles, rags, and baseboards. The closest CNDDDB occurrence of this species is a 1992 record from approximately 4 miles south of the BSA. A bat habitat assessment of bridges within the BSA was conducted. No bats were observed, and neither suitable roosting habitat nor sign of bat occupation was observed in bridges or culverts. Vegetation, rip-rap, and rock-slope protection within the BSA were determined to provide low potential for roosting for pallid bat.
- **Townsend's Big-Eared Bat:** This species is a CDFW SSC and a BLM sensitive species. Distribution is strongly correlated with the availability of caves and cave-like roosting habitat, including abandoned mines. Population centers occur in areas dominated by exposed, cavity or caverniculous forming rock and/or historic mining districts. It has also been reported to utilize buildings, bridges, rock crevices and hollow trees as roost sites. The closest CNDDDB occurrence of this species is an undated collection record from approximately 8 miles south of the BSA. A bat habitat assessment of bridges within the BSA was conducted. No bats were observed, and neither suitable roosting habitat nor sign of bat occupation was observed in bridges or culverts. Vegetation, rip-rap, and rock-slope protection within the BSA were determined to provide low potential for roosting for townsend's big-eared bat.

### Discussion of Special Status Flightless Mammals

Other than the bats identified above, the only special status mammal species determined to be of potential occurrence by the literature review and habitat assessment were:

- **Colorado Valley Woodrat:** This species has no formal designation other than a state ranking of S1S2. It is known from low-lying desert areas in southeastern California, and is closely associated with beavertail cactus & mesquite. Eats mainly succulent plants. Distribution influenced by abundance of nest building material. Beavertail cactus is reported to be present in the BSA. The closest CNDDDB occurrence of this species is a 1908 record from approximately eight miles south of the BSA.
- **Desert Bighorn Sheep:** This species is state fully protected and a BLM sensitive species. It frequents open, rocky, steep areas with available water and herbaceous forage. The CNDDDB reports herds in the Little San Bernardino Mountains to the north of the BSA and the Orocopia Mountains and Mecca Hills south of the BSA.
- **Palm Springs Pocket Mouse:** This species is a CDFW SSC, a BLM sensitive species, and is covered by the CVMSHCP. This nocturnal, burrowing rodent occurs in soils with a sand component in desert riparian, desert scrub, desert wash and sagebrush habitats. Most common in creosotedominated desert scrub. The closest CNDDDB occurrence of this species is a 2001 record from the immediate vicinity of the southwestern BSA. CVMSHCP modeled habitat for the species is present in the western BSA.
- **American Badger:** This species is a CDFW SSC. This burrowing mammal occurs in drier open stages of most shrub, forest, and herbaceous habitats. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. The closest CNDDDB occurrence of this species is a 1908 record from approximately 4.5 miles west of the BSA.
- **Kit / Gray Fox:** Take of these species is prohibited under CCR, Title 14, Division 1 (Subdivision 2), Chapter 5, Sections 460–464. Permanent resident of arid regions of the southern half of the state. Lives in annual grasslands or grassy open stages of vegetation dominated by scattered brush, shrubs, and scrub. Cover provided by dens they dig in open, level areas with loose-textured, sandy and loamy soils. Fox sign was found in the BSA.
- **Palm Springs Round-tailed Ground Squirrel:** This species is a CDFW SSC, a BLM sensitive species, and is covered by the CVMSHCP. This diurnal, burrowing rodent prefers mesquite on dunes/hummocks, but will also occupy creosote bush on dunes/hummocks and may occur in areas of coarse sands packed silt, or gravel associated with washes. The closest CNDDDB occurrence of this species is a 2001 record from the immediate vicinity of the southwestern BSA. CVMSHCP modeled habitat for the species is present in the western BSA.

Of these special status flightless mammals, only fox sign was detected in the BSA during the general habitat assessment, focused survey, and JD.

### 2.3.4.3 Environmental Consequences

#### No-Build Alternative

Under the No-Build Alternative, no temporary or permanent impacts to special-status animal species would occur.

## **Build Alternative**

Although permanent impacts to the species listed above could occur as a result of this project, these impacts are not expected to affect the species in a way that would lead the species toward listing under federal or state laws.

The proposed project would not include temporary access roads or staging areas outside the proposed project limits. The project footprint is limited to five feet from edge of the outside shoulder, except at bridge locations.

### Cheeseweed Owlfly

The cheeseweed owlfly is not known to occur in the BSA, but potential habitat is present which may be temporarily and/or permanently impacted by the project.

### Desert Tortoise

The project scope includes vegetation removal, grading, and new pavement. Project activities will have permanent and temporary impacts to desert tortoise critical habitat (DTCH) and desert tortoise suitable habitat. The impacts are summarized below:

- USFWS Designated Critical Habitat and CVMSHCP Conservation Area:
  - Permanent Impacts: 49 acres
  - Temporary Impacts: 100 acres
- Desert Tortoise Suitable Habitat:
  - Permanent Impacts: 43 acres
  - Temporary Impacts: 103 acres

Caltrans has determined that the proposed project will have a, “May Affect, Likely to Adversely Affect” to DTCH and desert tortoise, per USFWS Section 7, and will require a Streamline Biological Opinion. The project is located within the CVMSHCP Desert Tortoise and Linkage Conservation Area and per the CVMSHCP the project will require a USFWS Streamlined Biological Opinion for incidental take of desert tortoise and only for the portions of the project located within the Desert Tortoise and Linkage Conservation Area. A Draft Streamline Biological Opinion for desert tortoise was received from USFWS on December 13, 2019.

### Bird Species

Indirect impacts and direct impacts (suitable breeding and/or foraging habitat removal, potential nest disturbance) to bird species may occur due to the presence of suitable habitat for five avian species in the BSA. These impacts to bird species would be also avoided by the implementation of the MBTA measures.

### Bat Species

Potential, though low, for roosting habitat is present for pallid bat and Townsend’s big-eared bat which may be temporarily and/or permanently impacted by the project. Measures BIO-1 through BIO-4 would help avoid or minimize potential impact.

### Flightless Mammals

Temporary and/or permanent impacts are anticipated for six flightless mammals because habitat or potential habitat is present within the BSA. Pre-construction and other measures would help avoid and/or minimize impact.

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

The following avoidance and minimization measures for animal species will be implemented:

- BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01) Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.
- BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.
- BIO-3: Compliance Documentation** (2018 Caltrans Standard Specification 14-1.01) Caltrans will require all contractors to comply with the Natural Resource Protection Plan in the performance of work necessary for project completion. Evidence of compliance is required prior to Caltrans accepting or receiving materials or goods produced from outside of the ROW or using facilities located outside of the ROW, including but not limited to, noncommercial batch plants, haul roads, quarries, and similar operations. Copies of the compliance documents will be maintained at the work-site by the resident engineer.
- BIO-4: Contractor-Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D) The Contractor will hire, with the approval and authorization by the Caltrans Biologist, a well-qualified Contractor-Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologist and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.
- BIO-5: Predation Prevention** (2018 Caltrans Standard Specification 14-10.01) To preclude attracting predators, such as the common raven and coyote, food-related trash items



will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife.

- BIO-8: Worker Environmental Awareness Training** (2018 Caltrans Standard Specification 14-6.03D(3)) The CSB will present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They will be advised of the special status species in the BSA, the steps to avoid impacts to the species, and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area environs. Included in this program will be color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the contractor and resident engineer office, where they will remain through the duration of the project. The contractor, resident engineer, and the CSB will be responsible for ensuring that employees are aware of the listed species. If additional employees are added to the project after initiation, they will receive instruction prior to working on the project.
- BIO-9: Desert Tortoise Under Equipment** (2018 Caltrans Standard Specification 14-6.03D[3]) Whenever project vehicles are parked outside of a desert tortoise fence that is intended to preclude entry by desert tortoises, workers will check under the vehicle before moving the vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the CSB to relocate the tortoise. If an authorized biologist is not present on-site, the Resident Engineer or supervisor must notify the Caltrans Biologist. Workers will not be allowed to capture, handle, or relocate tortoises.
- BIO-10: Exclusionary Desert Tortoise Fencing** (2018 Caltrans Standard Specification 80-4.02B[2]) Permanent exclusionary desert tortoise fencing will be installed to prevent entry by desert tortoises into a work site. The CSB will ensure that desert tortoises cannot pass under, over, or around the fence. The CSB must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction clearance surveys for desert tortoise and desert tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction clearance surveys will be performed.
- BIO-11: Deceased or Injured Tortoise Within the Project Site** Upon locating a dead or injured tortoise within a project site, the resident engineer will immediately notify the CSB and the Caltrans Biologist whom will notify the USFWS within 24 hours of the observation via email/telephone. Written notification must be made to the appropriate USFWS field office within 5-days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).

**BIO-12: Transportation of Injured Tortoise** Injured desert tortoises will be transported to a veterinarian for treatment at the expense of the contractor or Caltrans. Only the CSB or an approved desert tortoise biological monitor will be allowed to handle an injured tortoise. If an injured animal recovers, the appropriate USFWS field office will be contacted for final relocation of the animal.

**BIO-13: Pre-construction Clearance Nesting Bird Survey** (2018 Caltrans Standard Specification 14- 6.03B) If construction occurs within nesting bird season (February 1 to September 30), then pre- construction nesting bird surveys will be conducted by the CSB to locate and avoid nesting birds. If an active avian nest is located, a 100-foot “no construction” buffer (300-foot for raptors) will be put in place until nesting season has ceased, or the young have fledged.

**BIO-14: Burrowing Owl Relocation** Should any burrowing owls, burrows, or other sign be detected during any pre-construction clearance surveys or construction monitoring, coordination with CDFW shall be conducted to determine the appropriate avoidance, minimization, and mitigation measures required for the project. The CSB shall monitor the relocated owls a minimum of 3 days per week for a minimum of 3 weeks. A report summarizing the results of the relocation and monitoring shall be submitted to CDFW within 30 days following completion of the relocation and monitoring of the owls.

**BIO-15: Identifying Burrowing Owl Burrows** Use bright orange environmentally sensitive area (ESA) fencing, clearly mark areas supporting burrows and a buffer zone setback area (Table BIO-15 Burrowing Owl Buffer Zone Setback Distances). Disturbance to project activities in these areas must be avoided.

Table BIO-15. Burrowing Owl Buffer Zone Setback Distances

Time of Year	Level of Disturbance in Meters		
	Low	Med.	High
April 1- Aug.15	200	500	500
Aug. 16 - Oct. 15	200	200	500
Oct. 16 - March 31	50	100	500

**BIO-16: Burrowing Owl Burrow Exclusion** For unavoidable impacts to occupied burrowing owl burrows, the burrows must be excluded and closed by the CSB to permanently exclude burrowing owls. 1-way doors would need to be temporarily installed in burrow openings during the nonbreeding season (September 1 to January 31) and before breeding behavior has been. Suitable habitat (including suitable burrows) must be available adjacent or near the disturbance site or artificial burrows shall need to be provided nearby. Once the Caltrans Biologist has confirmed that the owls have left the burrow, burrows shall be excavated using hand tools and filled to prevent reoccupation. All burrowing owls associated with occupied burrows, that shall be directly impacted (temporarily or permanently) by the project shall be passively relocated.

**BIO-18:** Construction Staging Areas will be analyzed, approved, and delineated prior to construction and outlined on the construction plan sheets for the purpose to limit construction areas.

**BIO-19:** Artificial lighting for the project site is to be directed specifically at the work site only.

**BIO-20:** Rock Slope Protection must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.

**BIO-21:** CVMSHCP has identified the following desert tortoise linkages and conservation measures. Caltrans must adhere to the following conservation measures for compliance with the CVMSHCP: CVMSHCP, Section 4.3.17 Desert Tortoise and Linkage Conservation Area, CVMSHCP, Section 4.4.6 Biological Corridors under the I-10 Freeway in the Desert Tortoise and Linkage Conservation Area.

### 2.3.4.5 Compensatory Mitigation

#### Desert Tortoise

Because DTCH and desert tortoise suitable habitat occurs in the PIA, compensatory mitigation for desert tortoise would be required for implementation of the project.

**BIO-23:** Permanent impacts to DTCH and desert tortoise suitable habitat will be mitigated at a minimum 1:1 ratio by land purchase or in-lieu fee credit purchase. Compensatory mitigation measures for impacts to DTCH will be refined in coordination with the regulatory agencies and may include measures to relocate individual desert tortoises found during construction or hydroseed habitat in the median on-site after the project has been completed. Any additional conditions required on permits by regulatory agencies will be included in the mitigation measures.

### 2.3.5 Threatened and Endangered Species

#### 2.3.5.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened

species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

### **2.3.5.2 Affected Environment**

Unless otherwise noted, the information from this section was synthesized from the NES prepared for this proposed project (Caltrans 2019g). References used in the NES are not carried over to this section. To comply with the provisions of various state and federal environmental statutes and executive orders, the potential impacts to natural resources of the region were investigated and documented.

Under provisions of Section 7(a)(2) of the Federal Endangered Species Act (FESA), a federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with the USFWS to ensure that its actions would not jeopardize the continued existence of any listed species or destroy or adversely modify critical habitat. The California Endangered Species Act (CESA) protects plant and animal species that are listed as threatened or that are candidates for listing.

### **Federal Endangered Species Act Consultation**

The project is located within and outside of a Conservation Area and per the CVMSHCP, the project will require a USFWS Streamlined BO for incidental take of desert tortoise and only for the portions of the project located within the Desert Tortoise and Linkage Conservation Area. An official USFWS species list (generated through IPaC) was requested and received on January 23, 2020 (Appendix D). This project is located outside of NOAA Fisheries jurisdiction and therefore a NOAA Fisheries species list is not required and no effects to NOAA Fisheries species are anticipated.

Caltrans has submitted a request for a Streamlined BO for incidental take of desert tortoise and desert tortoise critical habitat to USFWS for review. Pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21), as described in the NEPA Delegation Pilot Program MOU between FHWA and Caltrans, Caltrans has been designated the authority to conduct Section 7 Consultation of the Federal Endangered Species Act. The project will seek a determination of "May Affect, Likely to Adversely Affect" federally listed desert tortoise and desert tortoise critical habitat. Caltrans has determined the project will have "No Effect" for the federally listed Coachella valley milk-vetch, Triple-ribbed milk vetch, Casey's June beetle, razorback sucker, desert pupfish, desert slender salamander, Coachella Valley fringe-toed lizard, Yuma Ridgway's

(clapper) rail, California black rail, southwestern willow flycatcher, and peninsular bighorn sheep DPS.

### **California Endangered Species Act Consultation**

The CDFW authorizes “Take” of endangered, threatened, and candidate species through the provision of Section 2081 and 2080.1 of the California Fish and Game Code. The project is subject to the CVMSHCP and Caltrans is not required to obtain a Take Permit for CVMSHCP covered species. The desert tortoise is a covered species, thus a 2081 permit would not be required. Additionally, the project will cause “No Take” of the state listed desert pupfish, desert slender salamander, Coachella Valley fringe-toed lizard, southwestern willow flycatcher, California black rail, elf owl, Yuma Ridgway's (clapper) rail, Least Bell's vireo, and peninsular bighorn sheep DPS.

### **Discussion on Desert Tortoise**

The desert tortoise was detected in the BSA through the presence of scat. The desert tortoise is listed as threatened under the FESA and CESA. The entire extent of the project lies in the historic range of the desert tortoise.

Desert tortoise range has decreased by 90 percent since the 1950s. Human-related activities including, but not limited to, highway construction, domestic animals, and land use practices have degraded suitable habitat or caused complete habitat loss in many areas. Desert tortoises also suffer from fragmentation, diminished forage quality, fires, protracted droughts, and disease-associated mortality. Predation on juvenile tortoises by ravens has also contributed to declining desert tortoise numbers. Desert tortoises inhabit the Mojave, Colorado, and Sonoran Deserts in the southwestern United States and adjacent Mexico. The Mojave population of desert tortoise occupies those portions north and west of the Colorado River in southwestern Utah, northwestern Arizona, southern Nevada, and California.

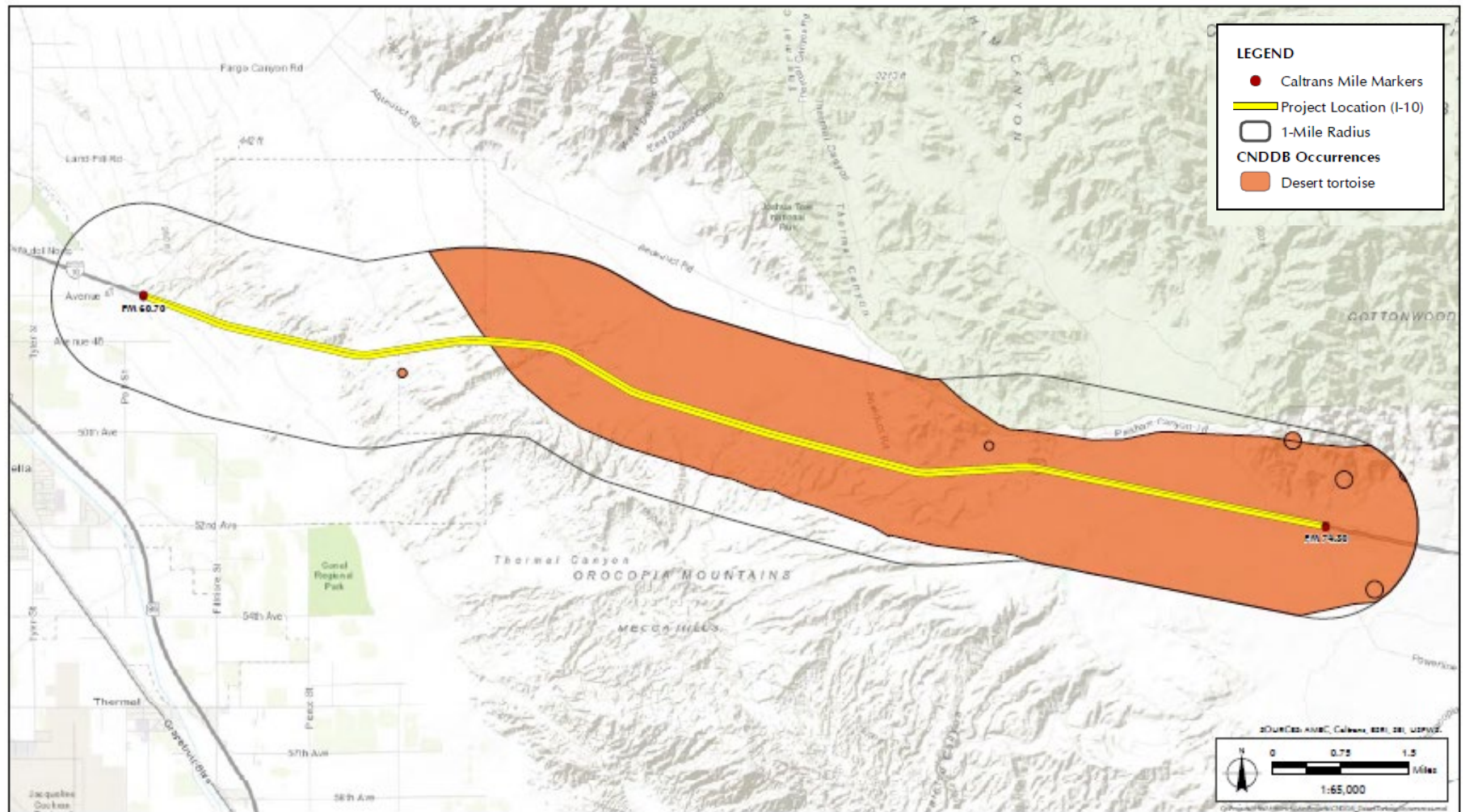
The desert tortoise can be found primarily within desert scrub environments located in washes, rocky hillsides, and flat desert, as long as soils permit for digging burrows. Burrow construction is possible in sandy, sandy loamy, or gravelly and rockier soils. Desert tortoise prefers surfaces with sand and fine gravel over areas with coarse gravel, pebbles, and desert pavement and areas with scattered shrubs where there is abundant inter-shrub space for herbaceous plants growth.

The desert tortoise is primarily active between March and June and in late summer months in the eastern Mojave Desert, but may also be active outside these months when the temperature is below 104 degrees Fahrenheit. During these active periods, desert tortoises usually spend nights and the hotter part of the day in their burrows or resting under shrubs. They may spend as much as 95 percent of the year in these covered burrows. During inactive periods, desert tortoises hibernate, aestivate, or rest in subterranean burrows. Most desert tortoise individuals spend November through February in dormant states inside their burrows.

The database searches identified seven records of desert tortoises within one mile of the BSA (Figure 2.15). Four occurrences were within two miles of PM 74.00 on the north and south side of I-10, one occurrence was within one mile of PM 70.00 on the north side of I-10, one occurrence was within one mile of PM 59.00 on the south side of I-10, and one occurrence was recorded in CNDDDB as PSOMAS Paradise Valley desert tortoise presence/absence surveys

conducted in April and May 2003 on an 8.5-square mile property. These historic occurrences were documented between 1987 and 2005.

Overall, the BSA has been affected by previous highway maintenance activities and is routinely used by the public. Due to the presence of the I-10 eastbound and westbound lanes within the BSA and the continuous highway activity and maintenance associated with I-10, there are several areas within the BSA exhibiting high disturbance levels that do not constitute ideal habitat conditions for desert tortoise. Areas with high levels of disturbance include barren/ruderal sections of the median, the road of I-10, and developed roadside locations. However, areas of native scrub with minimal disturbance include the desert washes and natural plant communities which are suitable habitat for desert tortoise.



**Figure 2.15.** Occurrences of Desert Tortoise within One Mile of the Survey Area.

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### 2.3.5.3 Environmental Consequences

#### No-Build Alternative

Under the No-Build Alternative, no permanent or temporary impacts to threatened and endangered species would occur.

#### Build Alternative

All construction activities would take place within the ROW once the project area is considered cleared of desert tortoise. No temporary roads or staging areas would be located outside of the fenced ROW. Temporary impacts such as noise or dust would be minimized with the listed avoidance and minimization measures listed below and therefore are expected to be minimal. In summary, the impacts to desert tortoise habitat would be:

- USFWS Designated Critical Habitat and CVMSHCP Conservation Area:
  - Permanent Impacts: 49 acres
  - Temporary Impacts: 100 acres
- Desert Tortoise Suitable Habitat:
  - Permanent Impacts: 43 acres
  - Temporary Impacts: 103 acres

Table 2.22 presents the regulatory determinations for federally-listed species. Based on the type of work proposed, a determination of “*may affect, likely to adversely affect*” has been made for desert tortoise. A determination of “*may affect, likely to adversely affect*” means that that listed resources are likely to be exposed to the action or its environmental consequences and will respond in a negative manner to the exposure (USFWS). Although the BSA grading limits will be further minimized during final design, permanent impacts to DTCH would be mitigated by land purchase of suitable habitat or in-lieu fee credit purchase in coordination with CDFW and the USFWS.

**Table 2.22. Regulatory Determinations for Federally Listed Species**

Species	Status	Determination
Coachella valley milk-vetch ( <i>Astragalus lentiginosus</i> var. <i>coachellae</i> )	Endangered	NE
Triple-ribbed milk vetch ( <i>Astragalus tricarinatus</i> )	Endangered	NE
Casey's June beetle ( <i>Dinacoma caseyi</i> )	Endangered	NE
razorback sucker ( <i>Xyrauchen texanus</i> )	Endangered	NE
desert pupfish ( <i>Cyprinodon macularius</i> )	Endangered	NE
desert slender salamander ( <i>Batrachoseps major aridus</i> )	Endangered	NE
Coachella Valley fringe-toed lizard ( <i>Uma inornata</i> )	Threatened	NE
desert tortoise ( <i>Gopherus agassizii</i> )	Threatened	MALAA

southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	Endangered	NE
Yuma Ridgway's (clapper) rail ( <i>Rallus obsoletus yumanensis</i> )	Endangered	NE
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	Endangered	NE
peninsular bighorn sheep DPS ( <i>Ovis canadensis nelsoni pop.2</i> )	Endangered	NE
<b>KEY:</b> MALAA = may affect/likely to adversely affect; MANLAA = may affect/not likely to adversely affect; NE = no effect		

Caltrans has determined that a federal Section 7 consultation between Caltrans, authorized to act on behalf of FHWA, and USFWS, will be necessary to address potential impacts to desert tortoise and designated DTCH. Table 2.23 presents the regulatory determinations for state-listed species. Caltrans has also determined the project will likely cause take to the desert tortoise, a state-listed species. The CDFW authorizes "Take" of endangered, threatened, and candidate species through the provision of Section 2081 and 2080.1 of the California Fish and Game Code. The project is subject to the CVMSHCP and Caltrans is not required to obtain a Take Permit for CVMSHCP covered species. The desert tortoise is a covered species; thus a 2081 permit would not be required.

Authorized take of the desert tortoise can be avoided by implementing the conservation measures specified in the Biological Opinion. Any additional conditions subsequently required on permits by regulatory agencies will be included in the mitigation measures.

**Table 2.23. Regulatory Determinations for State-Listed Species**

Species	Status	Determination
razorback sucker ( <i>Xyrauchen texanus</i> )	Endangered	No Take
desert pupfish ( <i>Cyprinodon macularius</i> )	Endangered	No Take
desert slender salamander ( <i>Batrachoseps major aridus</i> )	Endangered	No Take
Coachella Valley fringe-toed lizard ( <i>Uma inornata</i> )	Endangered	No Take
desert tortoise ( <i>Gopherus agassizii</i> )	Threatened	Take
southwestern willow flycatcher ( <i>Empidonax traillii extimus</i> )	Endangered	No Take
California black rail ( <i>Laterallus jamaicensis coturniculus</i> )	Threatened	No Take
elf owl ( <i>Micrathene whitneyi</i> )	Endangered	No Take
Yuma Ridgway's (clapper) rail ( <i>Rallus obsoletus yumanensis</i> )	Threatened	No Take
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	Endangered	No Take
peninsular bighorn sheep DPS ( <i>Ovis canadensis nelsoni pop.2</i> )	Threatened	No Take

Temporary impact to threatened or endangered species, the desert tortoise, would be in the form of construction activities. Other stressors acting through indirect exposure pathways, including construction equipment noise, dust, the introduction of predator attractants (i.e., trash), exclusionary fencing, and the introduction of nonnative plant species, have the potential to behaviorally-alter, displace, or cause home range abandonment of desert tortoise. During final design grading limits within the project impact area would be further evaluated and minimized to lessen the estimated impacts to desert tortoise.

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

Avoidance, minimization, and mitigation measures will include the following:

**BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01)

Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.

**BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

**BIO-4: Contractor Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D)

The Contractor will hire with the approval and authorization by the Caltrans Biologist a well-qualified Contractor Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologist and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.

**BIO-5: Predation Prevention** (2018 Caltrans Standard Specification 14-10.01) To preclude attracting predators, such as the common raven and coyote, food-related trash items will be removed daily from the work site and disposed of at an approved refuse

disposal site. Workers are prohibited from feeding all wildlife.

- BIO-8: Worker Environmental Awareness Training** (2018 Caltrans Standard Specification 14- 6.03D[3]) The CSB will present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They will be advised of the special status species in the BSA, the steps to avoid impacts to the species, and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area environs. Included in this program will be color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the contractor and resident engineer office, where they will remain through the duration of the project. The contractor, resident engineer, and the CSB will be responsible for ensuring that employees are aware of the listed species. If additional employees are added to the project after initiation, they will receive instruction prior to working on the project.
- BIO-9: Desert Tortoise Under Equipment** (2018 Caltrans Standard Specification 14- 6.03D[3]) Whenever project vehicles are parked outside of a desert tortoise fence that is intended to preclude entry by desert tortoises, workers will check under the vehicle before moving the vehicle. If a desert tortoise is beneath the vehicle, the worker will notify the CSB to relocate the tortoise. If an authorized biologist is not present on-site, the Resident Engineer or supervisor must notify the Caltrans Biologist. Workers will not be allowed to capture, handle, or relocate tortoises.
- BIO-10: Exclusionary Desert Tortoise Fencing** (2018 Caltrans Standard Specification 80- 4.02B[2]) Permanent exclusionary desert tortoise fencing will be installed to prevent entry by desert tortoises into a work site. The CSB will ensure that desert tortoises cannot pass under, over, or around the fence. The CSB must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction clearance surveys for desert tortoise and desert tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground disturbing activities beginning in a previously undisturbed or unfenced area, preconstruction clearance surveys will be performed.
- BIO-11: Deceased or Injured Tortoise Within the Project Site** Upon locating a dead or injured tortoise within a project site, the resident engineer will immediately notify the CSB and the Caltrans Biologist whom will notify the USFWS within 24 hours of the observation via email/telephone. Written notification must be made to the appropriate USFWS field office within 5-days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).
- BIO-12: Transportation of Injured Tortoise** Injured desert tortoises will be transported to a veterinarian for treatment at the expense of the contractor or Caltrans. Only the

CSB or an approved desert tortoise biological monitor will be allowed to handle an injured tortoise. If an injured animal recovers, the appropriate USFWS field office will be contacted for final relocation of the animal.

**BIO-18:** Construction Staging Areas will be analyzed, approved, and delineated prior to construction and outlined on the construction plan sheets for the purpose to limit construction areas.

**BIO-20:** Rock Slope Protection must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.

**BIO-21:** CVMSHCP has identified the following desert tortoise linkages and conservation measures. Caltrans must adhere to the following conservation measures for compliance with the CVMSHCP: CVMSHCP, Section 4.3.17 Desert Tortoise and Linkage Conservation Area, CVMSHCP, Section 4.4.6 Biological Corridors under the I-10 Freeway in the Desert Tortoise and Linkage Conservation Area.

### 2.3.5.5 Compensatory Mitigation

Mitigation for permanent impacts to DTCH and desert tortoise habitat is expected and will be determined during the regulatory agency consultation period and/or permitting phase. Desert tortoise is a covered species under the CVMSHCP and Caltrans, as a signatory to the CVMSHCP, is obligated to contribute funds to CVCC for land acquisition and monitoring and management, as described in the CVMSHCP Section 6.6.2.

**BIO-23:** Permanent impacts to DTCH and desert tortoise suitable habitat will be mitigated at a minimum 1:1 ratio by land purchase or in-lieu fee credit purchase. Compensatory mitigation measures for impacts to DTCH will be refined in coordination with the regulatory agencies and may include measures to relocate individual desert tortoises found during construction or hydroseed habitat in the median on-site after the project has been completed. Any additional conditions required on permits by regulatory agencies will be included in the mitigation measures.

**BIO-24:** The project is entirely located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with the eastern portion of the project, from PM 67.4 to PM 74.30, located within the Desert Tortoise Linkage Conservation Area and the western portion of the project, from PM 60.9 to PM 674.4 located outside of any CVMSHCP Conservation Areas. Caltrans will coordinate with the Coachella Valley Conservation Commission (CVCC) for the acquisition of conservation lands, and management and monitoring of these lands. Additionally, Caltrans will comply with the applicable avoidance and minimization measures described in the CVMSHCP Section 4.4 for Covered Activities.

### 2.3.6 Invasive Species

#### 2.3.6.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human

health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

### 2.3.6.2 Affected Environment

Unless otherwise noted, the information from this section was synthesized from the NES prepared for the proposed project (Caltrans 2019g). References used in the NES are not carried over to this section.

The California Invasive Plant Council (Cal-IPC) ranks 200 of the 4,200 known non-native plants in the state as having invasive characteristics at 1 of 3 levels: (1) limited, (2) moderate, or (3) high. During the October and November 2018 surveys, surveyors detected 1 species with a "limited" ranking, Mediterranean grass (*Schismus barbatus*); and 1 species with a "high" ranking, salt cedar (*Tamarix ramosissima*) (Table 2.24). Overall, invasive species constitute a minor percentage of the BSA, and 99 percent of the remaining BSA was composed of indigenous natural vegetation.

**Table 2.24. Invasive Plants in the BSA**

Common Name	Cal-IPC Ranking
Mediterranean grass	Limited
Salt cedar	High
<p>KEY:</p> <p><i>Limited:</i> These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.</p> <p><i>High:</i> These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.</p>	

Salt cedar has been ranked high because of its capability to cause severe ecological impacts on physical processes, plant and animal communities, vegetation structure, and to have reproductive biology and other attributes that are conducive to moderate to high rates of dispersal and establishment. Less than 10 individuals were observed within the project area; however, an individual of salt cedar can produce 500,000 seeds in 1 year. In most circumstances, roads are associated with the spread of invasive species by means of vehicles or wildlife species (U.S. Department of Transportation 2017). Paved roads and post-construction bare ground may facilitate spreading.

### 2.3.6.3 Environmental Consequences

In compliance with the Executive Order on Invasive Species, EO 13112, and guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. None of the species on the California list of invasive species is used by the Department for erosion control or landscaping in Riverside County. All equipment and materials will be inspected for the presence of invasive species and cleaned if necessary. In areas of particular sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.

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

**BIO-1: Materials and Spoils Control** (2018 Caltrans Standard Specification 14-10.01)

Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.

**BIO-2: Equipment Staging** (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

**BIO-4: Contractor Supplied Biological** (2018 Caltrans Standard Specification 14-6.03D) The Contractor will hire with the approval and authorization by the Caltrans Biologist a well-qualified Contractor Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologist and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted by the CSB and/or trained individuals, as appropriate.

## 2.4 Cumulative Impacts

### 2.4.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

### 2.4.2 Resources Considered in the Cumulative Analysis

The cumulative impact analyses included in this section considers projects that are currently proposed, approved, or under construction in the vicinity of the proposed project. The geographic boundaries, or resource study area (RSA) boundaries, vary by resource due to factors unique to the human or biological ecology of each resource. The specific RSA boundaries are noted, as applicable, in the discussion below. The projects considered in this cumulative impacts analysis are:

1. EA 1C082: RIV 10 Blythe Pavement Rehab (PM 104.9-134.0)

Caltrans 1C082 pavement rehabilitation project is of similar scope to the proposed project, but for PM 104.9 to PM 134.0. Construction for this project is expected to start in the fall of 2021.

2. EA 1C083: RIV 10 Blythe Pavement Rehab (PM 134-156.50)

Caltrans 1C083 pavement rehabilitation project is of similar scope to the proposed project, but for PM 134.00 to PM 156.50. Construction for this project is expected to start on January 2023.

The proposed project would have no permanent effects on land use, parks and recreation, farmlands and timberlands, growth, community cohesion/character, relocations and property acquisition, environmental justice, traffic and emergency services, cultural resources,



visual/aesthetics, hydrology, stormwater, water quality, geology and soils, paleontology, hazardous waste/materials, air quality, climate change, noise, coastal zone, wild and scenic rivers, or waters of the US. Therefore, the proposed Project would not have the potential to contribute to a cumulative impact to these resources.

The proposed Project, however, could potentially have project-level direct or indirect effects on, Waters of the State and Waters of the U.S., and threatened and endangered species. The potential for cumulatively considerable impacts in these resource areas is discussed below.

#### **2.4.2.1 Biological Resources**

##### **Wetlands and Other Waters**

The RSA is located in eastern Riverside County within the Sonoran Desert. The RSA was determined by the individual Hydrological Sub-Areas the proposed Project intersected (HSA 717.20 and 717.20) to ensure the inclusion of all wetlands and other waters that could be affected by the construction of this project. Elevations in the Project area range from 377 to 935 feet AMSL. Potential Waters of the United States and Waters of the State were mapped within the project area for the proposed project. Surface water throughout most of the year is scarce due to the low precipitation within the region.

The proposed Project location is characterized by highly variable climate extremes. Lowland areas receive less than five inches of precipitation per year. High temperatures and low precipitation are present during the summer with highs regularly exceeding 100 degrees Fahrenheit.

51 ephemeral drainages with jurisdiction pursuant to Section 404 of the CWA and Section 1602 for the California Fish and Game Code were mapped within the project limits. For project work anticipated to occur in those drainages, the following permits are anticipated: Section 404 Individual Permit from the USACE, a Section 401 Water Quality Certification Permit from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW. Coordination for these jurisdictional drainages is ongoing.

The proposed project could result in impacts to federal and state streambeds due to the rehabilitation activities of a transportation facility through ephemeral drainages and crossings under the jurisdiction of USACE, RWQCB and CDFW. The proposed project would result in impacts to Waters of the US (WOTUS) and Waters of the State (WSC) due to RSP replacement, temporary bridge work, and grading. For the proposed project alone, 51 of the drainages within the BSA have a connection with waters of the Colorado River via the Coachella Canal and/or flow into the Salton Sea, and thus, are under the jurisdiction of the USACE. The proposed project would permanently impact 6 acres of WSC and WOTUS, and temporarily impact 12 acres of WSC and WOTUS.

Impacts to waters would be fully compensated by compliance with state regulations such that no net loss of habitat functions or values occurs. Also, the proposed project will minimize and/or offset potential impact by limiting construction activities to the smallest footprint possible within drainage features and by installing temporary fencing along the construction footprint to avoid disturbances to additional areas within the drainage.

This project is adjacent to Caltrans pavement rehabilitation projects for two additional sections of I-10 with similar scope for a total of over 90 miles. Wetland delineations would also take place for the two adjacent projects to determine if WOTUS and state streambeds would be affected. Appropriate avoidance and/or minimization measures would be implemented as needed to ensure protection of federal and/or state jurisdictional features. In addition, these projects would be required to provide compensation that fully replaces the relevant functions and values at a watershed level under the permitting processes of Section 404 of the Clean Water Act and Section 1602 of the State Streambed Alteration Program if it is determined that WOTUS and state streambeds are affected. With implementation of proposed measures WQ-1, WQ-2, and BIO-1, BIO-2, BIO-4, and BIO-6 the proposed Project would not contribute to substantial adverse cumulative impacts to state streambeds. The project impacts would be fully mitigated; thus, the proposed construction would not contribute to regional cumulative loss of riparian or wetland resources.

### Threatened and Endangered Species

The RSA is located in an incorporated portion of Riverside County within the Colorado Desert region of the Sonoran Desert. General habitat for the species analyzed under cumulative impacts encompasses the Mojave Desert and Colorado/Sonoran Desert regions in Riverside County. The RSA for endangered species potentially impacted is defined as the Project limits and area within a five-mile radius of the Project limits, including the dirt median that separates the roadbeds. These RSA limits are based on the home ranges<sup>18</sup> for the Desert tortoise, a federal- and state-listed species found in the area.

The RSA is characterized by arid climatic conditions and low precipitation. The combination of extreme temperature ranges and low precipitation rates creates a unique environment for many plants and animals in the region. Biological field surveys were conducted for this project within the Caltrans ROW. During the biology surveys, it was determined that areas that are already bare and/or ruderal<sup>19</sup> cover about 10.78 percent of the RSA. Road (I-10)<sup>20</sup> area comprise approximately 26.90 percent of the RSA.

Desert tortoise range has declined due to several factors including: Habitat loss due to human-related activities, disease caused by reintroduction efforts and other contamination by humans, illegal collection, road kills, habitat degradation by invasive plants, and predation on tortoises by dogs and juvenile tortoises by ravens. Other factors influencing the Mojave Desert populations of the desert tortoise are described by the “road corridor” or “road-effect zone.” These terms are used to describe the area directly surrounding habitat that is affected by the road and vehicle traffic.

Two adjacent projects with the same scope, in combination with the proposed project, are expected to contribute to cumulative impacts that may adversely affect the desert tortoise. Cumulatively, as noted in Table 2.25, the 1C081, 1C082, and 1C083 I-10 pavement rehabilitation projects would permanently impact 155.99 acres of DTCH and 206.5 acres of

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<sup>18</sup> Home range is defined as the maximum distance a species is expected to travel in its life time.

<sup>19</sup> Bare/ruderal land cover type indicates areas where over 90 percent of the native vegetation has been removed. These areas usually consist of staging areas and gravel or dirt crossings.

<sup>20</sup> Road (I-10) land cover type consists of any paved areas including I-10 east and west-bound lanes, on-ramps, and frontage roads within the BSA.

DTSH. In addition, these three projects would temporarily impact 258.53 acres of DTCH and 388.82 acres of DTSH.

**Table 2.25. Cumulative Impacts to Desert Tortoise Critical Habitat and Suitable Habitat**

Project EA	Impacts to Desert Tortoise Critical Habitat (acres)		Impacts to Desert Tortoise Suitable Habitat (acres)	
	Permanent	Temporary	Permanent	Temporary
1C081	49.00	100.00	43.00	103.00
1C082	89.16	110.78	105.50	136.96
1C083	17.83	47.75	58.00	148.86
<b>TOTAL</b>	<b>155.99</b>	<b>258.53</b>	<b>206.5</b>	<b>388.82</b>
Source: NES 1C081, NES 1C082, NES 1C083				

For the three projects, majority of the impact to desert tortoise habitat would occur in the median. In contrast to critical habitat, suitable habitat in the RSA is primarily found in the median. Most of this habitat is considered to be already degraded due to the presence of the I-10 corridor. Further, the I-10 can pose a threat to wildlife species due to high-speed vehicles and continuous maintenance activities. The center median is expected to be revegetated via hydroseeding. Areas along the shoulder that will be graded are already disturbed. Therefore, effects would be minimal.

Although habitat is assumed present in the NES, the habitat present only within the median is not of high quality to successfully support desert tortoise populations. In a conversation with Caltrans Senior Environmental Planner Antonia Toledo in April 2019, referring to project 1C082, John Taylor from USFWS concurred that, through this stretch of the I-10, the median is transitory habitat and “not high quality” habitat due to the high mortality rate. The median is surrounded by high-speed traffic on both directions of the I-10. Roads and the disturbances associated with them may lead to reduced habitat quality due to a decrease in abundance/density of breeding individuals and to behavioral responses, such as avoidance. Traffic disturbances, particularly noise, and psychological factors, such as stress, have been shown in studies to reduce habitat quality for wildlife species near roads.<sup>21</sup>

High quality habitat for desert tortoise is supported outside of the median. Nevertheless, to minimize and mitigate impacts to this habitat, Caltrans will implement avoidance and minimization measures BIO-1 through BIO-5, BIO-8 through BIO-12, and BIO-17; and compensatory mitigation. The two adjacent projects will also conduct desert tortoise surveys and would implement necessary measures and mitigation in coordination with, and as required by, the appropriate agencies.

<sup>21</sup> Richard Forman, et al., *Road Ecology: Science and Solutions*. (Washington, DC: Island Press, 2003), 123-125.

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## Chapter 3      California Environmental Quality Act (CEQA) Evaluation

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The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require 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. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

### 3.1 CEQA Environmental Checklist

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

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been

considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

**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 checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality 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 checked="" type="checkbox"/>	<input 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**

The proposed project would not have a substantial adverse impact on a scenic vista because the project area does not include any scenic vistas.

**b, c) Less Than Significant**

The proposed project would alter the median from an earthen median to AC pavement. However, the visual impacts will be low, and the visual quality of the existing corridor will not be altered as a result of the project. No portion of the project limits is eligible for designation as a scenic highway. Viewer sensitivity in the area is considered low.

**d) No Impact**

The proposed project would not include new lighting elements in an area in which there is currently no lighting.

**AGRICULTURE AND FOREST RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California 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.				
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**

The proposed project would not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural land. Therefore, no impacts to farmland would occur.



**b) No Impact**

There are no parcels under a Williamson Act contract within the project limits.

**c, d) No Impact**

There are no forest or timberlands within the project limits.

**e) No Impact**

There are no other changes anticipated to farmland or forest land.

**AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management 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, c, d) No Impact**

The proposed project is included in SCAG's 2016 RTP/SCS and 2019 FTIP, thus the project would not conflict with the Air Quality Management Plan or expose sensitive receptors to substantial pollutant concentrations. Since this project does not increase capacity in the long term, it will have no impact on traffic volumes and would generate a less than significant amount of pollutants during construction due to the very short duration of project construction.

**b) Less Than Significant**

Temporary construction activities could generate fugitive dust from the operation of construction equipment. The project will comply with construction standards adopted by the Air Quality Management District, as well as Caltrans standardized procedures for minimizing air pollutants during construction. Impacts will be less than significant. No mitigation is required.

**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 Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input 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,b) Less Than Significant with Mitigation Incorporated**

Desert tortoise, a federally- and state-listed species has potential to exist within the BSA. Desert tortoise were detected in the BSA through the presence of scat and burrows. Also, there are seven historical records of desert tortoises within one mile of the BSA.

The project has potential to directly impact desert tortoise in the form of vegetation removal, new pavement, and grading, and in the form of direct exposure due to vehicle strikes. The

proposed project would permanently impact 49 acres of Desert Tortoise USFWS Designated Critical Habitat and CVMSHCP Conservation Area, and temporarily impact 100 acres. Most of the impact would occur in the median, an area of low-quality habitat. With the implementation of the measures in Appendix C Environmental Commitments Record, the impacts to desert tortoise and DTCH would be less than significant with mitigation incorporated. In addition, compensatory mitigation for desert tortoise and DTCH would be incorporated in coordination with CDFW. Mitigation for DTCH and desert tortoise would be at a minimum 1:1 ratio by land purchase or in-lieu fee credit.

Under the Build Alternative, direct, permanent impacts are anticipated for up to 44.41 acres of blue palo verde – ironwood woodland. It is anticipated that the proposed project would have direct, indirect, permanent, and temporary impacts to the desert willow-smoke tree wash woodland, for up to 2.34 acres, because of the bridge widenings and construction of the truck-climbing lane.

Implementing avoidance and minimization measures would minimize impacts to blue palo verde – ironwood woodland community and desert willow-smoke tree wash woodland community. Included in the measures, a qualified biologist will perform a pre-construction plant survey, no more than a week prior to ground-breaking activities, to identify and flag or fence any rare plant individuals found in the project area. Also, impacts to these communities would be fully mitigated pursuant to state and federal requirements, thus the proposed construction would not contribute to regional cumulative habitat loss.

**c) No Impact**

There are no wetlands in the BSA.

**d) Less Than Significant Impact**

As discussed in the NES, the BSA is within the CVMSCHP Desert Tortoise and Linkage Conservation Area. The following corridors have been identified within the project limits:

- Corridor 1: Thermal Canyon (PM 68.0)
- Corridor 2: E. Cactus City Wash and Hazy Gulch culverts (PM 73.0-74.5)
- Corridor 3: Happy Gulch culvert (PM 75.5-76.0)
- Corridor 4: Desperation Arroyo culvert (PM 78.0-81.0)
- Corridor 5: Desperation Arroyo, West Buried Mountain Wash, Buried Mountain Wash, Resurrection Wash, West Saddle Gulch, Saddle Gulch, West Cotton Gulch, Cotton Gulch, East Cotton Gulch, and Paul Gulch culverts.

The project would maintain the same level of connectivity for wildlife movement.

**e,f) No Impact**

This project will not conflict with any local policies or ordinances protecting biological resources. This project will 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.

**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 checked="" type="checkbox"/>	<input 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) Less than Significant**

A detailed description of cultural resources findings is included in Chapter 2, Section 2.1.10. one property in the APE was determined by Caltrans to be a Historic Property; (CHL)-985: DTC/C-AMA.

Caltrans determined that further disturbance to the tank tracks from the DTC/C-AMA located within the APE would not be considered an adverse effect because they represent less than 1% of the DTC/C-AMA. Caltrans determined that a Finding of No Adverse Effect (FNAE) without standard conditions is appropriate for the undertaking and received SHPO concurrence on January 28, 2019. (See appendix G for SHPO coordination).

**b,c) No Impact**

No prehistoric archaeological resources, pursuant to SS 15064.5, were identified within the project limits or the APE. All rehabilitation activities are proposed to occur within the existing State right of way in previously disturbed area. Therefore, no human remains are expected to be encountered. Caltrans standard specification will be implemented in the event human remains are found during construction activities.

**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 will not result in significant environmental impacts during project construction and operation from wasteful, inefficient, or unnecessary consumption of energy resources. A Transportation Management Plan (TMP) will be developed and implemented to reduce vehicle delays and idling that generate GHGs.

**b) No Impact**

The project does not conflict with state or local plans for renewable energy or energy efficiency.

**GEOLOGY AND SOILS**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to 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 checked="" type="checkbox"/>	<input 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 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 waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Less	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CEQA Significance Determinations for Geology and Soils****a) No Impact**

The project location is in a very high to high ground shaking risk area. The most significant fault near the project area would be the San Andreas Fault, which the I-10 crosses over about .5 miles from the project start location. However, the proposed project involves the

rehabilitation of an already existing facility, thus the project would not increase or create new risks associated with geological features or soils.

Caltrans will implement standard specifications related to earthquakes, ground shaking, ground failure, and landslides during the design and construction to avoid and/or minimize any potential impact. Therefore, no mitigation measures are required.

**b) Less Than Significant**

Although the topography within the project limits is general flat, soil erosion and loss of topsoil may occur during construction. To avoid and/or minimize potential impacts, Caltrans standard specification and BMPs will be implemented. No mitigation measures are required.

**c, d, e) No Impact**

Landslides are not a major problem because the topography in the project region is subdued. The project limits are not located in an area susceptible to liquefaction or expansive soil. Lastly, the project scope does not involve of septic tanks or alternative waste water disposal systems. No mitigation measures are required.

**f) Less Than Significant with Mitigation**

Although the project is located in a paleontological sensitive area, implementation of Paleontological Mitigation Plan (PMP) for recovery and preservation of fossil remains exposed by project-related earth-moving activities would protect against impacts to important resources.



**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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**CEQA Significance Determinations for Greenhouse Gas Emissions****a) Less than Significant Impact with Mitigation**

Operational GHG emissions would increase from existing conditions over time. However, emissions would be the same with or without the project in both opening and design years. This indicates that the increase is a result of anticipated regional growth in population and both light-duty vehicle and heavy-duty truck traffic, rather than a result of project implementation. The addition of a truck climbing lane would allow for improved traffic flow, which could improve vehicles' fuel efficiency. Nevertheless, the project would not contribute to reducing statewide GHG emissions. This would be a potentially significant impact. Although the project would not directly contribute to the increase in GHG emissions, Caltrans will install an electric vehicle charging station at a nearby rest stop as a mitigation measure. With implementation of this mitigation and construction GHG-reduction measures, the impact would be considered less than significant.

**b) Less than Significant Impact with Mitigation**

The proposed project is included in the RTP/SCS for the Southern California Association of Governments (SCAG), which was found to have less than significant impact on potential to conflict with AB 32 or any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. The project also would not conflict with the regional and local plans identified in Section 3.2, *Climate Change*. The proposed project's incremental contribution would not be cumulatively considerable with mitigation measures incorporated to address construction and operational emissions. Accordingly, the project would not conflict with plans or policies intended to reduce GHG emissions. Impacts would be considered less than significant with mitigation.

**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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<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 - d) No Impact**

The proposed project involves the rehabilitation of existing pavement through this stretch of I-10. Some vehicles using this facility may contain materials deemed hazardous. The project, however, is not anticipated to increase the potential for vehicles carrying hazardous

materials to travel using this route or increase the potential for accidents to occur in the project area. The hazards associated with vehicular transport of hazardous waste are regulated under existing programs and would not be affected by the project.

No schools exist within a 0.25 mile of the proposed project site. The proposed project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and did not show up in any of the Federal, State, and local databases searched.

**e) No Impact**

The project is not located within an airport land use plan. The airports closest to the project are Jacqueline Cochran Regional Airport, located 5.3 miles from the project site, and Bermuda Dunes Airport, 7.7 miles from the project site. Therefore, the project would not result in a safety hazard for people residing or working in the project area.

**f) No Impact**

To avoid and/or minimize impacts during construction, detour lanes will be installed before pavement rehabilitation activities begin. Additionally, Caltrans will implement standard traffic management plan (TMP) to avoid and/or minimize impacts to any emergency response plan or emergency evacuation plan in the area. No mitigation measures are required.

**g) No Impact**

According CalFire's Fire Hazard Severity Zone mapping tool, the project is not in a location vulnerable to wildfire.

**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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 has potential to temporarily impact groundwater and surface water quality. The potential impact would be in the form of pollutant runoff during construction, including paints, solvents, fuels, concrete waste, trash, and sediments. Construction activities could also result in increased potential for soil erosion. As discussed in Section 2.2.2, the project would comply with provisions of Statewide National Pollutants Discharge Elimination System (NPDES) permit. NPDES permits set limits on discharges, schedules for compliance, special conditions, and monitoring programs.

The project contractor would be responsible for preparing and implementing a SWPPP in accordance to Caltrans standards incorporating water pollution control BMPs, and of amending SWPPP during the course of project construction as necessary. Deployment of BMPs would reduce long-term water quality impacts. Therefore, less than significant impacts are anticipated.

**b) No Impact**

The project is not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

**c) Less Than Significant**

During project construction, erosion could be temporarily increased due to groundbreaking and vegetation removal. BMPs identified in the SWPPP would prevent construction pollutants from contacting stormwater with the intent of keeping erosion from moving into receiving waters. Thus, less than significant impact is anticipated.

**d) No impact**

The project is not located in a flood hazard, tsunami, or seiche zone area.

**e) No Impact**

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

**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,b) No Impact**

The area surrounding this stretch of I-10 is general undeveloped. Additionally, the proposed scope involves rehabilitation of an existing facility. For these reasons, implementation of the project would not physically divide an established community.

The project is located in an unincorporated area of Riverside County and in the City of Coachella, and is therefore governed by the County of Riverside General Plan and Coachella General Plan. All proposed activities will occur within the existing right of way, already zoned for a transportation use, and no property acquisition will be necessary. No impacts are anticipated.

**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,b) No Impact**

The Project site is not within an area designated for state or locally important mineral resources and is not utilized for mineral resource protection.

The project involves rehabilitating an already existing freeway, in an area zoned for transportation use. Per the Riverside County General Plan, Desert Center Area Plan, and Palo Verde Valley Area Plan, most of the area surrounding the project is on "Open Space Rural" designation. The project site is not within an area designated for mineral resources. Thus, the project would not result in a significant impact on the availability of any known mineral resource within the project area.

**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 groundborne vibration or groundborne 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,b,c) No Impact**

Existing noise levels at the modeled receivers are predicted to range from 64 to 77 dBA Leq(h). For No-Build conditions, noise levels range from 67 to 80 dBA Leq(h) ; For Build conditions, the noise level range is from 65 to 75 dBA Leq(h). The increase/decrease in noise levels under No-Build conditions relative to existing conditions is predicted to be 3 dB. The change in noise levels under Build conditions relative to No-build conditions is predicted to be in the range of -6 dB to -1 dB. The increase would be barely perceptible to the human ear. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required.

There are no noise sensitive receptors located within or near the project area. The project is not directly adjacent to or within a community. The project will not have a significant noise impact because there are no residences or businesses in the immediate vicinity of the project.

Groundborne noise and vibration could potentially occur during project construction. However, because there are no sensitive receptors in the vicinity of the project, the project would result in no impact from groundborne vibration or noise.

The project would not expose people residing or working in the project area to excessive noise levels. The project is not located within an airport land use plan or within two miles of an airport.



**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,b) No Impact**

The project involves the rehabilitation of an already existing freeway, and there will be no new infrastructure. Therefore, there will be no direct or indirect impacts to population growth in the area.

No new ROW will be acquired for this project. All work will be done within already existing Caltrans ROW. As a result, no residents or businesses will be displaced and/or relocated.

**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 checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**CEQA Significance Determinations for Public Services****a) Less Than Significant Impacts**

The project would not affect the acceptable service ratios, response times, or other performance objectives for fire protection, police protection, schools, parks, or other public facilities. No permanent impacts are anticipated. Temporary impacts during construction related to traffic operations may occur. To minimize potential construction related impact to public services, two detour lanes would be constructed prior to rehabilitation activities. Two lanes would be opened in each direction during construction, as is currently the case. No significant impact is anticipated.

**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,b) No Impact**

The project would not increase the use of existing neighborhood and regional parks or other recreational facilities. The project would not require construction or expansion of any recreational facilities. The project is located within existing ROW and will not require acquisition of park property. Therefore, there will be no permanent impact to the facility as protected by the Park Preservation Act. To handle traffic during construction, a two-lane temporary detour and crossovers will be constructed by widening within the median. Aside from traffic handling, the detour lanes would also ensure that park visitors can continue to have access to and from the park.

**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 checked="" type="checkbox"/>	<input 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/Traffic****a) No Impact**

The project is a rehabilitation project of an already existing freeway in an area zoned for transportation. The project will not conflict with a program, plan, ordinance, or policy addressing the circulation system because no new land uses are proposed.

**b) Less Than Significant**

CEQA Guidelines sections 15064.3, subdivision (b) states that, "transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact." Due to the nature of the project, no change in vehicles miles traveled is expected.

**c) No Impact**

The proposed project would not change or alter current design features. Thus, the project will not increase hazards due to a design feature.

**d) No Impact**

To minimize impacts during construction, two detour lanes would be constructed. Emergency vehicles would have access to two lanes in each direction during construction.

**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 checked="" type="checkbox"/>	<input 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) Less Than Significant**

One property in the APE was determined to be a historic property listed on the CHRP as California Historical Landmark (CHL)-985:DTC/C-AMA. Caltrans determined that further disturbance to the tank tracks would not result in significant impact to the historic property. No mitigation is proposed.

**b) No Impact**

Consultation with various interest and tribal groups has occurred and is ongoing. No SLFs were identified in the project area. Although the THPO expressed that there are culturally sensitive areas within the project area, no comments on the draft cultural documentation were received. Therefore, it is assumed that the project will have no impact.

**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, b, c, d, e) No Impact**

The project would not generate the need for relocation or construction of water, wastewater treatments or stormwater drainage, electric power, natural gas, or telecommunication facilities. The project would not require a water supply. The project does not require wastewater treatment and will not change the projected demands. Some solid waste would be generated by the project. Solid waste would require temporary use of local landfills during construction. The project would be served by a landfill with sufficient capacity. It is also Caltrans' policy to recycle materials whenever possible. The Project would be in compliance with all federal, state, and local management and reduction statutes and regulations related to solid waste. No impact is anticipated.

**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, b, c, d) No Impact**

The project is not located in or near a state responsibility area or on land classified as very high fire hazard severity zone. Per the Riverside County General Plan Safety Element, the project is located primarily within federal responsibility areas classified as moderate. Local responsibility areas classified as “all others” are scattered throughout the project area. Therefore, the project would not have an impact.

**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 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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**

Desert tortoise, a federal- and state-listed species, is presumed present within the BSA. Impacts to desert tortoise are discussed in sections 2.3.5. Most of the permanent and temporary impact to desert tortoise habitat will occur in an area where habitat is considered to be of low-quality because it is a dirt median surrounded by high-speed traffic in both directions.

Compensatory mitigation is expected in the form of land purchase or in-lieu fee credit purchase, at a minimum of 1:1 ratio. In addition, the project will also implement several biological avoidance and minimization measures listed in Section 2.3 to minimize impact to desert tortoise.

**b) Less Than Significant with Mitigation**



Cumulative impacts of the project are discussed in section 2.4. Two other rehabilitation projects of similar scope near the project area were considered for determining cumulative impacts, Caltrans projects 1C081 and 1C083.

Although the project has potential for cumulative considerable impact to waters under state and federal jurisdiction, Caltrans is coordinating with the appropriate agencies. Additional avoidance and minimization measures may also be identified through the permitting process. All three projects would be required to prepare wetland delineations, follow all laws and regulations, and apply for the appropriate permits.

The project also has potential for cumulative considerable impacts to biological resources, due to potential impact to desert tortoise and DTCH for all three projects. For all three projects, most of the impact to DTCH and to desert tortoise suitable habitat would occur in the median. Although the median is considered habitat, it is surrounded by high-speed traffic on both directions. The median is already an area of high mortality and thus considered "low quality" habitat. Impact to desert tortoise and DTCH would be mitigated for each project and all appropriate permits and laws/regulations would be followed. Also, measures included in this project would help minimize and/or avoid impact. In addition, mitigation would be implemented for this project by land purchase or in-lieu fee credit of, at a minimum, 1:1 ratio.

**c) No Impact**

The project area is located within a rural desert zone, with low human population and large open space. The project would not cause substantial adverse effects to human beings, either directly or indirectly.

## 3.2 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including 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 component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO<sub>2</sub>.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

### REGULATORY SETTING

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

#### Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, 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.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, 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 2019). 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.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

## 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) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO<sub>2</sub>e).<sup>22</sup> Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles travelled, to promote the state's goals of reducing

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<sup>22</sup> GHGs differ in how much heat each trap in the atmosphere (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" (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>.

greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires ARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

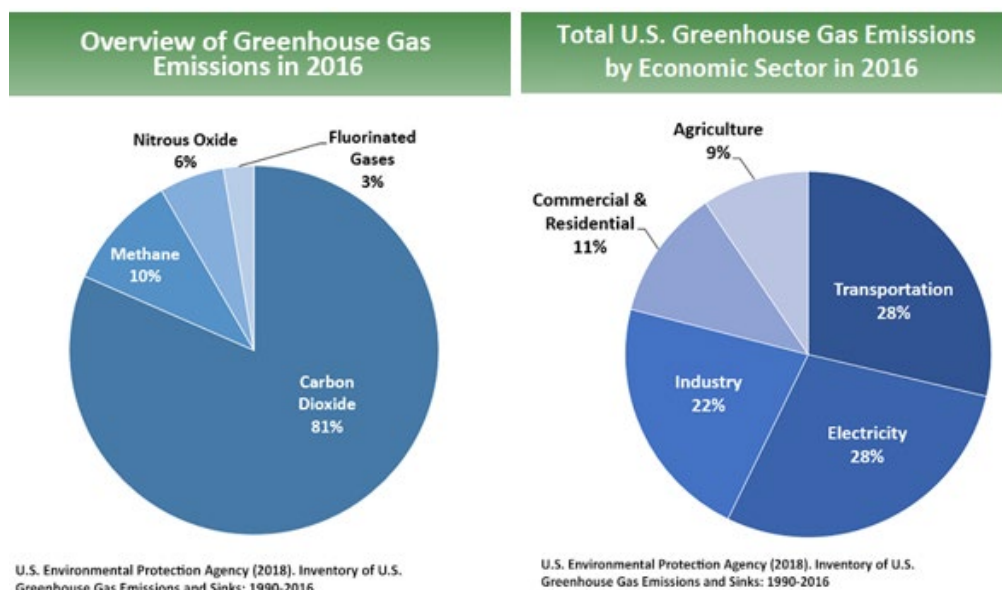
## **ENVIRONMENTAL SETTING**

The proposed project is in a sparsely populated rural area, with land uses consisting primarily of open-space rural and conservation habitat. I-10 is the main transportation route to and through the area for both passenger and commercial vehicles. The nearest alternate route is SR-62, twenty-eight miles to the north. Within the project limits, I-10 serves as a major corridor for goods movement. In 2019, Average Annual Daily Traffic (AADT) count was 28,000, with 51% of AADT counts consisting of trucks. The Riverside County Transportation Commission guides transportation development in the project area. The Riverside County General Plan Air Quality Element addresses GHGs in the project area.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. 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, as required by H&SC Section 39607.4.

### **National GHG Inventory**

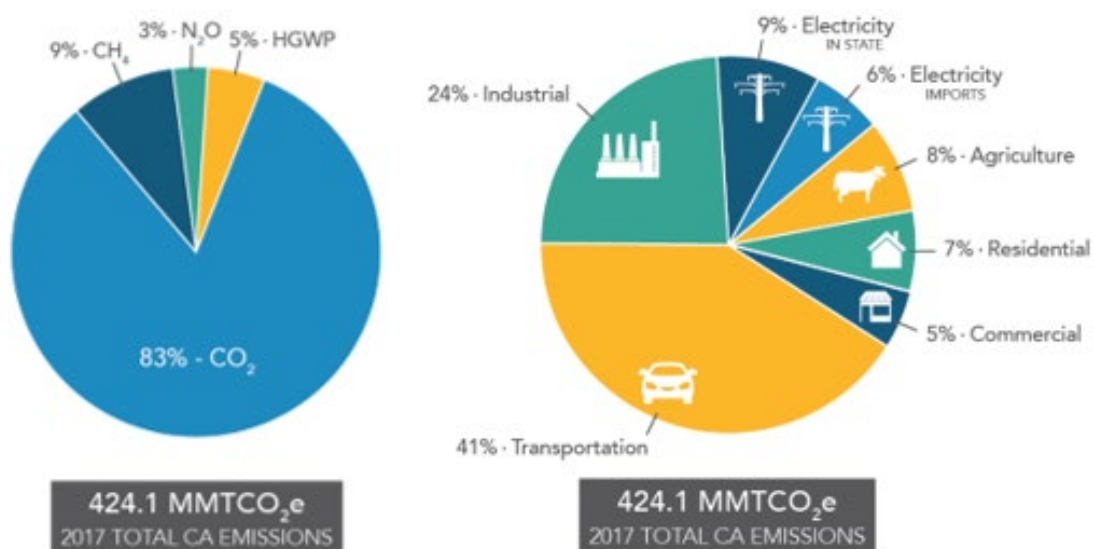
The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, perfluorocarbons, SF<sub>6</sub>, and nitrogen trifluoride. It also accounts for emissions of CO<sub>2</sub> that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO<sub>2</sub> (carbon sequestration). The 1990–2016 inventory found that of 6,511 MMTCO<sub>2</sub>e GHG emissions in 2016, 81% consist of CO<sub>2</sub>, 10% are CH<sub>4</sub>, and 6% are N<sub>2</sub>O; the balance consists of fluorinated gases (EPA 2018a). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.



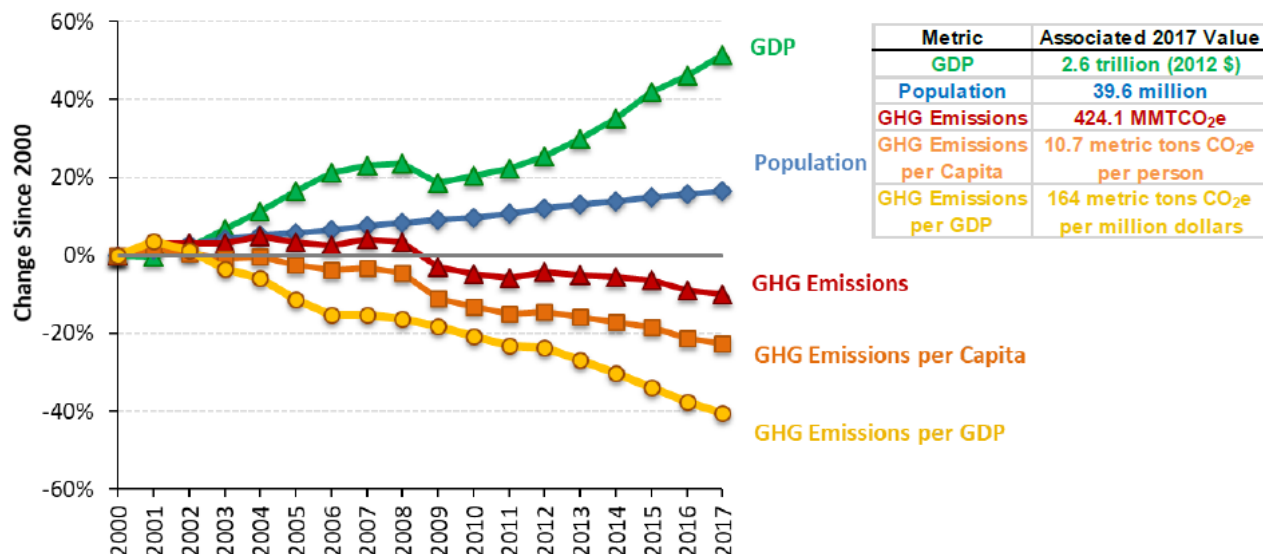
**Figure 2.16.** U.S. 2016 Greenhouse Gas Emissions.

### 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. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 MMTCO<sub>2</sub>e for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (ARB 2019a).



**Figure 2.17.** California 2017 Greenhouse Gas Emissions.



**Figure 2.18.** Change in California GDP, Population, and GHG Emissions since 2000  
(Source: ARB 2019b).

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. 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 AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

## Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) to plan future projects that will cumulatively achieve GHG reduction goals. 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 the Southern California Association of Governments (SCAG). The regional reduction targets for SCAG are 8% by 2020 and 19% by 2035 (ARB 2019c). The proposed project is within the jurisdiction of Riverside County Transportation Commission (RCTC). The 2016-2040 RTP and SCS provides a plan for meeting GHG emission reductions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning.

The Riverside County General Plan Air Quality Element and the City of Coachella Climate Action Plan (CAP) (2014) also address GHGs in the project area. The City of Coachella CAP is an implementation tool of the City's general plan goals to lower energy consumption, minimize VMT, reduce production of GHG emissions.

**Table 2.26. Regional Greenhouse Gas Reduction Policies**

<b>Title</b>	<b>GHG Reduction Policies or Strategies</b>
<i>Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy</i> (adopted April 7, 2016)	<ul style="list-style-type: none"> <li>• Preserve Our Existing System</li> <li>• Manage Congestion</li> </ul>
Riverside County General Plan (April 2019)	<b>Circulation Element</b> <ul style="list-style-type: none"> <li>• Policy C 5.2: Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping.</li> <li>• Policy C 20.14 (Previously C 20.12): Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles.</li> </ul>
Riverside County General Plan Amendments (Adopted July 17, 2018)	<b>Air Quality Element</b> <p>“It is a goal of Riverside County to manage its transportation system in a manner in which mobility and efficiency are enhanced.”</p> <ul style="list-style-type: none"> <li>• Policy AQ 14.4: Preserve transportation corridors with high demand potential or regional significance for future expansion to meet project demand.</li> <li>• Policy AQ 20.3: Reduce VMT and GHG emissions by improving circulation network efficiency.</li> </ul>
Riverside County Climate Action Plan (2018)	<b>Transportation Measures</b> <ul style="list-style-type: none"> <li>• R2-T5: Roadway Improvements including Signal Synchronization and Transportation Flow Management</li> <li>• R2-T8: Anti-Idling Enforcement</li> </ul>
City of Coachella Climate Action Plan (Public Draft, June 2014)	<ul style="list-style-type: none"> <li>• The CAP sets targets of 15% below 2010 per service population by 2020 and 49% below 2010 per service population by 2035.</li> <li>• Recommendations include traffic flow improvements for the transportation sector.</li> </ul>

## PROJECT ANALYSIS

GHG emissions from transportation projects can be divided into those produced during operation of the SHS 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 the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH<sub>4</sub> and N<sub>2</sub>O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

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).

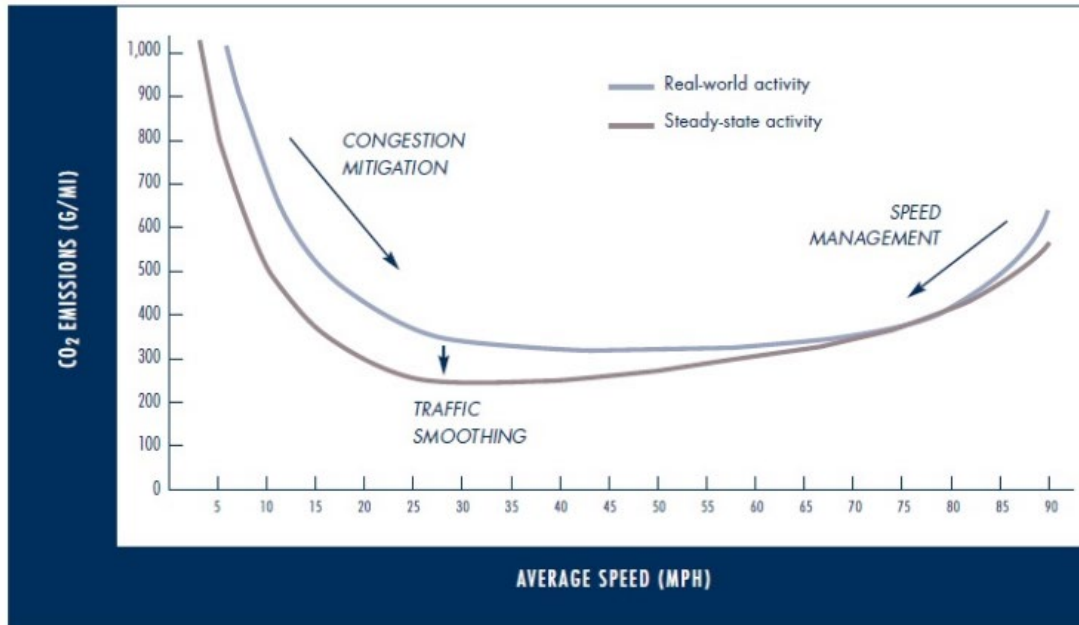
To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute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

### **Operational Emissions**

CO<sub>2</sub> accounts for 95 percent of transportation GHG emissions in the U.S. The largest sources of transportation-related GHG emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for over half of the emissions from the sector. The remainder of GHG emissions comes from other modes of transportation, including freight trucks, commercial aircraft, ships, boats, and trains, as well as pipelines and lubricants. Because CO<sub>2</sub> emissions represent the greatest percentage of GHG emissions it has been selected as a proxy within the following analysis for potential climate change impacts generally expected to occur.

The highest levels of CO<sub>2</sub> from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see Figure 2.19). To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO<sub>2</sub>, may be reduced.

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity, (3) transitioning to lower GHG-emitting fuels, and (4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued concurrently.



**Figure 2.19.** Possible Use of Traffic Operation Strategies in Reducing On-road CO2 Emissions  
(Source: Barth and Boriboonsomsin 2010)

The proposed project is located within the Southern California Association of Governments (SCAG) Final 2016-2040 RTP/SCS. The Final RTP/SCS meets the requirements of SB 375. For SCAG region, the California Air Resources Board (ARB) has set the following greenhouse gas reduction targets:

- 8% below 2005 per capital emission levels by 2020
- 13% below 2005 per capital emission levels by 2035

According to SCAG Final 2016-2040 RTP/SCS, the region will meet or exceed these targets (California Association of Governments, 2016). The proposed project is also listed on the 2019 Federal Transportation Improvement Program (FTIP).

According to SCAG Final 2016-2040 RTP/SCS, the region will meet or exceed these targets (California Association of Governments, 2016). The proposed project is also listed on the 2019 Federal Transportation Improvement Program (FTIP).

The purpose of the proposed project is to restore and extend service life of the existing pavement for a minimum of forty years, enhance trip reliability, and consequently minimize expenditures associated with future maintenance. Smoother pavement surfaces would improve vehicle operations and reduce emissions. The secondary purpose is to improve safety and mobility for the traveling public by adding an eastbound truck climbing lane, and upgrading features, such as Midwest Guardrail System (MGS), bridge rails, and drainage facilities, to current design standards. Within the project limits, bicycles are allowed on the shoulders. Upgrades include rumble strips and shoulders that will safely accommodate bicyclists. In

addition, signage would be installed along the highway to increase public awareness about the presence of cyclists.

The addition of a truck climbing lane will separate slow moving trucks climbing the steep grade along the project from the general traffic lanes. The improved traffic flow and improved efficiency of goods movement resulting from the addition of a truck climbing lane would, in turn, improve vehicles' fuel efficiency.

The regional RTP/SCS (California Association of Governments, 2016) states that truck-only lanes add capacity in congested corridors, improve truck operations and safety by separating trucks and autos, and provide a platform for the introduction of zero- and near zero-emission technologies. Accordingly, the proposed project would be consistent with regional efforts to reduce air pollution from goods movement sources.

### Quantitative Analysis

The CT-EMFAC2014 model, approved by U.S. EPA on August 15, 2019, was used to conduct separate model runs for existing/baseline (2020) conditions, open to traffic (2026), and the design-year (2046) for both the build and no-build alternatives. The results are summarized in Table 2.27. The existing/baseline emissions are 62,141 metric tons/year. For both the build and no-build alternative, emissions in the open to traffic year (2026) would be 63,273. Emissions in the design year (2046) would be 106,164, regardless of alternative. GHG and VMT calculations show no change in GHS emissions from the no-build to the build alternative. The construction of a truck climbing lane would not increase GHG emissions between alternatives.

**Table 2.27: Modeled Annual CO<sub>2</sub>e Emissions and Vehicle Miles Traveled, by Alternative**

Alternative	CO <sub>2</sub> e Emissions (metric tons/year)	Annual Vehicle Miles Traveled <sup>a</sup>
Existing/Baseline 2020	62,141	61.85x10 <sup>6</sup>
Open to Traffic 2026		
No-Build	63,273	65.96x10 <sup>6</sup>
Build Alternative	63,273	65.96x10 <sup>6</sup>
20-Year Horizon/Design-Year 2046		
No-Build	106,164	95.05x10 <sup>6</sup>
Build Alternative	106,164	95.05x10 <sup>6</sup>
Source: CT-EMFAC2014 CO <sub>2</sub> = carbon dioxide CO <sub>2</sub> e = CO <sub>2</sub> , N <sub>2</sub> O, CH <sub>4</sub> <sup>a</sup> Annual vehicle miles traveled (VMT) values derived from Daily VMT values multiplied by 347, per ARB methodology (ARB 2008: I-19).		

GHG and VMT calculations show no change in GHG emissions from the no-build to the build alternative. The construction of a truck climbing lane would not increase GHG emissions between alternatives. This demonstrates that the increases in VMT and GHG emissions are due to external factors such as anticipated growth in regional population and both light-duty vehicle and truck traffic, rather than to the project. Although the project would not directly contribute to the increase in GHG emissions, Caltrans will install an electric vehicle charging station at a

nearby rest stop to contribute to statewide GHG-reduction efforts and help offset construction and future operational emissions.

While CT-EMFAC has a rigorous scientific foundation and has been vetted through multiple stakeholder reviews, its GHG emission rates are based on tailpipe emission test data.<sup>23</sup> Moreover, the model does not account for factors such as the rate of acceleration and vehicle aerodynamics, which influence the amount of emissions generated by a vehicle. GHG emissions quantified using CT-EMFAC are therefore estimates and may not reflect actual physical emissions. Though CT-EMFAC is currently the best available tool for calculating GHG emissions from mobile sources, it is important to note that the GHG results are only useful for a comparison among alternatives.

### **Construction Emissions**

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The Caltrans Construction Emissions Tool (CAL-CET) was used to quantify the expected construction-related GHG emissions related to the proposed project. Construction GHG emissions would total 7,677 tons of CO<sub>2</sub> during the estimated 750 working days of construction.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which 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**

Operational GHG emissions would increase from existing conditions over time. However, emissions would be the same with or without the project in both opening and design years. This

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<sup>23</sup> This analysis does not currently account for the effects of the US National Highway Traffic Safety Administration and Environmental Protection Agency SAFE (Safer Affordable Fuel-Efficient) Vehicles Rule. Part One revoking California's authority to set its own greenhouse gas emissions standards was published on September 27, 2019 and effective November 26, 2019. The SAFE Vehicles Rule Part 2 would amend existing Corporate Average Fuel Economy (CAFE) and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026. The proposal would retain the model year 2020 standards for both programs through model year 2026. Although CARB has not yet provided adjustment factors for greenhouse gas emissions to be utilized in light of the SAFE Rule, modeling these estimates with EMFAC2017 or CT-EMFAC2017 remains the most precise means of estimating future greenhouse gas emissions.

indicates that the increase is a result of regional growth in population and both light-duty vehicle and heavy-duty truck traffic, rather than a result of project implementation. Nevertheless, the project would not contribute to reducing statewide GHG emissions.

The proposed project's incremental contribution will not be cumulatively considerable with mitigation measures incorporated to address construction and operational emissions. Accordingly, the project would not conflict with plans or policies intended to reduce GHG emissions. Impacts would be considered less than significant with mitigation.

## GREENHOUSE GAS REDUCTION STRATEGIES

### Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California*.

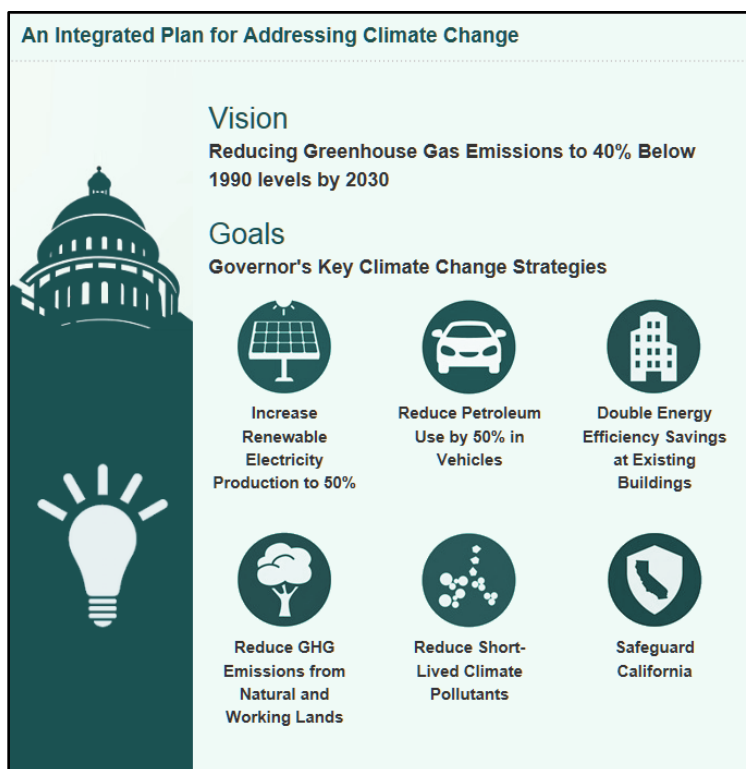


Figure 2.20. California Climate Strategy.

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

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.

### **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.

### **CALIFORNIA TRANSPORTATION PLAN (CTP 2040)**

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO<sub>2</sub> reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

### **CALTRANS STRATEGIC MANAGEMENT PLAN**

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

### **FUNDING AND TECHNICAL ASSISTANCE PROGRAMS**

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-

related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

### **CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES**

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

### **Project-Level GHG Reduction Strategies**

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

- Bicycles are allowed on the shoulders within the project limits. Rumble strips would be bicycle-friendly and a minimum of 4 feet clear shoulder will be provided between rumble strip and the outer edge of shoulders to enhance bicyclist safety. Signage would be installed along the highway to increase public awareness about the presence of cyclists.
- A Transportation Management Plan (TMP) will be developed and implemented to reduce vehicle delays and idling that generate GHGs.
- The preferred alternative minimizes overall footprint, preserving natural lands

**CC-1:** During construction, implement Caltrans' Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction; which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations.

**CC-2:** During construction, implement Caltrans' Standard Specifications Section 14-9.02, Air Pollution Control, which 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.

**CC-3:** To reduce construction emissions, limit vehicle idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.

**CC-4:** To reduce construction emissions, equipment shall be maintained in proper tune and working condition.

**CC-5:** To reduce the need for transport of earthen materials, re-use excavated materials on-site whenever possible.

**CC-7:** High-reflective backed signs will be used to reduce the need for additional lighting.

**GHG-1: Installation of zero-emission vehicle (ZEV) infrastructure:** Caltrans will install electric vehicle charging station at Cactus City Rest Area, on the eastbound and westbound sides.

## ADAPTATION

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

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the “human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, “Transportation,” presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to “integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions” (U.S. DOT 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events*, December 15, 2014) established FHWA policy 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 foster



resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

### **State Efforts**

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on*

*Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

## **Caltrans Adaptation Efforts**

### **CALTRANS VULNERABILITY ASSESSMENTS**

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

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 will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

## **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.

### ***FLOODPLAINS***

The project location is not within a 100-year flood zone. Majority of the project location is within Federal Emergency Management Agency (FEMA) flood risk Zone D. Areas in Zone D are areas with possible, but undetermined flood hazard, where flood hazard analysis has not been conducted. However, historical data is no longer a reliable predictor of future conditions. Changes in precipitation scenarios under future climate conditions include more extreme precipitation events and more precipitation falling as rain than snow, depending on geographic location. According to Caltrans District 8 2019 Climate Change Vulnerability Assessment, while projected precipitation changes are not as extreme in District 8 as they are in other Caltrans districts, a 5–20% change in 100-year storm precipitation depth could still have significant flash flooding impacts. Higher precipitations levels and more intense storm events could increase the risk of damage or loss from flooding. The scope of this project includes the extension of culverts in the median as well as rehabilitation of bridges, which, in turn, could help minimize damage in case of a flood event.

### ***WILDFIRE***

According CalFire's Fire Hazard Severity Zone mapping tool, the project is not in a location vulnerable to wildfire.

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## Chapter 4      Comments and Coordination

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### 4.1 Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, and Project Development Team (PDT) meetings. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

#### Cooperating Agencies

The United States Army Corps of Engineers (USACE) is a Cooperating Agency associated with the proposed project (see Appendix D). Cooperating Agencies are federal agencies that have jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project. Cooperating Agencies are also Participating Agencies that have an interest in the project. The role and responsibility of USACE in this project is to assist in identifying any waters of the United States and wetland within the project area. The USACE action area for this project is defined as the area within 300-feet of a regulated activity within delineated waters. USACE will also provide comments on the purpose and needs, and the draft/final IS/EA.

#### Consultation and Coordination with Public Agencies and Tribal Governments

After a review of the Caltrans Cultural Resource Database (CCRD), previous studies, and considering that the project is essentially a maintenance project through a well-established transportation corridor within Caltrans' R/W, it was determined that consultation with Local Government, Local Historical Society / Historic Preservation Groups, and Public Information Meetings were not warranted. However, consultation with associated/interested tribal groups has occurred and is ongoing.

A request was made to the Native American Heritage Commission (NAHC) for a Sacred Land File (SLF) search on the March 29, 2018. The NAHC responded March 30, 2018, with negative SLF results, and provided a Native American contact list. Consultation with the District Native American Coordinator (DNAC) further truncated the contact list, as such the following Native American tribes were contacted: Agua Caliente Band of Cahuilla Indians, Augustine Band of Cahuilla Indians, Cabazon Band of Mission Indians, Cahuilla Band of Indians, Morongo Band of Mission Indians, 29 Palms Band of Mission Indians, Ramona Band of Cahuilla Indians, Santa Rosa Band of Cahuilla Indians, Soboba Band of Luiseno Indians, and Torres-Martinez Desert Cahuilla Indians.

While Native American consultation is an ongoing process throughout the life of the project, there was no new information obtained from the consulting tribes that was not already identified during the study. Several tribes requested the documentation generated by the study and or Tribal

Monitoring during ground disturbing activities. Tribal monitoring is supported by the current study at one location; the ESA /AMA. Interested tribes will be contacted prior to construction of the project to confirm Tribal Monitoring.

Caltrans Cultural Studies branch determined that a *Finding of No Adverse Effect (FNAE) without standard conditions* is appropriate for the proposed Undertaking. Pursuant to Section 106 PA Stipulation X.B.2, and 5024 MOU Stipulation X.B.2, the proposed finding was transmitted to SHPO for consultation and concurrence on April 8, 2019. SHPO concurrence regarding Caltrans' proposed finding was received May 16, 2019. (See SHPO response in Appendix D Required Consultation/Concurrence Documentation).

For biological resource coordination, the project is located within and outside of a CVMSHCP Conservation Area. Per the CVMSHCP, the project will require a USFWS Streamlined Biological Opinion (BO) for incidental take of desert tortoise and only for the portions of the project located within the Desert Tortoise and Linkage Conservation Area. The Streamline BO was received on December 2019. An official USFWS species list was requested and received on January 23, 2020 and is included in Appendix D. Caltrans continues to work collaboratively with CDFW, USFWS and US Army Corp of Engineers to develop a robust project. The results of the jurisdictional delineation performed determined that 51 drainages in the BSA were jurisdictional pursuant to Section 404 of the CWA and Section 1602 of the California Fish and Game Code. Coordination with the regulatory and permitting agencies is ongoing. Permits are expected during the design phase.

## **Public Participation**

A public notice advertising Caltrans' intent to adopt a Mitigated Negative Declaration with Opportunity for Public Hearing will be published in the Desert Sun, a newspaper of general circulation. The document will be available for public review and comment for thirty (30) days.

## **4.2 Comments and Response to Comments**

If comments are received on the Draft IS/EA during the public availability period and/or at the public hearing, the Final IS/EA will be modified to reflect all substantive comments and responses to those comments. Substantive comments are those comments that are related to the facts of the project, environmental document, or studies—comments that are purely just expressing support or opposition to the project without any factual substantiation may be acknowledged but generally do not require a response.

## **Chapter 5      List of Preparers**

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The following Caltrans staff contributed to the preparation of this IS/EA:

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Tatiana Torres, Associate Environmental Planner – Generalist

Luz Quinnell, Associate Environmental Planner – Natural Sciences

Shannon Clarendon, Associate Environmental Planner – Cultural Studies (Archaeology)

Gary Jones, District Native American Coordinator

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Chris Igbinedion, Senior Transportation Engineer

Almabeth Anderson, Landscape Associate

Hannah Duarte, Environmental Planner – Generalist

Jessica Chavez, Environmental Planner – Generalist

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## Chapter 6 Distribution List

A public notice of this Draft IS/EA will be distributed to federal, state, regional and local agencies, elected officials, and utilities and services providers. In addition, all property owners and occupants within a 500-foot radius of the project limits will be provided the notice.

Agencies and Elected Officials	
George A. Johnson County Executive Officer	County of Riverside County Administrative Center 4080 Lemon Street – 4 <sup>th</sup> Floor Riverside, CA 92501
Anne Mayer Executive Director	Riverside County Transportation Commission P.O. Box 12008 Riverside, CA 92502
Supervisor V. Manuel Perez	Board of Supervisors 4 <sup>th</sup> District, Riverside County 73-710 Fred Waring Drive Suite 222 Palm Desert, CA 92260
Assembly Member Eduardo Garcia	48220 Jackson Street Suite A3 Coachella, CA 92236
Environmental Coordinator	U.S. Bureau of Land Management Palm Springs-South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262
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Captain Misty Reynolds Riverside County Sheriff	86625 Airport Blvd Thermal, CA 92274
Riverside County Fire Department Station 87	42900 Golf Center Parkway Indio, CA 92201
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Jacqueline Cochran Regional Airport	56-850 Higgins Dr Thermal, CA 92274
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Friends of the Desert Mountains	PO Box 1281 Palm Desert, CA 92261
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Donald & Joan Griffin	18001 Weston Pl. Tustin, CA 92780
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CDP Holdings	3855 Atherton Rd. Rocklin, CA 95765
Glorious Land	556 N. Diamond Bar Blvd. Ste. 212 Diamond Bar, CA 91765

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## **APPENDICES**

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**Appendix A. Section 4(f)**

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## **Appendix A. Section 4(f)**

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## **Section 4(f) Evaluation**

### **Applicable Technical Reports**

- Historic Property Survey Report (April 2019)

### **Introduction**

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance, or land of an historic site of national, state, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

### **Project Description**

The California Department of Transportation (Caltrans) proposes to rehabilitate the existing asphalt concrete (AC) pavement on Interstate 10 (I-10) from 2.0 miles east of Dillon Road Interchange to 2.0 miles east of Cactus City Rest Area. The project is located in the Coachella Valley. The project limits are from Post Mile (PM) R60.7 to PM R74.3. Rehabilitation activities include removal and replacement of existing inside and outside shoulders, guardrails, rumble strips, drainage inlets, dikes, and oversized drains. Grading will be limited to 5 feet outside the edge of shoulder, except at bridge locations. The proposed project will also the installation of a two-lane temporary detour in the existing median. Following construction, the eastbound detour lane would be converted to a general-purpose lane, and the eastbound outside lane would be designated as a truck climbing lane.

This section describes the proposed action and the Build Alternative that was developed to meet the identified purpose and need while avoiding and minimizing environmental impacts.

The proposed project consists of a Build Alternative and a No-Build Alternative. For the full project description and additional details, see Chapter 1 of the IS/EA.

## **Purpose and Need**

### *Project Purpose*

- The primary purpose of this project is to restore and extend service life of existing pavement for a minimum of 40 years, enhance trip reliability, and consequently minimize expenditures associated with future maintenance.
- The secondary purpose is to improve safety and mobility for the traveling public by adding an eastbound truck climbing lane, and upgrading features, such as Midwest Guardrail System (MGS), bridge rails, and drainage facilities, to current design standards.

### *Project Need*

- This project is needed to address current and future deficiencies of the existing pavement and extend the service life within the project limits and minimize maintenance frequency and consequently worker exposure.
- Additionally, slow-moving freight vehicles currently travel along the general-purpose lanes, impairing traffic flow.

## **Project Alternatives**

### *No-Build Alternative*

The No-Build Alternative would maintain existing pavement condition of I-10 within the project limits with no rehabilitation on the mainline lanes and ramps or associated improvements. The No-Build Alternative fails to address the project purpose and need, and it provides none of the project benefits cited for Alternative 2.

Without pavement rehabilitation, the existing pavement condition will deteriorate further along the corridor resulting in operational deficiencies and will necessitate future costly maintenance measures. With no capital improvements, there is no capital cost for this alternative. However, there would be continued costs associated with maintenance, periodic rehabilitation, and any necessary safety and/or operational improvements to the existing facility

### *Build Alternative*

The Build Alternative would include the following improvements to the identified portion of the I-10 Corridor:

- Cold plane existing asphalt concrete (AC) pavement on the mainline and shoulders.
- Raise the profile grade by approximately one foot to achieve the recommended structural section.
- Remove existing mainline asphalt concrete (AC) pavement and base.

- Construct temporary detour lanes and crossover lanes in the existing median for traffic handling during construction. As a result of detour construction, all existing bridges and/or drainage crossings, on the EB and WB direction, would be widened towards the median. Both detour lanes would remain in place after completion of the project.
- The EB detour lane, from PM R60.7 to PM R74.3 would be repurposed and incorporated into the mainline for public use after rehabilitation activities have concluded. Through this stretch, the facility would be re-stripped so that the temporary detour lane on the EB would be used as General-Purpose lane and the outside lane would be used as a truck climbing lane. The WB detour would be striped, signaling to the public that it is not available for use.
- Extend existing culverts in the median outside the Clear Recovery Zone.
- Remove existing AC on all bridges and treat the exposed deck.
- Remove and replace all existing bridge railings.
- Replace existing inlets in the median.
- Remove and replace existing dikes.
- Remove existing Metal Beam Guard Railing (MBGR) and replace with MGS.
- Remove and reinstall rumble strips.
- Widen existing bridges towards the median. Remove/replace/repair existing Rock Slope Protection (RSP) at all bridge locations in each direction.
- Construct approach and departure slabs at all bridges.
- Hydroseed the median for erosion control and attempted vegetation restoration.
- Cold plane and overlay existing Rest Area and ramps with Rubberized Hot Mix Asphalt.
- Repair, replacement, and installation of permanent desert tortoise fence.
- Install Inventory Marker Signs (G-11) at both bridge approaches facing traffic. Information, Warning, and Regulatory signs impacted by the project median widening will be replaced.
- Retrofit existing bridges and replace bridge railings at all (9) bridge locations:
  1. Polaris Wash/Bridge No. 54-0476 R/L
  2. Echo Ditch/Bridge No. 54-0475 R/L
  3. Smoky Gulch/Bridge No. 54-0201 R/L
  4. Sunny Gulch/Bridge No. 54-0202 R/L
  5. Brown Arroyo/Bridge No. 54-0204 R/L
  6. West Cactus Wash Br/Bridge No. 54-0460 R/L
  7. Cactus Wash Br//Bridge No. 54-0461 R/L

8. East Cactus Wash Br/Bridge No. 54-0462 R/L
  9. Hazy Gulch Br/Bridge No. 54-0463 R/L
- Scope of work for EA 08-1J910, within the project limits of 1C081, has been incorporated into this project. The scope of work for 1J910 consists of upgrading Changeable Message Sign (CMS) panels on existing sign structures and replacing structurally deficient single post sign structures.

### **Section 4(f) De Minimis Evaluation**

This section of the document discusses de minimis impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only de minimis impacts on lands protected by Section 4(f). This revision provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a de minimis impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. The Federal Highway Administration's final rule on Section 4(f) de minimis findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action. In fulfilling its responsibility under 23 USC 326 and 327, Caltrans evaluated publicly-owned lands of a public park, recreation area or wildlife and waterfowl refuge of national, State, or local significance within the project area. Caltrans has also analyzed all archaeological and historic sites within the Section 106 Area of Potential Effects (APE), to determine whether any are protected Section 4(f) properties. Section 4(f) de minimis determination consideration was required for one cultural resource within the project APE. There are no designated Wild or Scenic Rivers within the study area.

### **Resources Evaluated Relative to the Requirements of Section 4(f)**

This section of the document discusses historic properties found within or next to the project area that do not trigger Section 4(f) protection because either: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.



**Table A-1. Potential Section 4(f) Properties within the Project Study Area**

<b>Jurisdiction</b>	<b>Name</b>	<b>Location</b>	<b>Approximate Distance From the Project</b>	<b>Type</b>	<b>Amenities</b>
CA State Historic Preservation Office	1. General Patton's Desert Training Center California/Arizona Maneuver Area (DTC/C-AMA)	(No exact address) From Indio, California eastward toward Prescott, Arizona and from Yuma, Arizona to Searchlight, Nevada covering approximately 18,000 square miles of the Mojave and Colorado deserts.	Encompasses the entire Project APE	Eligible Historic Property	The largest military training ground in the history of military maneuvers. Consisting of eleven divisional camps and associated sites and features including but not limited to: maneuver areas, divisional camps, small unit training areas, air facilities and crash sites, campsites, ranges, railroad sidings and deposits, hospitals and medical facilities depots, airfields, ranges, bivouacs, anti-tank ditches, camouflage areas, foxholes, minefields, observation positions, obstacles, refuse scatter and dumps, roads, rock features, rock insignias or cairns, rock walls, slit trenches, tank tracks, and tank traps, and other associated military and non-military artifacts
Sources: City of Blythe, 2007. HPSR, 2019.					

The properties are described below, with an explanation of why implementation of the proposed project would not constitute a “use” under Section 4(f) for recreation facilities and a *de minimis* use for the DTC/C-AMA.

## Historic Sites

Consultation and identification efforts for the proposed Undertaking resulted in the identification of contributing elements to one Historic Property: General Patton's Desert Training Center California/Arizona Maneuver Area (DTC/C-AMA). These elements (tank tracks) are permanently located within the existing transportation corridor. Essentially, a very small portion of the DTC/C-AMA is permanently incorporated into a transportation facility, facilitating “use” of a National Register of Historic Places (NRHP) eligible property as defined in 23 CFR 774.17.

The DTC/C-AMA was assumed eligible for listing on the NRHP by the Caltrans Cultural Studies Office (CSO), and determined significant under Criteria A, B, C, and D; for the purposes of this project only. The property was determined significant at the state level and listed on the California Register of Historic Resources as CHL-985: DTC/C-AMA, in June 1989. Although, associated tank tracks were identified within the APE and determined to be contributing elements of the larger NRHP eligible property, the Undertaking and associated activities, will not pose adverse effects on the DTC/C-AMA, as a whole. The effect finding proposed that destruction, and or, further disturbances to these contributing elements, which constitute only a small minute portion of the overall DTC/C-AMA (<0.01%), would not rise to the level of being adverse, as such the Project results in a *Finding of No Adverse Effect* to the Historic Property.

No avoidance, minimization, or mitigation measures are required in conjunction with the completion of this analysis pursuant to Caltrans' Section 106 Programmatic Agreement (PA) and Section 4(f).

Caltrans has fulfilled its responsibilities regarding evaluation of properties protected by Section 4(f) for the proposed Project and has notified the California State Historic Preservation Office (SHPO) of its determination that one property within the APE is eligible for inclusion in the NRHP and requested concurrence in its determination of the Project's ***Finding of No Adverse Effects*** and ***de minimis*** impact. On April 8, 2019 Caltrans Cultural Studies Office (CSO) submitted Caltrans Section 106 documentation to SHPO for review and concurrence. SHPO concurrence was received May 16, 2019. Pursuant to Caltrans' Section 106 PA, a non-response from SHPO, regarding the 4(f) determinations, would be treated as written concurrence for the de minimis finding. Please see Appendix B-1 for consultation documentation regarding CSO's assumption of NRHP eligibility and SHPO concurrence. (Refer to Appendix D for consultation documentation).

## **Appendix B. Title VI Policy Statement**

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**DEPARTMENT OF TRANSPORTATION**

OFFICE OF THE DIRECTOR  
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*Making Connections  
a California Way of Life.*

April 2018

**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."*

Related federal statutes 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, please visit the following web page:  
[http://www.dot.ca.gov/hq/bep/title\\_vi/t6\\_violated.htm](http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm).

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 Business and Economic Opportunity, 1823 14<sup>th</sup> Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email [Title.VI@dot.ca.gov](mailto:Title.VI@dot.ca.gov), or visit the website [www.dot.ca.gov](http://www.dot.ca.gov).

A handwritten signature in blue ink, appearing to read "Laurie Berman".

LAURIE BERMAN  
Director

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## **Appendix C. Avoidance, Minimization, and/or Mitigation Summary (Environmental Commitments Record)**

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# ENVIRONMENTAL COMMITMENTS RECORD

## (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

Permit Type	Agency	Date Submitted	Date Received	Expiration	Fee	Notes	Permit Requirement Completed	
							Name	Date
1602	California Department of Fish & Wildlife							
General Permit for Storm Water Discharges	California State Water Resources Control Board					The Statewide NPDES has already been issued and only needs submittal of the Notice of Intent to be activated.		
Section 401 Clean Water Act	Regional Water Quality Control Board, Region 7					Certification for activities impacting stream crossings and potential ephemeral drainages.		
404 Standard Individual Permit	U.S. Army Corps of Engineers							
Approved Jurisdictional Determination	U.S. Army Corps of Engineers					The JD is Final but it includes impacts for the entire median and a 50-ft shoulder for a total of 7.11 acres of permanent impacts and 80.90 acres of temporary impacts. But the temporary and permanent impacts will require revisions once the design plans are finalized at 65%		
Section 7 Consultation	U.S. Fish and Wildlife Service	12/20/18	5/9/19			Pursuant to Section 7(a)(2), and using the criteria outlined in the desert tortoise programmatic biological opinion (PBO), Caltrans requested concurrence that the Project may affect, and is likely to adversely affect the federally threatened desert tortoise. Concurrence from USFWS was received on May 2, 2019.  Received Streamline Biological Opinion for desert tortoise from USFWS on 12/13/19.	Luz Quinell	12/13/2019

Date of ECR:12/20/2019

Project Phase:

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

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

08-RIV-10-  
PM R60.7/R74.3

EA 08-1C081  
PN 0816000086  
Generalist: Tatiana Torres  
ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
CULTURAL RESOURCES										
CR-1: If buried cultural resources are encountered during Project Activities, stop work within 60 feet of the area until a qualified archaeologist can evaluate the nature and significance of the find.	DED Section 2.1.10	Cultural Resources	District Cultural Studies/  Resident Engineer/  Contractor	Construction						
CR-2: In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters,	DED Section 2.1.10	Cultural Resources	District Cultural Studies/  Resident Engineer/  Contractor	Construction						

Date of ECR:12/20/2019

Project Phase:

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

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							Date / Initials	Date / Initials	YES	NO
DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.										
<b><u>PALEONTOLOGY</u></b>										
<b>P-1:</b> A Paleontological Mitigation Plan (PMP) will be prepared and will include, but not limited to, the following measures. The non-standard special provisions will ensure that the proposed project will not have an adverse impact on paleontological resources.  A. Mandatory preconstruction paleontological sensitivity training for earthmoving personnel. B. A signed repository agreement.	DED Section 2.2.3.4	District Paleontological Studies	District Paleontological Studies/  Resident Engineer/  Contractor	Pre-construction						

Date of ECR:12/20/2019

Project Phase:

- ☒ PA/ED (DED/FED)  
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☐ Construction

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

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							Date / Initials	Date / Initials	YES	NO
C. Field and laboratory methods proposed (must be consistent with repository requirements). D. Required Paleontological Mitigation Report upon completion of project earthmoving. E. PMP developed consistent with Caltrans format as detailed in the Caltrans Standard Environmental Reference (SER).										
<b>P-2:</b> Implementation of a Paleontological Monitoring Program shall be required where cuts exceed five feet in depth below the natural surface in previously undisturbed areas and/or where sensitive strata are currently at grade or less than five feet deep.	DED Section 2.2.3.4	District Paleontological Studies	District Paleontological Studies/  Resident Engineer/  Contractor							

Date of ECR: 12/20/2019

Project Phase:

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

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

08-RIV-10-  
PM R60.7/R74.3

EA 08-1C081  
PN 0816000086  
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ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
<b>P-3:</b> A qualified Principal Paleontologist shall be retained to be present at pre-grading meetings to consult with grading and excavation contractors. At the direction of the Project Paleontologist, Paleontological Monitors shall be on site to inspect cuts for fossils at all times during original grading involving sensitive geologic formations. If fossils are discovered, the Paleontologist (or Paleontological Monitor) shall recover them. If necessary, construction work in these areas shall be halted or diverted to allow recovery of fossil remains in a timely manner.	DED Section 2.2.3.4	District Paleontological Studies	District Paleontological Studies/  Resident Engineer/  Contractor							

Project Phase:  
☒ PA/ED (*DED/FED*)  
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08-RIV-10-  
PM R60.7/R74.3

EA 08-1C081  
PN 0816000086  
Generalist: Tatiana Torres  
ECL:

[illegible]

Date of ECR: 12/20/2019

Project Phase:

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

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EA 08-1C081  
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							Date / Initials	Date / Initials	YES	NO
<b>T-1:</b> Prepare a detailed TMP during the design phase with the following elements as major components: <ul style="list-style-type: none"> <li>Public Awareness Campaign (PAC) particularly related to the scheduling of construction activities and their impacts on the traveling public and surrounding community.</li> <li>Construction Zone Enforcement Enhancement Program (COZEED).</li> <li>Utilization of Portable Changeable Message Signs (PCMS).</li> <li>Advance information signing pertaining to date, time, and duration of intersection closure as well as detour alternatives.</li> </ul>	DED Section 2.2.8.4		District Design	PS&E/Pre-Construction						
<b>T-2:</b> Prior to construction start, prepare a staging and storage plan	DED Section 2.1.8.4		District Design	PS&E/ Pre-Construction						

Date of ECR:12/20/2019

Project Phase:

- ☒ PA/ED (DED/FED)  
☐ PS&E Submittal \_\_\_\_\_ %  
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## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

08-RIV-10-  
PM R60.7/R74.3

EA 08-1C081  
PN 0816000086  
Generalist: Tatiana Torres  
ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
and submit to Environmental for review and approval-										
<b>WATER QUALITY AND STORM RUNOFF</b>										
<b>WQ-1: Construction General Permit.</b> Prior to commencement of construction activities, the contractor shall obtain coverage under the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Order No. 2009-0009-DWQ, as amended by 2010-0014-DWG and 2012-0006-DWQ, NPDES No. CAS000002, or any other subsequent permit. This shall include submission of Permit Registration Documents (PRDs), including Notice of Intent (NOI) for coverage under the permit to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a	DED Section 2.2.14	Water Quality Assessment Report	District Design / District Storm Water / Resident Engineer / Contractor	PS&E, Final Design, Pre-Construction						



Date of ECR: 12/20/2019

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Waste Discharge Identification Number (WDID) is obtained from SMARTS. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality.										
<b>WQ-2: Caltrans MS4 Permit.</b> This project shall comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit, Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation Order No. 2012-0011-DWQ (Caltrans MS4 Permit), as amended by Order No. 2014-0006-EXEC, Order No. 2014-0077-DWQ, and Order No. 2015-0036-EXEC, NPDES No. CAS000003, or any subsequent permit. Caltrans-approved Design Pollution Prevention BMPs and Treatment BMPs shall be implemented to the maximum extent practicable (MEP) consistent with the requirements of	DED Section 2.2.14	Water Quality Assessment Report	District Design / District Storm Water / Resident Engineer / Contractor	Final Design, Construction						

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the Caltrans MS4Permit as implemented by the SWMP.										
<b>CLIMATE CHANGE</b>										
<b>CC-1:</b> During construction, implement Caltrans' Standard Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction; which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations.	DED Section 2.2.8.4	Environmental – Generalist	Resident Engineer / Contractor	Construction	Standard Specifications Section 7-1.02A and 7 1.02C					
<b>CC-2:</b> During construction, implement Caltrans' Standard Specifications Section 14-9.02, Air Pollution Control, which 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.	DED Section 2.2.8.4	Environmental – Generalist	Resident Engineer / Contractor	Construction	Standard Specifications Section 14-9.02					

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<b>CC-3:</b> To reduce construction emissions, limit vehicle idling to 5 minutes for delivery and dump trucks and other diesel-powered equipment.	DED Section 2.2.8.4	Environmental – Generalist	Resident Engineer / Contractor	Construction						
<b>CC-4:</b> To reduce construction emissions, equipment shall be maintained in proper tune and working condition.	DED Section 2.2.8.4	Environmental – Generalist	Resident Engineer / Contractor	Construction						
<b>CC-5:</b> To reduce the need for transport of earthen materials, re-use excavated materials on-site whenever possible.	DED Section 2.2.8.4	Environmental – Generalist	Resident Engineer / Contractor	Construction						
<b>CC-6:</b> High-reflective backed signs will be used to reduce need for additional lighting	DED Section 3.2	Environmental – Generalist	Resident Engineer / Contractor	Construction						
<b><u>GREENHOUSE GAS</u></b>										
<b>GHG-1:</b> Caltrans will install an electric vehicle charging station in Cactus City Rest Area, on the EB and WB sides.	DED Section 3.2	Environmental – Generalist	Resident Engineer / Contractor	Construction						
<b><u>AIR QUALITY</u></b>										
<b>AQ-1:</b> During construction, the contractor shall follow Caltrans 2018 Standard Specification 14-9.02 for exhaust and particulate matter	DED Section 2.2.5.4		District Environmental Engineering/Res	Construction						

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emissions control to comply with air-pollution-control rules, regulations, ordinances, and statutes that apply to work performed under the Contract, including those provided in Govt Code § 11017 (Pub Cont Code § 10231) and SCAQMD Rule 403.			ident Engineer/Contractor							
<b>HAZARDOUS WASTE / MATERIALS</b>										
<b>HAZ-1:</b> Any generated ACM waste during demolition, renovation, and/or construction shall be dispensed as hazardous asbestos waste. All renovation and demolition activities shall conducted in accordance with local, state, and federal requirements and regulations, including those of the local air quality management district.	DED Section 2.2.4	ACM/LBP Report	District Environmental Engineering/Resident Engineer/Contractor	Construction						
<b>HAZ-2:</b> This project involves the removal and management of ACCM. An asbestos compliance plan is required in accordance with Caltrans SSP 14-11.16, prior to renovation, refurbishing, or demolition activities on bridges.	DED Section 2.2.4	ISA Checklist	District Environmental Engineering / Resident Engineer / Contractor	Construction	SSP 14-11.16					

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<b>HAZ-3:</b> In accordance with Caltrans SSP 14-9.02, SCAQMD must be notified of all renovation and demolition activities at least 15 days before starting demolition or rehabilitation activities, unless except from notification requirements.	DED Section 2.2.4	ISA Checklist	District Environmental Engineering/ Resident Engineer/ Contractor	Pre-Construction/ Construction	SSP 14-9.02					
<b>HAZ-4:</b> The contractor shall follow Caltrans SSP 7-1.02K(6)(j)(iii), which includes specifications for handling, removing, and disposing of earth material containing lead. Excavated material on the job site is not considered hazardous waste, and therefore does not require disposal at a permitted landfill or solid waste disposal facility. All excavated material could be reused on the ROW. SSP 7-1.02K(6)(j)(iii) requires a lead compliance plan.	DED Section 2.2.4	ISA Checklist	District Environmental Engineering/ Resident Engineer/ Contractor	Construction	SSP 7-1.02K(6)(j)(iii)					
<b>HAZ-5:</b> The contractor shall follow Caltrans SSP 14-11.14A, for the removal and disposal of Treated Wood Waste from sign posts and/or MBGR posts.	DED Section 2.2.4	ISA Checklist	District Environmental Engineering/ Resident Engineer/ Contractor	Construction	SSP 14-11.14A					

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<b>HAZ-6:</b> The contractor shall follow Caltrans SSP 84-9.03B. Residue from the removal of painted or thermoplastic traffic stripes and pavement markings contains lead from the paint or thermoplastic. The average lead concentrations are less than 1,000 mg/kg total lead and 5 mg/L soluble lead. Per Caltrans SSP 84-9.03B, management of this material must be addressed in the lead compliance plan.	DED Section 2.2.4	ISA Checklist	District Environmental Engineering/ Resident Engineer/ Contractor	Construction	Caltrans Standard Specification section 36-4					
<b>BIOLOGICAL RESOURCES</b>										
<b>BIO-1: Materials and Spoils Control</b> (2018 Caltrans Standard Specification 14-10.01) Materials and Spoils Control-2018 Caltrans Standard Specification 14-10.01: Construction activities shall be limited to the smallest project footprint possible, including drainage features. Project-related debris, spoils, and trash will be contained and removed to a proper disposal facility. Materials and spoils will not be stored within any active drainage and a fence will be	DED Section 2.3.1.3	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 14-10.01					

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installed along the edges of the drainage to ensure that construction activities do not extend beyond the construction limits. Upon completion of construction, all refuse, including, but not limited to equipment parts, wrapping material, cable, wire, strapping, twine, buckets, metal or plastic containers, and boxes will be removed from the site and disposed of properly.										
<b>BIO-2: Equipment Staging</b> (2018 Caltrans Standard Specification 8-1.02C[1]) Equipment storage, fueling, and staging areas shall be located on previously disturbed areas with minimal risks of direct impacts to riparian areas or other sensitive habitats. These designated areas shall be selected in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters, including secondary containment. Refueling shall not occur within 50-feet of a drainage. Project-related spills of hazardous materials shall be	DED Section 2.3.1.3	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 8-1.02C(1)					

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reported to appropriate entities including but not limited to applicable jurisdictional cities, USFWS, CDFW, and RWQCB, and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.										
<b>BIO-3: Compliance Documentation</b> (2018 Caltrans Standard Specification 14-1.01) Caltrans will require all contractors to comply with the Natural Resource Protection Plan in the performance of work necessary for project completion. Evidence of compliance is required prior to Caltrans accepting or receiving materials or goods produced from outside of the ROW or using facilities located outside of the ROW, including but not limited to, noncommercial batch plants, haul roads, quarries, and similar operations. Copies of the compliance documents will be maintained at the work-site by the resident engineer.	DED Section 2.3.1.3	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 14-1.01					
<b>BIO-4: Contractor Supplied Biological</b> (2018 Caltrans Standard Specification 14-6.03D) The	DED Section 2.3.1.3	Natural Environmental Study	District Biological Studies /	Pre-Construction /Construction	2018 Caltrans Standard					



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Contractor will hire with the approval and authorization by the Caltrans Biologist a well-qualified Contractor Supplied Biologist (CSB) to ensure construction activities comply with the permits, licenses, agreements, and certifications and compliance of all protective measure. The CSB will notify the resident engineer of project activities that are not in compliance. The resident engineer will stop work until the protective measures are implemented fully. The CSB will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The CSB when handling desert tortoises, must be an authorized biologists and must follow the guidelines outlined in the Desert Tortoise Field Manual (USFWS 2018, Chapters 6 and 7). Immediately prior to the start of any ground-disturbing activities and prior to the installation of any desert tortoise exclusion fencing, pre-construction clearance surveys for the desert tortoise will be conducted			Resident Engineer / Contractor		Specification 14-6.03D					

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by the CSB and/or trained individuals, as appropriate.										
<b>BIO-5: Predation Prevention</b> (2018 Caltrans Standard Specification 14-10.01) To preclude attracting predators, such as the common raven and coyote, food-related trash items will be removed daily from the work site and disposed of at an approved refuse disposal site. Workers are prohibited from feeding all wildlife.	DED Section 2.3.1.3	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction/	2018 Caltrans Standard Specification 14-10.01					
<b>BIO-6: De-Water Plan</b> (2018 Caltrans Standard Specification 13-4.01 and 13-4.03G) For all bridges that cross blue lines and are susceptible to the presence of water, a de-watering/water control plan must be created and implemented in accordance with Caltrans Water Control Standard Specifications, if water is present or could be present during construction activities.	DED Section 2.3.2.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction	2018 Caltrans Standard Specification 13-4.01 and 13-4.03G					
<b>BIO-7: Pre-Construction Clearance Rare Plant Surveys</b> (2018 Caltrans Standard Specification 14- 6.03) Within 3 days prior to construction, special status and rare plant species	DED Section 2.3.3.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction	2018 Caltrans Standard Specification 14- 6.03					

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individuals will be flagged for clear identification to ensure they are visible to construction personnel for avoidance. Should multiple plants in a single location be found, the groupings will be fenced with environmental sensitive temporary fencing.										
<b>BIO-8: Worker Environmental Awareness Training</b> (2018 Caltrans Standard Specification 14- 6.03D(3) The CSB will present to each employee (including temporary, contractors, and subcontractors) a worker environmental awareness training prior to the initiation of work. They will be advised of the special status species in the BSA, the steps to avoid impacts to the species, and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area, their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 14- 6.03D(3)					

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requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project area environs. Included in this program will be color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the contractor and resident engineer office, where they will remain through the duration of the project. The contractor, resident engineer, and the CSB will be responsible for ensuring that employees are aware of the listed species. If additional employees are added to the project after initiation, they will receive instruction prior to working on the project.										
<b>BIO-9: Desert Tortoise Under Equipment</b> (2018 Caltrans Standard Specification 14-6.03D[3]) Whenever project vehicles are parked outside of a desert tortoise fence that is intended to preclude entry by desert tortoises, workers will check under the vehicle before moving the vehicle. If a desert	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 14-6.03D(3)					

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tortoise is beneath the vehicle, the worker will notify the CSB to relocate the tortoise. If an authorized biologist is not present on-site, the Resident Engineer or supervisor must notify the Caltrans Biologist. Workers will not be allowed to capture, handle, or relocate tortoises.										
<b>BIO-10: Exclusionary Desert Tortoise Fencing</b> (2018 Caltrans Standard Specification 80-4.02B[2]) Permanent exclusionary desert tortoise fencing will be installed to prevent entry by desert tortoises into a work site. The CSB will ensure that desert tortoises cannot pass under, over, or around the fence. The CSB must periodically check the fenced area to search for breaks in the fence and to ensure no desert tortoises have breached the fence. Preconstruction clearance surveys for desert tortoise and desert tortoise sign will be performed within all proposed construction areas prior to the fence being installed. In addition, prior to ground disturbing activities beginning in a previously undisturbed or unfenced area,	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 80-4.02B(2)					

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							Date / Initials	Date / Initials	YES	NO
preconstruction clearance surveys will be performed.										
<b>BIO-11: Deceased or Injured Tortoise Within the Project Site</b> Upon locating a dead or injured tortoise within a project site, the resident engineer will immediately notify the CSB and the Caltrans Biologist whom will notify the USFWS within 24 hours of the observation via email/telephone. Written notification must be made to the appropriate USFWS field office within 5-days of the finding. The information provided must include the date and time of the finding or incident (if known), location of the carcass or injured animal, a photograph, cause of death or injury, if known, and other pertinent information (i.e., size, sex, recommendations to avoid future injury or mortality).	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction						
<b>BIO-12: Transportation of Injured Tortoise</b> Injured desert tortoises will be transported to a veterinarian for treatment at the expense of the contractor or Caltrans. Only the CSB or an	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction						

Date of ECR: 12/20/2019

Project Phase:

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

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

08-RIV-10-  
PM R60.7/R74.3

EA 08-1C081  
PN 0816000086  
Generalist: Tatiana Torres  
ECL:

Avoidance, Minimization, and/or Mitigation Measures	Page # in Env. Doc. Or Permit	Environmental Analysis Source (Technical Study, Environmental Document, and/or Technical Discipline)	Responsible for Development and/or Implementation of Measure	Timing/ Phase	If applicable, corresponding construction provision: (standard, special, non-standard)	Action(s) Taken to Implement Measure/if checked No, add Explanation here	PS&E Task Completed	Construction Task Completed	Environmental Compliance	
							Date / Initials	Date / Initials	YES	NO
approved desert tortoise biological monitor will be allowed to handle an injured tortoise. If an injured animal recovers, the appropriate USFWS field office will be contacted for final relocation of the animal.										
<b>BIO-13: Pre-construction Clearance Nesting Bird Survey</b> (2018 Caltrans Standard Specification 14- 6.03B) If construction occurs within nesting bird season (February 1 to September 30), then pre-construction nesting bird surveys will be conducted by the CSB to locate and avoid nesting birds. If an active avian nest is located, a 100-foot "no construction" buffer (300-foot for raptors) will be put in place until nesting season has ceased, or the young have fledged.	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction	2018 Caltrans Standard Specification 14- 6.03B					
<b>BIO-14: Burrowing Owl Relocation</b> Should any burrowing owls, burrows, or other sign be detected during any pre-construction clearance surveys or construction monitoring, coordination with CDFW shall be conducted to determine the appropriate avoidance,	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction						

Date of ECR:12/20/2019

Project Phase:

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

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

08-RIV-10-  
PM R60.7/R74.3

EA 08-1C081  
PN 0816000086  
Generalist: Tatiana Torres  
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							Date / Initials	Date / Initials	YES	NO													
minimization, and mitigation measures required for the project. The CSB shall monitor the relocated owls a minimum of 3 days per week for a minimum of 3 weeks. A report summarizing the results of the relocation and monitoring shall be submitted to CDFW within 30 days following completion of the relocation and monitoring of the owls.																							
<b>BIO-15: Identifying Burrowing Owl Burrows</b> Use bright orange environmentally sensitive area (ESA) fencing, clearly mark areas supporting burrows and a buffer zone setback area (see Table BIO-15 below). Disturbance to project activities in these areas must be avoided.  Table BIO-15: Burrowing Owl Buffer Zone Setback Distances <table><tr><th rowspan="2">Time of Year</th><th colspan="3">Level of Disturbance in Meters</th></tr><tr><th>Low</th><th>Med.</th><th>High</th></tr><tr><td>April 1-Aug.15</td><td>200</td><td>500</td><td>500</td></tr><tr><td>Aug. 16 - Oct. 15</td><td>200</td><td>200</td><td>500</td></tr></table>	Time of Year	Level of Disturbance in Meters			Low	Med.	High	April 1-Aug.15	200	500	500	Aug. 16 - Oct. 15	200	200	500	DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction				
Time of Year		Level of Disturbance in Meters																					
	Low	Med.	High																				
April 1-Aug.15	200	500	500																				
Aug. 16 - Oct. 15	200	200	500																				



Date of ECR: 12/20/2019

Project Phase:

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

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

08-RIV-10-  
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										Date / Initials	Date / Initials	YES	NO
Oct. 16 - March 31	50	100	500										
<b>BIO-16: Burrowing Owl Burrow Exclusion</b> For unavoidable impacts to occupied burrowing owl burrows, the burrows must be excluded and closed by the CSB to permanently exclude burrowing owls. 1-way doors would need to be temporarily installed in burrow openings during the nonbreeding season (September 1 to January 31) and before breeding behavior has been. Suitable habitat (including suitable burrows) must be available adjacent or near the disturbance site or artificial burrows shall need to be provided nearby. Once the Caltrans Biologist has confirmed that the owls have left the burrow, burrows shall be excavated using hand tools and filled to prevent reoccupation. All burrowing owls associated with occupied burrows, that shall be directly impacted (temporarily or permanently) by the project shall be passively relocated.				DED Section 2.3.4.4	Natural Environmental Study	District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction						

Date of ECR: 12/20/2019

Project Phase:

- ☒ PA/ED (DED/FED)  
☐ PS&E Submittal \_\_\_\_\_ %  
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## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

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							Date / Initials	Date / Initials	YES	NO
<b>BIO-17: Hydroseeding.</b> After completion of detour-lane construction, disturbed soil will be hydroseeded with a native-plant seed mix to restore the PIA.	DED Section 2.1.9.4		District Biological Studies / Resident Engineer / Contractor	After completion of rehabilitation activities						
<b>BIO-18:</b> Construction Staging Areas will be analyzed, approved, and delineated prior to construction and outlined on the construction plan sheets for the purpose to limit construction areas.	DED Section 2.3.4.4	District Biological Studies	District Biological Studies / Resident Engineer / Contractor	Pre-Construction						
<b>BIO-19:</b> Artificial lighting for the project site is to be directed specifically at the work site only.	DED Section 2.3.4.4	District Biological Studies	District Biological Studies / Resident Engineer / Contractor	Construction						
<b>BIO-20:</b> Rock Slope Protection must be grouted or covered with minimum 1-foot of soil material to prevent desert tortoise entrapment.	DED Section 2.3.5.4	District Biological Studies	District Biological Studies / Resident Engineer / Contractor	Construction						
<b>BIO-21:</b> CVMSHCP has identified the following desert tortoise linkages and conservation measures. Caltrans	DED Section 2.3.5.4	District Biological Studies	District Biological Studies /	Construction						

Date of ECR: 12/20/2019

Project Phase:

- ☒ PA/ED (DED/FED)  
☐ PS&E Submittal \_\_\_\_\_ %  
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							Date / Initials	Date / Initials	YES	NO
must adhere to the following conservation measures for compliance with the CVMSHCP: CVMSHCP, Section 4.3.17 Desert Tortoise and Linkage Conservation Area, CVMSHCP, Section 4.4.6 Biological Corridors under the I-10 Freeway in the Desert Tortoise and Linkage Conservation Area.			Resident Engineer / Contractor							
<b>BIO-22: Plant Surveys</b> Plant surveys shall be conducted during Spring of 2020 to confirm presence or absence of listed species.	DED Section 2.3.3.4		District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Spring 2020						
<b>BIO-23:</b> Permanent impacts to DTCH and desert tortoise suitable habitat will be mitigated at a minimum 1:1 ratio by land purchase or in-lieu fee credit purchase. Compensatory mitigation measures for impacts to DTCH will be refined in coordination with the regulatory agencies and may include measures to relocate individual desert tortoises found during construction or hydroseed habitat in the median on-site after the project has been completed. Any additional	DED Section 2.3.5.5		District Biological Studies / Resident Engineer / Contractor	Pre-Construction/ Construction						

Date of ECR: 12/20/2019

Project Phase:

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

## ENVIRONMENTAL COMMITMENTS RECORD (RIV10 BLYTHE PAVEMENT REHAB; MAINLINE, SHOULDERS, RAMPS)

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							Date / Initials	Date / Initials	YES	NO
conditions required on permits by regulatory agencies will be included in the mitigation measures.										
<b>BIO-24:</b> The project is entirely located within the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) with the eastern portion of the project, from PM 67.4 to PM 74.30, located within the Desert Tortoise Linkage Conservation Area and the western portion of the project, from PM 60.9 to PM 674.4 located outside of any CVMSHCP Conservation Areas. Caltrans will coordinate with the Coachella Valley Conservation Commission (CVCC) for the acquisition of conservation lands, and management and monitoring of these lands. Additionally, Caltrans will comply with the applicable avoidance and minimization measures described in the CVMSHCP Section 4.4 for Covered Activities.	DED Pg. 2-15		District Biological Studies / Resident Engineer / Contractor	Design/ Permitting/ Pre-Construction/ Construction						
<b>BIO-25:</b> The project will impact jurisdictional Waters of the State (WSC) and Waters of the US (WOTUS). The impact analysis and	DED Pg. 2-120		District Biological Studies	Design/ Permitting						

Project Phase:

☐ PS&E Submittal \_\_\_\_\_ %

ECL:

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## **Appendix D. Required Consultation/Concurrence Documentation**

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## SHPO Concurrence



State of California • Natural Resources Agency

Gavin Newsom, Governor

DEPARTMENT OF PARKS AND RECREATION  
OFFICE OF HISTORIC PRESERVATION

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer  
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100  
Telephone: (916) 445-7000 FAX: (916) 445-7053  
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

May 16, 2019

VIA EMAIL

In reply refer to: FHWA\_2019\_0415\_001

Ms. Alexandra Bevk Neeb, Section 106 Coordinator  
Cultural Studies Office  
Caltrans Division of Environmental Analysis  
1120 N Street, PO Box 942873, MS-27  
Sacramento, CA 94273-0001

Subject: Finding of No Adverse Effect for Proposed RIV-10 Blythe Pavement  
Rehabilitation: Mainline, Shoulders, Ramps Project in Riverside County,  
CA

Dear Ms. Bevk Neeb:

You are consulting about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), a Finding of No Adverse Effect Report, and an Environmentally Sensitive Area (ESA) Action Plan for the proposed project.

Caltrans proposes to rehabilitate the existing Asphalt Concrete pavement on I-10 from 2.0 miles east of Dillon Road Interchange (PM R60.7) to 2.0 miles east of the Cactus City Rest Area (PM R74.3), using full depth pavement replacement strategy for the mainline and shoulders. Caltrans will remove the existing AC pavement on the mainline and shoulders and replace it with 1.0-foot-thick Continuous Reinforced Concrete Pavement (CRCP) or Jointed Plain Concrete Pavement (JPCP). The proposed scope of work will take place in Caltrans Right-of-Way. A full project description and depiction of the area of potential effects (APE) are located on pages 1-2 of the HPSR.

Ms. Bevk Neeb  
May 16, 2019  
Page 2 of 2

FHWA\_2019\_0415\_001

Based on consultation and identification efforts Caltrans is assuming that the following properties are eligible for the National Register of Historic Places (NRHP) pursuant to Stipulation VIII.C.4 of the PA:

- CHL-985 Desert Training Center/California-Arizona Maneuver Area (DTC)
- P-33-003077 (CA-RIV-03077)

Caltrans has applied the Criteria of Adverse Effect and found that pursuant to Stipulation X.B.2 of the PA a Finding of No Adverse Effect is appropriate for this undertaking. P-33-03077 will be protected in its entirety from project effects through establishment of an ESA and Archaeological Monitoring Area (AMA) and monitoring. The undertaking will effect less than 0.01% of the total DTC, and that effect will not rise to the level of being adverse.

Based on my review of the submitted documentation, I have no objection to this finding.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at [natalie.lindquist@parks.ca.gov](mailto:natalie.lindquist@parks.ca.gov) or Alicia Perez at (916) 445-7020 with e-mail at [alicia.perez@parks.ca.gov](mailto:alicia.perez@parks.ca.gov).

Sincerely,



Julianne Polanco  
State Historic Preservation Officer

## US Fish and Wildlife Service Species List, January 2020



### United States Department of the Interior

#### FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

Phone: (760) 431-9440 Fax: (760) 431-5901

<http://www.fws.gov/carlsbad/>



#### In Reply Refer To:

Consultation Code: 08ECAR00-2018-SLI-1454

Event Code: 08ECAR00-2020-E-01156

Project Name: 1C081 RIV-10 Repave PM 60-74

January 23, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

#### To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Carlsbad Fish And Wildlife Office**  
2177 Salk Avenue - Suite 250  
Carlsbad, CA 92008-7385  
(760) 431-9440

## Project Summary

Consultation Code: 08ECAR00-2018-SLI-1454

Event Code: 08ECAR00-2020-E-01156

Project Name: 1C081 RIV-10 Repave PM 60-74

Project Type: TRANSPORTATION

Project Description: Caltrans is proposing to rehabilitate the existing asphalt concrete pavement on 1-10 from 2.0 miles west of Dillon Road Interchange to 2 miles north of Cactus City Rest Area and includes AC pavement using full depth pavement replacement strategy for the mainline and shoulders, the existing AC pavement on the mainline and shoulders will be removed and replaced with 1.0 foot thick Continuous Reinforced Concrete Pavement (CRCP) or Jointed Plain Concrete Pavement (JPCP).

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.692581203018264N116.05072782905057W>



Counties: Riverside, CA



## Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

## Birds

NAME	STATUS
<b>Least Bell's Vireo</b> <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
<b>Southwestern Willow Flycatcher</b> <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered
<b>Yuma Clapper Rail</b> <i>Rallus longirostris yumanensis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/3505">https://ecos.fws.gov/ecp/species/3505</a>	Endangered

## Reptiles

NAME	STATUS
Coachella Valley Fringe-toed Lizard <i>Uma inornata</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2069">https://ecos.fws.gov/ecp/species/2069</a>	Threatened
Desert Tortoise <i>Gopherus agassizii</i> Population: Wherever found, except AZ south and east of Colorado R., and Mexico There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/4481">https://ecos.fws.gov/ecp/species/4481</a>	Threatened

## Flowering Plants

NAME	STATUS
Coachella Valley Milk-vetch <i>Astragalus lentiginosus</i> var. <i>coachellae</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/7426">https://ecos.fws.gov/ecp/species/7426</a>	Endangered

## Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Desert Tortoise <i>Gopherus agassizii</i> <a href="https://ecos.fws.gov/ecp/species/4481#crithab">https://ecos.fws.gov/ecp/species/4481#crithab</a>	Final



## USACE Cooperating Agency



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT  
915 WILSHIRE BOULEVARD, SUITE 930  
LOS ANGELES, CA 90017-3401

January 21, 2020

SUBJECT: Invitation to Become Cooperating Agency on the Interstate 10 Rehabilitation Project from 2.0 miles east of Dillon Road Interchange to 2.0 miles east of Cactus City Rest Area (EA 1C081)

Antonia Toledo, Senior Environmental Planner  
California Department of Transportation, District 8  
Division of Environmental Studies 464 West Fourth Street, MS 1222  
San Bernardino, California 92401

Dear Ms. Toledo:

This correspondence is in response to your letter dated December 20, 2019, requesting U.S. Army Corps of Engineers (the "Corps") participation as a cooperating agency in the development of project-level Environmental Assessment (EA) for the proposed Interstate 10 Rehabilitation Project from 2.0 miles east of Dillon Road Interchange to 2.0 miles east of Cactus City Rest Area (the "Project"), in Riverside County, California.

The Federal Highway Administration delegated its responsibilities under the National Environmental Policy Act ("NEPA") as well as consultation and coordination activities under other federal environmental laws to the California Department of Transportation (Caltrans). The Corps understands that Caltrans will prepare a project-level EA in accordance with NEPA and the Council on Environmental Quality implementing regulations at 40 C.F.R. parts 1500-1508.

By this letter, the Corps hereby agrees to coordinate with Caltrans as a cooperating agency under 40 C.F.R. §§1501.6(b) and 1508.5, 33 C.F.R. part 325, Appendix B, paragraph 8(c), and 33 C.F.R. §230.16 to ensure that Caltrans' resulting EA may be adopted by the Corps for purposes of exercising our regulatory authorities under section 404 of the Clean Water Act (CWA), 33 U.S.C. §1344. Further, because of our section 404 of the CWA administrative responsibilities, we have particular concern in ensuring the project complies with the Section 404(b)(1) guidelines (40 C.F.R. part 230), which are fundamental to supporting our eventual determination of the least environmentally damaging practicable alternative (LEDPA) in any case in which a Corps standard individual permit is required. The Corps agrees to assist Caltrans in preparing the EA due to our jurisdiction by law for areas that could be affected by the Project and our special expertise in the following areas:

- a. Identifying and delineating aquatic resources;
- b. Corps' Regulatory Program regulations at 33 C.F.R. parts 320-332;

- c. Compliance with the U.S. Environmental Protection Agency's CWA § 404(b)(1) Guidelines (40 C.F.R. part 230); and
- d. Assessing the functions and services of aquatic resources and identifying appropriate methods to conduct such assessments.

Subject to availability of resources and in accordance with applicable laws and regulations, the Corps agrees to:

- a. Assist in identifying interest groups;
- b. Attend coordination meetings and joint field reviews;
- c. Raise concerns about any relevant technical studies that may be needed;
- d. Assist in developing the range of alternatives, including the "practicability" of such alternatives and evaluation criteria;
- e. Assist in identifying appropriate and practicable mitigation, including appropriate and practicable steps to first avoid and then minimize adverse impacts to aquatic resources, and then compensate for unavoidable adverse impacts/losses remaining after all appropriate and practicable minimization has been incorporated;
- f. Identify issues, concerns, and any technical studies that the EA should address, including risk assessments for completed Corps projects, to support the Corps in fulfilling its NEPA or other responsibilities and any other requirements per CWA § 404;
- g. Review administrative draft and administrative final EAs - Caltrans shall allow the Corps at least 30 days to review such documents; and
- h. Cooperate in the application of principles for integration of NEPA and the CWA § 404 review processes. Specifically, if the project receives federal aid (funds) and would result in five or more acres of permanent impacts to waters of the U.S., Caltrans would need to ensure the environmental review process follows the procedures for coordination, checkpoint agreement responses, and dispute resolution set forth in the "NEPA and Clean Water Act Section 404 Integration Process for Federal Aid Surface Transportation Projects in California Memorandum of Understanding" (April 2006).

Furthermore, we are required to comply with section 106 of the National Historic Preservation Act of 1966 (NHPA; herein "Section 106") and section 7 of the Endangered Species Act of 1973 (ESA; herein "Section 7") for the federal action under evaluation. It is appropriate for Caltrans as the lead federal agency under NEPA to act as the lead federal agency for section

106 coordination and associated compliance requirements. Similarly, it is appropriate that Caltrans to be the lead federal action agency for purposes of section 7 consultation and associated compliance requirements. Based on this understanding, Caltrans will be responsible for complying with section 106 and section 7. When the CWA § 404 application is submitted, please provide the information in accordance with 33 CFR part 325, Appendix C, Procedures for the Protection of Historic Properties, including the April 25, 2005, Revised Interim Guidance for Implementing Appendix C of 33 CFR Part 325 with the Revised Advisory Council on Historic Preservation Regulations at 36 CFR Part 800, so that we can review if the "Area of Potential Effect" or effects of the activity requiring DA authorization have been fully considered and evaluated for lead Federal agency consultation under section 106 of the NHPA. In accordance with 50 CFR part 402, Interagency Cooperation - Endangered Species Act (ESA) of 1973, as amended, Final Rule (51 FR 19926, June 3, 1986), we request advanced coordination to ensure that the "action area" or effects of the activity requiring Corps' authorization have been fully considered and evaluated when consulting under section 7 of the ESA. At the time of your consultation, a brief statement regarding our designation of Caltrans as the lead federal agency, along with a copy of this letter, must be provided to the agencies to ensure compliance with section 7 of the ESA, and section 106 of the NHPA. These designations are limited to federalized impacts associated with the proposed project.

The Corps looks forward to continued dialogue and coordination with Caltrans on this project. If you have any questions, please contact Veronica Li at (213) 452-3292 or via e-mail at [Veronica.C.Li@usace.army.mil](mailto:Veronica.C.Li@usace.army.mil). Please refer to this letter and SPL-2020-00038-VCL in your reply. Please help me to evaluate and improve the regulatory experience for others by completing the [customer survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey) form at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey).

Sincerely,

COHEN.MARK.  
D.1239558450

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Mark D. Cohen  
Deputy Chief, Regulatory Division

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## **Appendix E. SCAG FTIP Listing**

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August 9, 2019

Amendment #19-09

SOUTHERN CALIFORNIA  
ASSOCIATION OF GOVERNMENTS  
900 Wilshire Blvd., Ste. 1700  
Los Angeles, CA 90017  
(213) 236-1800  
www.scag.ca.gov

REGIONAL COUNCIL OFFICERS

President

Bill Jahn, Big Bear Lake

First Vice President

Randon Lane, Murietta

Second Vice President

Rex Richardson, Long Beach

Immediate Past President

Alan D. Wagner, San Bernardino  
County Transportation Authority

COMMITTEE CHAIRS

Executive/Administration

Bill Jahn, Big Bear Lake

Community, Economic &  
Human Development

Peggy Huang, Transportation  
Corridor Agencies

Energy & Environment

Linda Parks, Ventura County

Intergovernmental

Cheryl Viegas-Walker, El Centro

Mr. Bruce De Terra  
Chief, Division of Transportation Programming  
Department of Transportation  
Transportation Programming, MS-82  
1120 "N" Street  
Sacramento, CA 94274-0001

SUBJECT: AMENDMENT #19-09 TO THE 2019 FEDERAL TRANSPORTATION  
IMPROVEMENT PROGRAM (FTIP)

Dear Mr. De Terra:

Under authority granted to me by the Southern California Association of Governments (SCAG) Regional Council, I hereby approve and transmit amendment #19-09 for projects in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. Included in this amendment package is a narrative describing the projects being amended, project listing reports, a financial plan, performance measures language, a conformity determination analysis, conformity project listing report, and one comment received.

This amendment:

- Is consistent with the amended 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS);
- Does not affect the regional emissions analysis of the FTIP;
- Does not affect the timely implementation of the Transportation Control Measures; and
- Does not adversely impact financial constraint.

Furthermore, SCAG through its function as the designated Metropolitan Planning Organization (MPO) has found the attached projects to conform to the applicable State Implementation Plan.

In addition, SCAG has completed the interagency consultation and the public participation process for this amendment on August 8, 2019. No comments were received during the public review period.

Page 2  
Letter to Bruce De Terra  
August 9, 2019

If you have any questions, please contact Pablo Gutierrez of my staff at (213) 236-1929 or via e-mail at [gutierre@scag.ca.gov](mailto:gutierre@scag.ca.gov)

Sincerely,



SARAH JEPSON  
Director of Planning

Enclosures

SJ:pg

cc: Mr. Abhijit Bagde, Caltrans, Division of Transportation Programming  
Mr. Ray Tellis, FTA  
Ms. Charlene Lorenzo, FTA  
Mr. Michael Morris, FHWA  
Mr. Ted Matley, FTA  
Ms. Karina O'Conner, EPA Region 9  
Caltrans District 7, 8, 11, and 12  
Mr. Mark Baza, Imperial County Transportation Commission  
Mr. Wil Ridder, Los Angeles County Metropolitan Transportation Authority  
Ms. Adriann Cardoso, Orange County Transportation Authority  
Ms. Shirley Medina, Riverside County Transportation Commission  
Ms. Andrea Zureick, San Bernardino County Transportation Authority  
Mr. Peter DeHaan, Ventura County Transportation Commission





U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**California Division**

September 3, 2019

650 Capitol Mall, Suite 4-100  
Sacramento, CA 95814  
(916) 498-5001  
(916) 498-5008 (Fax)

In Reply Refer To:  
HDA-CA

Mr. Bruce de Terra, Division Chief  
Transportation Programming Federal Resources Office, M.S. 82  
California Department of Transportation  
1120 N Street  
Sacramento, CA 95814

SUBJECT: SCAG 2019 FTIP/FSTIP AMENDMENT NO. 19-09

Dear Mr. de Terra:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our reviews of Amendment No. 19-09 to the Southern California Association of Governments' (SCAG) 2019 Federal Transportation Improvement Program (FTIP), which was submitted by your letter dated August 15, 2019. As detailed in your letter's enclosure, this amendment requests to add 121 new individual and one grouped project listings to SCAG's portion of the Federal Statewide Transportation Improvement Program (FSTIP), and to modify 37 individual and 17 grouped project listings with removal of three individual project listings previously approved for California FSTIP inclusion.

We have determined the project listings from this amendment are from SCAG's adopted 2016/2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and the modifications requested rely on a previous regional emissions analysis. Acceptance of this amendment has been coordinated with Region 9 of the Environmental Protection Agency (EPA) in accordance with the procedures outlined in the *National Memorandum of Understanding (MOU) between the Department of Transportation (DOT) and EPA on Transportation Conformity*, dated April 25, 2000. SCAG's portion of the FSTIP, including its 2019 FTIP Amendment No. 19-09, conforms to the applicable State Implementation Plan (SIP) for air quality.

Pursuant to the February 14, 2018 *Memorandum of Agreement (MOA) between the FHWA – California Division and FTA – Region 9*, and based on our review of information submitted with the State's proposed 2018/19 – 2021/22 FSTIP, which includes revenues, proposed project funding information to demonstrate financial constraint, and statewide and metropolitan planning process documentation, we accept this FSTIP modification proposed for the SCAG region in accordance with 23 Code of Federal Regulations (CFR) Part 450 and 49 CFR Part 613 (see the Final Rule on Statewide and Metropolitan Transportation Planning published in the May 27,

2016 Federal Register). We have determined SCAG's amended portion of the FSTIP, to include its FTIP Amendment No. 19-09, is financially constrained as required by the Federal surface transportation programs authorizing legislation and statewide planning, metropolitan planning, and programming regulations. SCAG's portion of the FSTIP was developed through a continuing, cooperative, and comprehensive transportation planning process in accordance with the metropolitan transportation planning provisions of 23 United States Code (U.S.C.) § 134 and 49 U.S.C. Chapter 53 as amended by Public Law 114-94 (the Fixing America's Surface Transportation (FAST) Act).

Our approval is being given with understanding that an eligibility determination of individual projects for funding must be met, and the applicant must ensure satisfaction of all administrative and statutory requirements. If you have questions or would like additional information about our FSTIP approval for this amendment feel free to contact Michael Morris of the FHWA California Division's Cal-South Office at (213) 894-4014, or by email at [michael.morris@dot.gov](mailto:michael.morris@dot.gov); or Adam Stephenson of the FTA's Region 9 Los Angeles Metro Office at (213) 202-3957, or by email at [adam.stephenson@dot.gov](mailto:adam.stephenson@dot.gov).

/s/ Ray Tellis

Ray Tellis  
Regional Administrator  
FTA Region 9

Sincerely,

  
Tashia Clemens  
Director, Planning and Environment  
FHWA California Division



## 2019 Federal Transportation Improvement Program

Riverside County  
State Highway  
Including Amendments 1-11  
(In \$000's)

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment
RIV180101	Riverside	SCAB		3A04WT059	CARH3	215	31.83	32.83			S	NON-EXEMPT	0
Description: IN WESTERN RIVERSIDE COUNTY IN THE CITY OF PERRIS: I-215 AT HARLEY KNOX BLVD. IC IMPROVEMENT - RECONSTRUCT AND WIDEN HARLEY KNOX BLVD. IC FROM 2 TO 4 LANES AND RECONSTRUCT/WIDEN RAMP.													
Fund		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
AGENCY		3,500	4,000	27,000	34,500		3,500	4,000	27,000				34,500
RIV180101 Total		3,500	4,000	27,000	34,500		3,500	4,000	27,000				34,500
RIV050533	Riverside	SCAB		RIV050533	CARH3	215	35.4	36.2			S	NON-REPORTABLE TCM COMMITTED	0
Description: AT I-215/CACTUS AVE IC: WIDEN IC FROM 3 TO 6 THRU LNS (EB FROM 2 TO 3 BTWN W/O BNSF RR TO 1300' E/O VETERANS WAY, ADD 4TH EB LANE FROM NB EXIT RAMP TO E/O ELSWORTH ST, WIDEN WB FROM 1&2 TO 3 THRU LNS FROM COMMERCE CENTER DR TO BNSF RR), WIDEN RAMP 1 TO 2&3 LNS (ENTRY RAMP INCL HOV), EXTEND NB AUX LN BTWN ALESSANDRO BLVD SOUTH TO CACTUS AVE NB ENTRY LOOP RAMP & ADD DEDICATED RT-TURN LNS (EA0E760)													
Fund		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
DEVELOPER FEES				22,300	22,300		22,300						22,300
WESTERN RIV TUMF		12,370	5,700		18,070	1,800			10,570	5,700			18,070
RIV050533 Total		12,370	5,700	22,300	40,370	1,800	22,300		10,570	5,700			40,370
RIVLS01	Riverside	SCAB		3GR104	SHP04	999		145,500			S	EXEMPT - 93.126	9
Description: GRP'D PRJCTS FOR SAFETY IMPRVMTS - SHOPP CLLSION RDUCTN PRGRM: PRJCTS ARE CONSISTNT W/ 40 CFR PART 93.126 EXEMPT TBLS 2&3 - RR/HWY CRSSNG, SAFER NON-FED-AID SYSTM RDS, SHULDR IMPRVMTS, TRFFIC CNTRL DVICES/OPRTNG ASSIST OTHR THN SGNLS, INTERSCTN SGNL PRJCTS AT INDVL INTERSCTNS, PVMNT MRKNG DEMO, TCL OUTSIDE THE UA, LGHTNG IMPRVMTS, EMRGNCY TRCK PLOVRS. INCLDS SHOPP FNDNG BYOND FNCLY CNSTR YRS													
Fund		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
SHOPP - ADVANCE CONSTRUCTION				145,500	145,500		20,693	64,840	7,290	52,677			145,500
RIVLS01 Total				145,500	145,500		20,693	64,840	7,290	52,677			145,500
RIVLS02	Riverside	SSAB		30M0701	SHP03	999		999,783			S	EXEMPT - 93.126	9
Description: GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM: PROJECTS ARE CONSISTENT W/ 40 CFR PART 93.126 EXEMPT TABLE 2 - PAVEMENT RESURFACING AND/OR REHABILITATION, EMERGENCY RELIEF (23 USC 125), WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES).													
Fund		ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
SHOPP - ADVANCE CONSTRUCTION				999,783	999,783		29,056	471,912	47,146	451,669			999,783
RIVLS02 Total				999,783	999,783		29,056	471,912	47,146	451,669			999,783

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# SCAG Final 2016 RTP/SCS – Project List Appendix

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TABLE 1 FTIP Projects - Continued

County	System	FTIP ID	Route #	Description	Project Cost (\$1,000's)
RIVERSIDE	STATE HIGHWAY	RIVLS09	999	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP MANDATES PROGRAM: PROJECTS ARE CONSISTENT W/ 40 CFR PART 93.126 EXEMPT TABLES 2&3 - RR/HWY CROSSING, SAFER NON-FED-AID SYSTEM RDS, SHOULDR IMPRVMTS, TRAFFIC CNTRL DEVICES/OPERATING ASSIST OTHER THAN SIGNALS, INTERSECTN SIGNAL PRJCTS AT INDVL INTERSECTNS, PVMNT MARKING DEMO, TCL OUTSIDE THE UA, LIGHTING IMPRVMTS, EMERGENCY TRUCK PULLOVERS	\$10,822
RIVERSIDE	STATE HIGHWAY	RIVLS02	999	GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION - SHOPP ROADWAY PRESERVATION PROGRAM: PROJECTS ARE CONSISTENT W/ 40 CFR PART 93.126 EXEMPT TABLE 2 - PAVEMENT RESURFACING AND/OR REHABILITATION, EMERGENCY RELIEF (23 USC 125), WIDENING NARROW PAVEMENTS OR RECONSTRUCTING BRIDGES (NO ADDITIONAL TRAVEL LANES)	\$391,053
RIVERSIDE	STATE HIGHWAY	RIVLS13	999	GROUPED PROJECTS FOR PAVEMENT RESURFACING AND/OR REHABILITATION ON THE STATE HIGHWAY SYSTEM - HIGHWAY MAINTENANCE: PROJECTS ARE CONSISTENT WITH 40 CFR PART 93.126 EXEMPT TABLES 2 & 3 - PAVEMENT RESURFACING AND/OR REHABILITATION	\$6,806
RIVERSIDE	STATE HIGHWAY	RIVLS10	999	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP MOBILITY PROGRAM: PROJECTS ARE CONSISTENT W/ 40 CFR PART 93.126 EXEMPT TABLES 2&3 - RR/HWY CROSSING, SAFER NON-FED-AID SYSTEM RDS, SHOULDR IMPRVMTS, TRAFFIC CNTRL DEVICES/OPERATING ASSIST OTHER THAN SIGNALS, INTERSECTN SIGNAL PRJCTS AT INDVL INTERSECTNS, PVMNT MARKING DEMO, TCL OUTSIDE THE UA, LIGHTING IMPRVMTS, EMERGENCY TRUCK PULLOVERS	\$13,206
RIVERSIDE	STATE HIGHWAY	RIVLS01	999	GROUPED PROJECTS FOR SAFETY IMPROVEMENTS - SHOPP COLLISION REDUCTION PROGRAM: PROJECTS ARE CONSISTENT W/ 40 CFR PART 93.126 EXEMPT TABLES 2&3 - RR/HWY CROSSING, SAFER NON-FED-AID SYSTEM RDS, SHOULDR IMPRVMTS, TRAFFIC CNTRL DEVICES/OPERATING ASSIST OTHER THAN SIGNALS, INTERSECTN SIGNAL PRJCTS AT INDVL INTERSECTNS, PVMNT MARKING DEMO, TCL OUTSIDE THE UA, LIGHTING IMPRVMTS, EMERGENCY TRUCK PULLOVERS.	\$177,019
RIVERSIDE	STATE HIGHWAY	RIVLS12	999	GROUPED PROJECTS FOR EMERGENCY REPAIR - SHOPP EMERGENCY RESPONSE PROGRAM: PROJECTS ARE CONSISTENT W/40 CFR PART 93.126 EXEMPT TABLE 2 - REPAIR DAMAGE CAUSED BY NATURAL DISASTERS, CIVIL UNREST, OR TERRORIST ACTS. APPLIES TO DAMAGES THAT DO NOT QUALIFY FOR FED EMERGENCY RELIEF FUNDS OR TO DAMAGES THAT QUALIFY FOR FED EMERGENCY RELIEF FUNDS BUT EXTEND BEYOND THE FEDERALLY DECLARED DISASTER PERIOD.	\$495
RIVERSIDE	TRANSIT	RIV151212	0	IN WESTERN RIVERSIDE COUNTY FOR RTA - INSTALLATION OF A TURNKEY ITS TO IMPROVE FLEET MANAGEMENT, IMPROVE EFFICIENCY, ENHANCE SERVICE AND INCREASE RIDERSHIP	\$5,500
RIVERSIDE	TRANSIT	RIV140810	0	IN COACHELLA VALLEY FOR SUNLINE TRANSIT AGENCY: SIX REPLACEMENT CNG BUSES FOR FIXED ROUTE SERVICE. (FY14 5307 - \$300K) (UZA: INCCPS)	\$2,386
RIVERSIDE	TRANSIT	RIV091210	0	IN CORONA - PURCHASE THREE REPLACEMENT TYPE II CNG PARATRANSIT DIAL-A-RIDE BUSES W/LIFTS, FAREBOXES, SECURITY CAMERAS, COMMUNICATION EQUIPMENT & ACCESSORIES (FEDERAL APPROPRIATION THROUGH HR 3288, FFY 2009/2010 - FTA 5309).	\$260
RIVERSIDE	TRANSIT	RIV110802	0	IN EASTERN RIVERSIDE COUNTY FOR PALO VERDE TRANSIT AGENCY - OPERATING ASSISTANCE: FIXED ROUTE AND DIAL-A-RIDE OPERATING ASSISTANCE FOR FISCAL YEAR 2011/2012 (UZA: PALO VERDE).	\$960
RIVERSIDE	TRANSIT	RIV120803	0	IN EASTERN RIVERSIDE COUNTY FOR PALO VERDE TRANSIT AGENCY - OPERATING ASSISTANCE: FIXED ROUTE AND DIAL-A-RIDE OPERATING ASSISTANCE FOR FISCAL YEAR 2012/2013 (UZA: PALO VERDE).	\$886
RIVERSIDE	TRANSIT	RIV130616	0	IN EASTERN RIVERSIDE COUNTY FOR PALO VERDE VALLEY TRANSIT AGENCY - OPERATING ASSISTANCE FOR FIX ROUTE AND PARATRANSIT SERVICES (NON-UZA) (FTA 5317 FY11/12)	\$913
RIVERSIDE	TRANSIT	RIV140803	0	IN EASTERN RIVERSIDE COUNTY FOR PALO VERDE TRANSIT AGENCY: OPERATING ASSISTANCE FOR FIXED ROUTE AND PARATRANSIT SERVICE FOR FY15. (5317 FY11 & FY12 - \$7K)	\$936
RIVERSIDE	TRANSIT	RIV061143	0	RCTC'S SHARE OF OCTA'S FY 07 REHAB AND RENOVATION (FY 07 5307) (UZA: RIV-SAN)	\$75
RIVERSIDE	TRANSIT	RIV090301	0	METROLINK POSITIVE TRAIN CONTROL (PTC): SYSTEM WIDE IMPLEMENTATION OF PTC - JOINT PROJECT FUNDED BY LACMT, OCTA, SANBAG, AND VCTC (RCTC PROGRAMMING ONLY ITS SHARE OF THE PROJECT COST) (FY 09 - ARRA FTA 5307).	\$4,786
RIVERSIDE	TRANSIT	RIV090601	0	REHABILITATION/RENOVATION OF METROLINK TRACK, SIGNALS, COMMUNICATIONS, STRUCTURES, FACILITIES, SYSTEMS, & ROLLING STOCK, INC. REPLACEMENT OF LOCOMOTIVES WITH TIER-4 TECH. UTILIZATION OF TOLL DEVELOPMENT CREDITS TO MATCH FTA 5307 & FTA5309(A) IN CONSTRUCTION IS AS FOLLOWS: \$245 IN FY 11 FOR FTA 5307 & 5309(A); \$251 IN FY 12 FOR FTA 5307.	\$3,377
RIVERSIDE	TRANSIT	RIV110914	0	IN RIVERSIDE AND SAN BERNARDINO COUNTY - FOR RIVERSIDE - SAN BERNARDINO COUNTY INDIAN HEALTH, INC.: PURCHASE OF FIVE MINI-VANS FOR SERVICE EXPANSION (FTA 5310 - FFYS 10 & 11) (\$25 TDC USED TO MATCH FTA 5310 IN CONS).	\$220
RIVERSIDE	TRANSIT	RIV111207	0	IN WESTERN RIVERSIDE COUNTY - CONTINUE THE IMPLEMENTATION OF PARK-N-RIDE FACILITIES THROUGH PROPERTY LEASES (VARIOUS LOCATIONS THROUGHOUT THE WESTERN COUNTY).	\$690

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## **Appendix F. Air Quality Checklist**

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## Transportation Air Quality Conformity Findings Checklist


<b>Project Name:</b>	RIV 10 BLYTHE PAVEMENT REHAB: MAINLINE, SHOULDERS, RAMPS		
<b>Dist-Co-Rte-PM:</b>	08-RIV-10-PM R60.9/PM R 74.0	<b>EA:</b>	1C081
<b>Federal-Aid No.:</b>	0000		
<b>Document Type:</b>	<input type="checkbox"/> 23 USC 326 CE <input type="checkbox"/> 23 USC 327 CE <input type="checkbox"/> EA <input type="checkbox"/> EIS		
<b>Step 1.</b> Is the project located in a nonattainment or maintenance area for ozone, nitrogen dioxide, carbon monoxide (CO), PM2.5, or PM10 per EPA's <u>Green Book</u> listing of non-attainment areas? <input type="checkbox"/> If no, go to Step 17. <b>Transportation conformity does not apply to the project.</b> <input checked="" type="checkbox"/> If yes, go to Step 2.			
<b>Step 2.</b> Is the project exempt from conformity per <u>40 CFR 93.126</u> or <u>40 CFR 93.128</u> ? <input checked="" type="checkbox"/> If yes, go to Step 17. <b>The project is exempt from all project-level conformity requirements (40 CFR 93.126 or 128) (check one box below and identify the project type, if applicable).</b> <input checked="" type="checkbox"/> 40 CFR 93.126 <sup>1</sup> Project type from Table 2: <u>Pavement resurfacing and/or rehabilitation</u> <input type="checkbox"/> 40 CFR 93.128 <input type="checkbox"/> If no, go to Step 3.			
<b>Step 3.</b> Is the project exempt from regional conformity per <u>40 CFR 93.127</u> ? <input type="checkbox"/> If yes, go to Step 8. <b>The project is exempt from regional conformity requirements (40 CFR 93.127) (identify the project type).</b> Project type: _____ <input type="checkbox"/> If no, go to Step 4.			
<b>Step 4.</b> Is the project located in a region with a currently conforming RTP and TIP? <input type="checkbox"/> If yes, the project is included in a currently conforming RTP and TIP per 40 CFR 93.115. <b>The project's design and scope have not changed significantly from what was assumed in RTP conformity analysis (40 CFR 93.115[b]).</b> Go to Step 8. <input type="checkbox"/> If no and the project is located in an isolated rural area, go to Step 5. <input type="checkbox"/> If no and the project is not located in an isolated rural area, STOP and do not proceed until a conforming RTP and TIP are adopted.			
<b>Step 5.</b> For isolated rural areas, is the project regionally significant per 40 CFR 93.101, based on review by Interagency Consultation? <input type="checkbox"/> If yes, go to Step 6. <input type="checkbox"/> If no, go to Step 8. <b>The project, located in an isolated rural area, is not regionally significant and does not require a regional emissions analysis (40 CFR 93.101 and 93.109[j]).</b>			
<b>Step 6.</b> Is the project included in another regional conformity analysis that meets the isolated rural area analysis requirements per 40 CFR 93.109, including Interagency Consultation and public involvement? <input type="checkbox"/> If yes, go to Step 8. <b>The project, located in an isolated rural area, has met its regional analysis requirements through inclusion in a previously-approved regional conformity analysis that meets current requirements (40 CFR 93.109[j]).</b> <input type="checkbox"/> If no, go to Step 7.			
<b>Step 7.</b> The project, located in an isolated rural area, requires a separate regional emissions analysis. <input type="checkbox"/> <b>Regional emissions analysis for regionally significant project, located in an isolated rural area, is complete. Regional conformity analysis was conducted that includes the project and reasonably foreseeable regionally significant projects for at least 20 years. Interagency Consultation and public participation were conducted. Based on the analysis, the interim or emission budget conformity tests applicable to the area are met (40 CFR 93.109[j] and 95.105).<sup>2</sup> Go to Step 8.</b>			
<b>Step 8.</b> Is the project located in a CO nonattainment or maintenance area? (South Coast Air Basin only) <input type="checkbox"/> If no, go to Step 9. <b>CO conformity analysis is not required.</b> <input type="checkbox"/> If yes, <b>hot-spot analysis requirements for CO per the CO Protocol</b> (or per EPA's modeling guidance, CAL3QHCR can be used with EMFAC emission factors <sup>3</sup> ) <b>have been met. Project will not cause or contribute to a new localized CO violation (40 CFR 93.116 and 93.123)<sup>4</sup>. Go to Step 9.</b>			

<sup>1</sup> Please refer to Clarifications on Exempt Project Determinations (<http://www.dot.ca.gov/ser/downloads/guidance/eq-clarifications-exempt-project-determinations.pdf>) to verify exempt project type from Table 2. Road diets, auxiliary lanes less than one-mile, and ramp metering may be exempt under "projects that correct, improve, or eliminate a hazardous location or feature."

<sup>2</sup> The analysis must support this conclusion before going to the next step.

<sup>3</sup> Use of the CO Protocol is strongly recommended due to its use of screening methods to minimize the need for modeling. When modeling is needed, the Protocol simplifies the modeling approach. Use of CAL3QHCR must follow U.S. EPA's latest CO hot spot guidance, using EMFAC instead of MOVES; see: <http://www.epa.gov/otaq/stateresources/transconf/projectlevel-hotspot.html#co-hotspot>.

<sup>4</sup> As of October 1, 2007, there are no CO nonattainment areas in California. Therefore, the requirements to not worsen existing violations and to reduce/eliminate existing violations do not apply.

<b>Step 9.</b> Is the project located in a PM10 and/or a PM2.5 nonattainment or maintenance area? <input type="checkbox"/> If no, go to Step 13. <b>PM2.5/PM10 conformity analysis is not required.</b> <input type="checkbox"/> If yes, go to Step 10.	
<b>Step 10.</b> Is the project considered to be a Project of Air Quality Concern (POAQC), as described in EPA's <u>Transportation Conformity Guidance</u> for PM 10 and PM 2.5? <input type="checkbox"/> If no, the project is not a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Analysis Guidance. Interagency Consultation concurred with this determination on <u>        </u> . Go to Step 12. <input type="checkbox"/> If yes, go to Step 11.	
<b>Step 11.</b> The project is a POAQC. <input type="checkbox"/> The project is a project of concern for PM10 and/or PM2.5 hot-spot analysis based on 40 CFR 93.116 and 93.123, and EPA's Hot-Spot Guidance. Interagency Consultation concurred with this determination on <u>        </u> . Detailed PM hot-spot analysis, consistent with 40 CFR 93.116 and 93.123 and EPA's Hot-Spot Guidance, shows that the project would not cause or contribute to, or worsen, any new localized violation of PM10 and/or PM2.5 standards. Go to Step 12.	
<b>Step 12.</b> Does the approved PM SIP include any PM10 and/or PM2.5 control measures that apply to the project, and has a written commitment been made as part of the air quality analysis to implement the identified SIP control measures? [Control measures can be found in the applicable Federal Register notice at: <a href="https://www.epa.gov/state-and-local-transportation/conformity-adequacy-review-region-9#ca">https://www.epa.gov/state-and-local-transportation/conformity-adequacy-review-region-9#ca</a> .] <input type="checkbox"/> If yes, a written commitment is made to implement the identified SIP control measures for PM10 and/or PM2.5 through construction or operation of this project (40 CFR 93.117). Go to Step 14. <input type="checkbox"/> If no, go to Step 13.	
<b>Step 13a.</b> Have project-level mitigation or control measures for CO, PM10, and/or PM2.5, included as part of the project's design concept and scope, been identified as a condition of the RTP or TIP conformity determination? AND/OR <b>Step 13b.</b> Are project-level mitigation or control measures for CO, PM10, and/or PM2.5 included in the project's NEPA document? AND <b>Step 13c</b> (applies only if Step 13a and/or 13b are answered 'yes'). Has a written commitment been made as part of the air quality analysis to implement the identified measures? <input type="checkbox"/> If yes to 13a and/or 13b and 13c, a written commitment is made to implement the identified mitigation or control measures for CO, PM10, and/or PM2.5 through construction or operation of this project. These mitigation or control measures are identified in the project's NEPA document and/or as conditions of the RTP or TIP conformity determination <sup>1</sup> (40 CFR 93.125(a)). Go to Step 14. <input type="checkbox"/> If no, go to Step 14.	
<b>Step 14.</b> Does the project qualify for a Categorical Exclusion pursuant to 23 USC 326? <input type="checkbox"/> If yes, go to step 15. <input type="checkbox"/> If no, go to Step 16.	
<b>Step 15.</b> Is any analysis required by steps 1-13 of this form? <sup>5</sup> <input type="checkbox"/> If yes, then Caltrans prepares the appropriate analysis and documentation for the project file and makes the conformity determination through its signature on the CE form. No FHWA involvement is required. See the AQCA Annotated Outline. Go to Step 17. <input type="checkbox"/> If no, then Caltrans makes the conformity determination through its signature on the CE form. No FHWA involvement is required. Go to Step 17.	
<b>Step 16.</b> Does the project require preparation of a Categorical Exclusion, EA, or EIS pursuant to 23 USC 327? <input type="checkbox"/> If yes, then Caltrans submits a conformity determination request to FHWA for FHWA's conformity determination letter. An AQCA is needed. See the AQCA Annotated Outline. Date of FHWA air quality conformity determination: <u>12/13/2019</u> Go to Step 17.	
<b>Step 17.</b> STOP as all air quality conformity requirements have been met.	
Signature:	
Printed Name:	Paul Phan
Title:	Senior Transportation Engineer
Date:	12/13/2019

<sup>5</sup> Please note that not all projects that qualify for a categorical exclusion will be exempt from air quality conformity requirements. Many types of projects that may qualify for a CE (such as the addition of auxiliary lanes less than one-mile, weaving lanes less than one-mile, turning lanes less than one-mile, climbing lanes less than one-mile, parking, road diets, ramp metering, and even many bridge projects) MAY require some level of project level conformity analysis and may even require interagency consultation. Additionally, please note that for ALL projects the project file must include evidence that one of the three following situations apply: 1) Conformity does not apply to the project area; or 2) The project is exempt from all conformity analysis requirements; or 3) The project is subject to project-level conformity analysis (and possibly regional conformity analysis) and meets the criteria for a conformity determination. The project file must include all supporting documentation and this checklist.

## **Appendix G. List of Acronyms**

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## List of Acronyms

AADT	Average Annual Daily Traffic
AB	Assembly Bill
AC	Asphalt Concrete
ACCM	Asbestos Containing Construction Materials
ACHP	Advisory Council on Historic Preservation
ACM	Asbestos Containing Material
ADA	Americans with Disabilities Act
ADL	Aerially Deposited Lead
ADT	Average Daily Traffic
ADDT	Annual Average Daily Traffic
APE	Area of Potential Effects
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ASR	Archaeological Survey Report
BA	Biological Assessment
BAU	Business As Usual
BCC	Bird of Conservation Concern
BLM	Bureau of Land Management
BMPs	Best Management Practices
BO	Biological Opinion
BSA	Biological Study Area
CAFE	Corporate Average Fuel Economy
CARB	California Air Quality Management District
CCAA	California Clean Air Act
CCRD	Caltrans Cultural Resource Database
CDCA	California Desert Conservation Area
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CHRIS	California Historical Resource Information System
CHRP	California Register of Historic Places
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
COZEEP	Construction Zone Enforcement Enhancement Program
CRHR	California Register of Historical
CRPR	California Rare Plant Rank
CSO	Cultural Studies Office

CTC	California Transportation Commission
CTP	California Transportation Plan
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CWA	Clean Water Act
DHV	Design Hour Volumes
DSA	Disturbed Soil Area
DOC	Department of Conservation
DOSH	Division of Occupational Safety and Health
DTC/C-AMA	Desert Training Center/ California-Arizona Maneuver Area
DTCH	Desert Tortoise Critical Habitat
DTCS	Department of Toxic Substances Control
DTSH	Desert Tortoise Suitable Habitat
DWMA	Desert Wildlife Management Areas
EB	Eastbound
ECR	Environmental Commitments Record
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
EPACT92	Energy Policy Act of 1992
ESA	Environmentally Sensitive Area
ESR	Environmental Study Request
FCAA	Federal Clean Air Act
FED	Final Environmental Document
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FNAE	Finding of No Adverse Effect
FOE	Finding of Effect
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse Gas
HOT	High-Occupancy Toll
HOV	High-Occupancy Vehicle
H&SC	Health and Safety Code
HSS	Department of Health and Human Services
HPSR	Historic Property Survey Report
HSAs	Hydrologic Sub-Areas
HUD	Housing and Urban Development
IPCC	Intergovernmental Panel on Climate Change
ISA	Initial Site Assessment
IS/EA	Initial Study/Environmental Assessment
LBP	Lead-Based Paint

LCFS	Low Carbon Fuel Standard
LEDPA	Least Environmentally Damaging Practicable Alternative
LUCR	Land Use Conversion Report
MBGR	Metal Beam Guard Railing
MBTA	Migratory Bird Treaty Act
MDAQMD	Mojave Air Quality Management District
MEP	Maximum Extent Practicable
MGS	Midwest Guardrail System
MLD	Most Likely Descendent
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environmental Study
NESMI	Natural Environmental Study Minimal Impacts
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NNI	Net New Impervious
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSR	Noise Study Report
NWI	National Wetlands Inventory
NWPS	National Wilderness Preservation System
OHWM	Ordinary High Water Mark
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSTP	Office of Science and Technology Policy
PA	Programmatic Agreement
PAC	Public Awareness Campaign
PBO	Programmatic Biological Opinion
PCMS	Portable Changeable Message Signs
PCS	Pavement Condition Survey
PDT	Project Development Team
PHV	Peak Hour Volume
PIA	Project Impact Area

PLACs	Permits, Licenses, Agreements, and Certifications
PM	Particulate Matter
PM	Post Mile
PRC	Public Resources Code
PRDs	Permit Registration Documents
RAP	Relocation Assistance Program
RCFD	Riverside County Fire Department
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
RIS	Replaced Impervious Surface
ROW	Right Of Way
RSA	Rapid Stability Assessment
RSP	Rock Slope Protection
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy"
SDC	Seismic Design Criteria
SHPO	California State Historic Preservation Officer
SHOPP	State Highway Operation and Protection Program
SIP	State Implementation Plan
SLF	Sacred Land File
SLR	Sea Level Rise
SMARTS	Stormwater Multiple Application and Report Tracking System
SR	State Route
SSC	Species of Special Concern
SSP	Standard Special Provision
STLC	Soluble Threshold Limit Concentration
SWMP	Statewide Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAMP	Transportation Asset Management Plan
TCR	Transportation Concept Report
TDS	Total Dissolved Solids
THPO	Tribal Historic Preservation Officer
TMP	Transportation Management Plan
TMDL	Total Maximum Daily Load
TSCA	Toxic Substances Controls Act
TTLC	Total Threshold Limit Concentration
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation



U.S. EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
WB	Westbound
WDID	Waste Discharge Identification Number
WDRs	Waste Discharge Requirements
WOTUS	Waters of the United States
WPCP	Water Pollution Control Program
WSC	Waters of the State of California

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## **Appendix H. List of Technical Studies**

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### **List of Technical Studies**

Historic Property Survey Report (April 2019)

Natural Environment Study (June 2019)

Visual Impacts Assessment (December 2019)

Air Quality Checklist (December 2019)

Noise Study Report (December 2019)

Initial Site Assessment Checklist (July 2019)

Asbestos Containing Materials and Lead-Based Paint Survey Report (March 2019)

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