

# Bridge Replacement and Bridge Rail Upgrade

RIVERSIDE COUNTY, CALIFORNIA

DISTRICT 08-RIV-74 (PM 13.2)

DISTRICT 08-RIV-74 (PM 33.9)

DISTRICT 08-RIV-79 (PM 9.3)

DISTRICT 08-RIV-371 (PM 65.4)

EA 08-1C6801 PN 0812000343

## Initial Study with Proposed Mitigated Negative Declaration



Prepared by the  
State of California Department of Transportation  
November 2019



## General Information About This Document

### *What's in this document:*

The California Department of Transportation (Caltrans) has prepared this Initial Study, which examines the potential environmental impacts of alternatives being considered for the proposed project in Riverside, California. The document describes the project, the existing environment that could be affected by the project, potential impacts from the project, and proposed avoidance, minimization, and/or mitigation measures.

### *What you should do:*

- Please read this Initial Study. Additional copies of this document as well as the technical studies are available for review at the Caltrans district office at 464 West 4<sup>th</sup> Street, San Bernardino, 92401.
- We welcome your comments. If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

Shawn Oriaz, Senior Environmental Planner  
California Department of Transportation  
464 W. 4<sup>th</sup> Street, MS 827  
San Bernardino, CA 92401-1400

Submit comments via email to: [2021RiversideBridgeProjects@dot.ca.gov](mailto:2021RiversideBridgeProjects@dot.ca.gov)

- Submit comments by the deadline: December 23, 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 appropriated, Caltrans could design and build all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Shawn Oriaz, Senior Environmental Planner, 464 W. 4<sup>th</sup> Street, MS 827, San Bernardino, CA 92401 (909) 388-7034; or call the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.

**PROJECT DESCRIPTION AND BACKGROUND:**

**Project Title:** RIV 74, 79, 371 Upgrade to Standard Bridge Rail  
**Lead Agency Name and Address:** California Department of Transportation District 8, 464 W. 4<sup>th</sup> Street, San Bernardino, CA 92401  
**Contact Person and Telephone Number:** Shawn Oriaz (909)388-7034  
**Project Location:** RIV 74, 79, 371  
**Project Sponsor's Name and Address:** California Department of Transportation District 8, 464 W. 4<sup>th</sup> Street, San Bernardino, CA 92401  
**General Plan Description:** N/A  
**Zoning:** N/A  
**Description of Project:** Widen Leach Canyon Bridge (Br# 56-0750, PM 13.2) on State Route (SR-74) to provide standard shoulder width and upgrade the bridge rail; extend the box culvert at Blue Ridge Wash Bridge (Br# 56-0257, PM 33.9) on State Route 74 and upgrade the bridge rails; entirely replace existing Arroyo Seco Bridge (Br# 56-0189, PM 9.3) on State Route (SR-79); and upgrade bridge rails and approach rails at Cahuilla Creek Bridge (Br #56-0490, PM 65.4) on State Route (SR-371) in Riverside County, to improve the safety of the traveling public by meeting current crash and safety standards.  
**Surrounding Land Uses and Setting:** The proposed project is located on various routes in Riverside County. Leach Canyon Bridge is located in the City of Lake Elsinore. The immediate surrounding land use is residential. Leach Canyon Channel is maintained by Riverside County Flood Control. Blue Ridge Wash Bridge is located near the City of Hemet. Immediate surrounding land use is residential in a rural area. Arroyo Seco Bridge is located on SR-79 over the Arroyo Seco Creek in the Oak Mountain area. Cahuilla Creek Bridge is on SR-371 over Cahuilla Creek in a rural area.  
**Other Public Agencies Whose Approval is Required:** California Department of Fish and Wildlife, Regional Water Quality Control Board, US Army Corp of Engineers, and US Fish and Wildlife

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project. Please see the CEQA checklist for additional information. Any boxes *not* checked represent issues that were considered as part of the scoping and environmental analysis for the project, but for which no adverse impacts were identified; therefore, no further discussion of those issues is in this document.

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Aesthetics                          | <input type="checkbox"/> Agriculture and Forestry        | <input type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources     | <input type="checkbox"/> Cultural Resources              | <input type="checkbox"/> Geology/Soils                      |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality |
| <input type="checkbox"/> Land Use/Planning                   | <input type="checkbox"/> Mineral Resources               | <input type="checkbox"/> Noise                              |
| <input type="checkbox"/> Paleontology                        | <input type="checkbox"/> Population/Housing              | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                          | <input type="checkbox"/> Transportation/Traffic          | <input type="checkbox"/> Utilities/Service Systems          |
| <input type="checkbox"/> Mandatory Findings of Significance  |  |   |

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

11/15/19  
 \_\_\_\_\_  
 Date

# **Proposed Mitigated Negative Declaration**

Pursuant to: Division 13, Public Resources Code

## ***Project Description***

The California Department of Transportation (Caltrans) proposes to widen Leach Canyon Bridge (Br# 56-0750, PM 13.2) on State Route (SR-74) to provide standard shoulder width and upgrade the bridge rail; extend the box culvert at Blue Ridge Wash Bridge (Br# 56-0257, PM 33.9) on State Route 74 and upgrade the bridge rails; entirely replace existing Arroyo Seco Bridge (Br# 56-0189, PM 9.3) on State Route (SR-79); and upgrade bridge rails and approach rails at Cahuilla Creek Bridge (Br #56-0490, PM 65.4) on State Route (SR-371) in Riverside County, to improve the safety of the traveling public by meeting current crash and safety standards.

## ***Determination***

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

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

The proposed project would have no effect on: aesthetics, agriculture and forestry resources, air quality, cultural resources, energy, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, noise, paleontology, population and housing, recreation, traffic and transportation, tribal cultural resources, utilities and service systems, public services, and wildfires.

In addition, the proposed project would have no significant effect on: biological resources and greenhouse gas emissions.

In addition, the proposed project would have no significantly adverse effect on biological resources, greenhouse gas emissions, and hydrology and water quality because the following mitigation measures would reduce potential effects to insignificance:

## ***Compensatory Mitigation***

Temporary impact areas in arroyo toad critical habitat are proposed to be restored at a 1:1 ratio. The project proposes to mitigate for temporary impacts through restoration and enhancement of on-site riparian/riverine areas. A Habitat Mitigation and Monitoring Plan (HMMP) will be prepared.

Permanent impacts on riparian/riverine habitat that supports arroyo toad is proposed to be mitigated through the purchase of credits or permittee-responsible creation/preservation at a 3:1 ratio.

On-site mitigation is proposed to include controlling or removing known threats from Arroyo Seco Creek, including eliminating bullfrogs and removing exotic vegetation.

TRF-1, a traffic management plan will be prepared and coordinated with the local emergency responders.

TRF-2, a traffic management plan will be implemented to minimize traffic delays and associated idling emissions during construction.

WQ-1 The project will include the use of permanent treatment BMPs to mitigate pollutants from stormwater runoff.

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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 Introduction**

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## **1.1 Introduction**

The California Department of Transportation (Caltrans) proposes to widen Leach Canyon Bridge (Br# 56-0750, PM 13.2) on State Route (SR-74) to provide standard shoulder width and upgrade the bridge rail; extend the box culvert at Blue Ridge Wash Bridge (Br# 56-0257, PM 33.9) on State Route 74 and upgrade the bridge rails; entirely replace existing Arroyo Seco Bridge (Br# 56-0189, PM 9.3) on State Route (SR-79); and upgrade bridge rails and approach rails at Cahuilla Creek Bridge (Br #56-0490, PM 65.4) on State Route (SR-371) in Riverside County, to improve the safety of the traveling public by meeting current crash and safety standards.

Leach Canyon Bridge is located in the City of Lake Elsinore on State Route 74. The bridge is over a concrete channel that drains to Lake Elsinore. Blue Ridge Wash Bridge is a box culvert located at Blue Ridge Wash near the City of Hemet. The Arroyo Seco Bridge is located over the Arroyo Seco Creek between the City of Temecula and Aguanga. The Cahuilla Creek Bridge is located over Cahuilla Creek between Aguanga and Anza.

This project is included in the 2018 Federal Transportation Improvement Program (FTIP) and is proposed for funding from the SHOPP program (State Highway Operation and Protection Program) under 201.112/HA-21 Program (Bridge Rail Replacement and Upgrade) for delivery in the 2019/2020 Fiscal Year.

## **1.2 Purpose and Need**

### **1.2.1 Purpose**

The purpose of the proposed project is to improve the safety of the traveling public by upgrading bridge rails to meet current crash and safety standards.

### **1.2.2 Need**

The Structure Replacement and Improvement Needs Report (STRAIN), dated October 2014, identified selected bridges as qualified for bridge rail upgrade. These structures exhibit several extensive cracks in the balusters along the top of the rail at various location and are subject to active deterioration. There is a need to upgrade bridge rails to meet current 2019 crash standards.

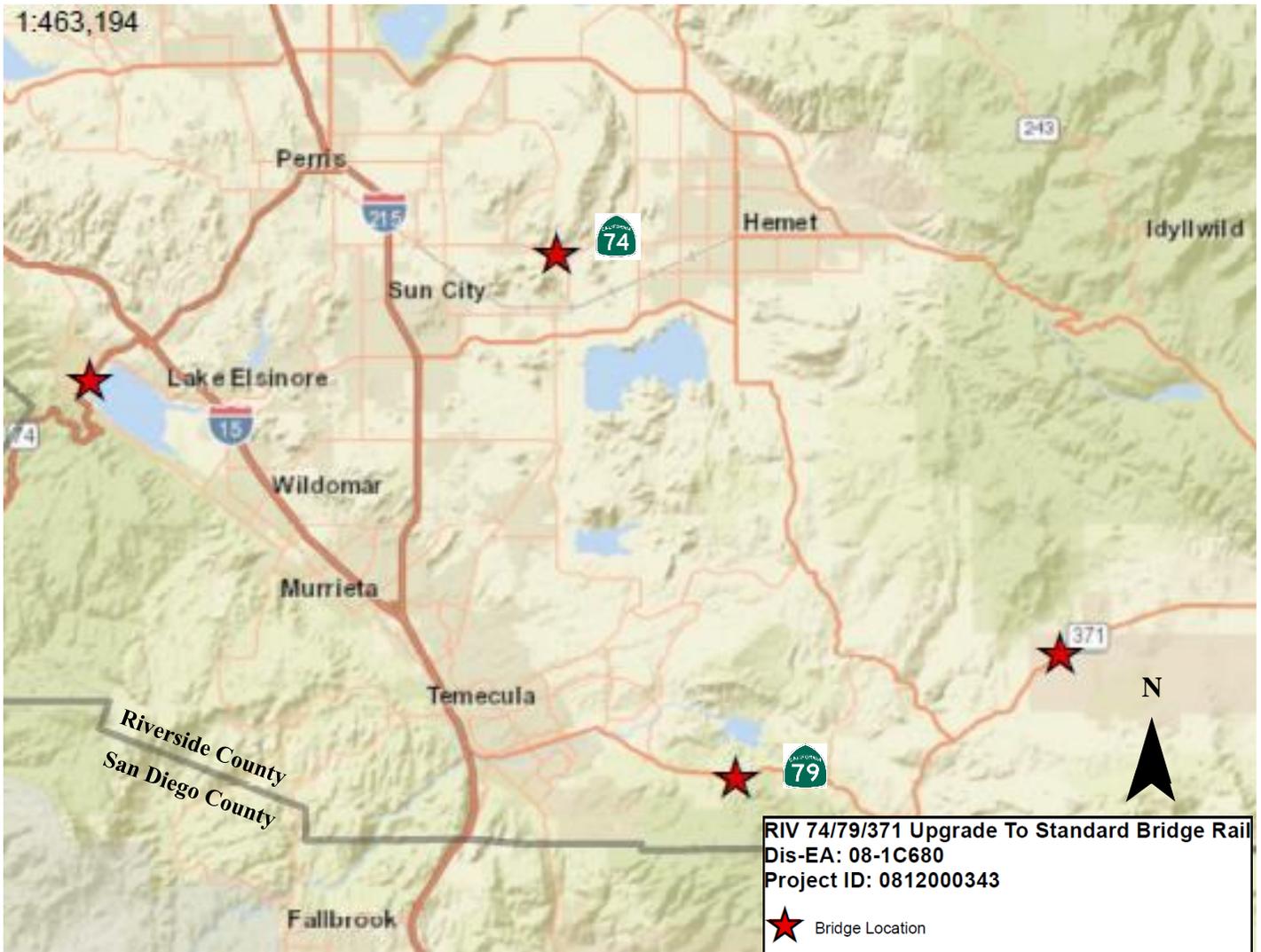


Figure 1-1 Project Vicinity



**Leach Canyon Bridge**  
**Bridge A (No. 56-0750)**  
**SR-74 PM 13.2**

 Bridge Location

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.



1:17,778



Arroyo Seco Creek



USFS - Dripping Springs Station 37



**Arroyo Seco Bridge  
 Bridge C (No. 56-0189)  
 SR-79 PM 9.3**

 Bridge Location

0 0.125 0.25 0.5 Miles



0 0.175 0.35 0.7 1.05 Kilometers



© 2011, H-RI, Garmin, (s) OpenStreetMap contributors, and the GIS user community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Skyway DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

1:17,778



Cahuilla  
Creek  
MX Park

**Cahuilla Creek Bridge  
Bridge D (No. 56-0490)  
SR-371 PM 65.4**

 Bridge Location

0 0.125 0.25 0.5  
Miles

0 0.125 0.25 0.5 1  
Kilometers

Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community. Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Skybus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

## 1.3 Alternatives

This section describes the project alternatives that were studied. The alternatives are the Build Alternative and the No-Build Alternative.

### 1.3.1 Build Alternative

The work planned for each location is provided below:

- **Bridge A** (Bridge No. 56-0750) – SR-74 at PM 13.2, Leach Canyon Bridge. Work at this location includes widening to provide standard shoulder width and upgrade to the bridge rail.
- **Bridge B** (Bridge No. 56-0257) – SR-74 at PM 33.9, Blue Ridge Wash Bridge. Work at this location includes extending the box culvert and upgrading the bridge rails.
- **Bridge C** (Bridge No. 56-0189) – SR-79 at PM 9.3, Arroyo Seco Bridge. Work at this location includes entirely replacing the existing Arroyo Seco Bridge. The replacement bridge will contain the same amount of lanes and is not capacity increasing.
- **Bridge D** (Bridge No 56-0490) – SR-371 at PM 65.4, Cahuilla Creek Bridge. Work includes upgrading the bridge rails and approach rails.

All construction work will be restricted to existing state right-of-way (ROW). No new ROW, including temporary construction easements, is expected to be needed for the build alternative. Utility relocations are not anticipated.

Construction work, construction equipment and crew activities, and construction crew vehicles would be restricted to stay within the paved areas and on bridge decks except for the Arroyo Seco Bridge location and Blue Ridge location.

### 1.3.2 No Build Alternative

Under the No Build Alternative, there would be no rehabilitative activities to meet current crash and safety standards. No improvement to the safety of the traveling public would be constructed.

## 1.4 Permits and Approvals

**Table 1. Permits and Approvals**

<b>Agency</b>	<b>Permits</b>	<b>Status</b>
California Department of Fish & Wildlife	Section 1602 Streambed Alteration Agreement	Application for the 1602 Agreement will occur during the Final Design phase of the project. The project will not proceed to construction before receiving the 1602 Agreement.
Santa Ana and San Diego Regional Water Quality Control Board	Section 401 Water Quality Certification	Application for the 401 Certification will occur during the Final Design phase of the project. The project will not proceed to construction before receiving the 401 Certification.
US Army Corps of Engineers	404 Non Reporting	The 404 Non Reporting was determined in November 2019.
US Fish and Wildlife	BO and MSHCP Consistency Letter	Received on June 28, 2019.

# Chapter 2 CEQA Environmental Checklist

08-RIV-74, 79, 371

Various

0812000143

Dist.-Co.-Rte.

P.M/P.M.

Project ID#

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 indicated no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. 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.

## 2.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Regulatory Setting

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]).

### CEQA Significance Determinations for Aesthetics

- a) **No Impact.** The proposed project would involve upgrade to bridge rails and approach rails, widening shoulder width, extension of a box culvert, and a bridge replacement. The proposed improvements would not have a significant impact on a scenic vista or obscure significant views. Such views would continue to be available because the proposed project

features would strengthen or replace existing structures and would not introduce new features that would impair existing views or scenic vistas.

- b) **No Impact.** Within the project limits along SR-74, SR-79, and SR-371, there are no designated or eligible state scenic highways. The proposed improvements at each of the locations would not result in substantial visual changes. The proposed project activities would occur within existing right of way. Therefore, the proposed project would not damage scenic resources located along a state highway.
- c) **No Impact.** The proposed project would not degrade the existing visual character or quality of the work sites or their surroundings because the proposed project features would strengthen or replace existing structures and would not introduce new features that would affect the existing visual character or quality of the sites or their surroundings. Therefore, no impacts are anticipated on visual resources.
- d) **No Impact.** The proposed project would not add new sources of light or glare or result in damage to scenic resources or scenic vistas. Therefore, there will be no impacts to the views.

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

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

## 2.2. Agriculture and Forest Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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"/>

## Regulatory Setting

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.

### CEQA Significance Determinations for Agriculture and Forest Resources

- No Impact.** According to the California Department of Conservation’s Farmland Mapping and Monitoring Program, there are no farmlands or vacant lands that are mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance within the vicinity of the proposed project. No impacts are anticipated.
- No Impact.** There are no areas within the study area under Williamson Act contract. No impacts are anticipated.
- No Impact.** There are no forest lands, timberlands, or timberland production areas adjacent to or within the project sites. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. No impacts are anticipated.

- d) **No Impact.** The proposed project would not result in the loss or conversion of forest land. No impacts are anticipated.
- e) **No Impact.** There are no forest lands, timberlands, or agricultural lands within or adjacent to the project sites. The proposed project would not involve changes that would result in the conversion of farmland to non-agricultural use or forest land to non-forest use. No impacts are anticipated.

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

No avoidance, minimization, or mitigation measures are required for agricultural and forest resources.

## 2.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
<b>AIR QUALITY:</b> 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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## 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.

## CEQA Significance Determinations for Air Quality

**a) No Impact:** The proposed project is located in the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with SCAG, local governments, and the private sector. The AQMP provides the blueprint for meeting state and federal ambient air quality standards. This project is not a capacity-increasing transportation project. 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. Therefore, the proposed project will not conflict with the AQMP, violate any air quality standard, result in a net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Impacts will be less than significant. No mitigation is required.

The proposed project is included in the 2019 Federal Transportation Improvement Program (FTIP) from the *2019 Grouped Project Detailed Backup Listings* on the Southern California Associated of Governments (SCAG) website. The project is part of the State Highway Operation and Protection Program (SHOPP) under “RIVLS06 Exempt Grouped Projects for Bridge Rehabilitation and Reconstruction – SHOPP Program 2019 FTIP Amendment Modification #19-03, includes the project as part of the FY 2018-2019,” as follows:

“In and near the cities of Lake Elsinore, Perris, Menifee and Hemet, at Leach Canyon Bridge No, 56-0750 and Blue Ridge Wash Bridge No. 56-0257; also on Routes 79 and 371, at Arroyo Seco Bridge no. 56-0189, and Cahuilla Bridge No. 56-0490. Bridge rail replacement, replace one bridge, and extend one culvert. PA&ED \$505K in prior year, PS&E, and R/W Support in 18/19. Con Supp., R/W, & Con in 19/20.”

As such, the proposed project is expected to result in no impacts.

- b) No Impact:** The project is listed under Table 1, Carbon Monoxide (CO) Protocol. Therefore, it is exempt from air emissions analyses. Since the project would not increase the number of travel lanes on SR-74, SR-79, and SR-371, no increase in vehicle miles traveled (VMT) would occur as result of project implementation, and traffic volumes would be the same under the Build Alternative and No-Build Alternative. Therefore, the proposed project would not increase roadway capacity on the various routes and would not increase emissions of criteria pollutants and their precursors following the construction period. No operation impacts related to violation of air quality standards would occur.
- c) No Impact:** As discussed above, project construction would generate criteria pollutants and their precursors. However, such emissions would be short term and transitory, and fugitive dust would be limited. No net increase in operational emissions would occur, traffic volumes would be the same under the Build Alternative and No-Build Alternative. The project would result in short-term generation of emissions, but no increases would occur for project operation and no impacts related to a cumulatively considerable net increase of any criteria pollutant.

- d) No Impact:** No impacts related to exposure of sensitive receptors to substantial pollutant concentration would occur. California Air Resources Board (CARB) characterizes sensitive land uses as simply as possible by using the example of residences, playgrounds, and medical facilities. However, there are none of these sensitive receptors in the nearby vicinities<sup>1</sup>.
- e) No Impact:** According to the ARB, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting areas, refineries, landfills, dairies, and fiberglass molding facilities. Because the project would not include any of these types of uses, and no sensitive land uses are located along the alignment, no impacts would occur.

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<sup>1</sup> California Environment Protection Agency, California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective (2005), Page 2. [www.arb.ca.gov/ch/landuse.htm](http://www.arb.ca.gov/ch/landuse.htm)

## 2.4 Biological Resources

BIOLOGICAL RESOURCES: Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	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 or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## WETLANDS AND OTHER WATERS

### 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.

## **PLANT SPECIES**

### **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).

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.

## **ANIMAL SPECIES**

### **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 below. 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

## **THREATENED AND ENDANGERED SPECIES**

### **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.

## **INVASIVE SPECIES**

### **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.

### **CEQA Significance Determinations for Biological Resources**

#### **a) Less than Significant with Mitigation:**

##### ***Special-Status Plant Species***

The USFWS Information Planning and Consultation (IPaC) list, California Natural Diversity Database (CNDDDB) inventory database, and California National Plant Society (CNPS) online database indicate that 39 special-status plant species and one special-status moss species have the potential to occur within the region surrounding the Biological Study Area (BSA), based on the USGS 7.5-minute quadrangles in which the project is located. The plant species include chaparral sand-verbena, Munz's onion, San Diego ambrosia, Jaeger's milk-vetch, San Jacinto Valley crownscale, Parish's brittle-scale, Davidson's salt-scale, Nevin's barberry, thread-leaved brodiaea, intermediate mariposa-lily, Payson's jewel-plant, Vail Lake ceanothus, smooth tarplant, Parish's chaenactis, Parry's spineflower, long-spined spineflower, white-bracted spineflower, Mojave tarplant, Cuyamaca larkspur, slender-horned spineflower, many-stemmed dudleya, San Diego Button-celery, San Jacinto Mountains bedstraw, Alvin Meadow bedstraw, Palmer's grapplinghook, Tecate cypress, San Diego sunflower, Coulter's goldfields, heart-leaved pitcher sage, Robinson's pepper-grass, Orcutt's linanthus, intermediate monardella, Hall's monardella, little mousetail, spreading navarretia, California Orcutt grass, Santiago Peak phacelia, white rabbit-tobacco, and Parry's tetracoccus. The moss species is California screw moss.

Survey results revealed Nevin's barberry, a rare plant in the outer, western portion of the BSA, but it was not in the Project Impact Area (PIA). Therefore, it will not be impacted by the project.

The following plant species were not detected in the Arroyo Seco Bridge BSA but suitable habitat was present in 2018 surveys: Vail Lake ceanothus, round-leaved filaree, slender-horned spineflower, and many-stemmed dudleya.

The California Native Plant Society (CNPS) indicated rare plant species within the BSA but Caltrans has determined that the project will not have an impact on the following plants: Munz's onion, Nevin's barberry, thread-leaved brodiaea, Vail Lake ceanthus, slender-horned spineflower, and California Orcutt grass.

In order to ensure no impacts occur on special-status plant species or threatened and endangered plant species at Arroyo Seco, measures BIO 1 – BIO 5 will be implemented.

### ***Habitats and Natural Communities of Special Concern***

According to the California Department of Fish and Wildlife (CDFW) CNDDB, four Natural Communities of Concern have the potential to occur within the region surrounding Arroyo Seco Bridge's BSA. The Natural Communities of Concern include Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Riversidian Alluvial Fan Sage Scrub. The survey results identified the BSA as sparse riparian scrub, coast live oak woodland, non-native grassland, Riversidean alluvial fan sage scrub, and Riversidean coastal sage scrub. In addition, coast live oak, sycamore, cottonwood, and willow trees were present in the BSA.

Direct, permanent impacts from clearing, grubbing, and bridge pier construction are expected for vegetation and trees within the Arroyo Seco Bridge PIA. Tree removal will be replaced at a 3:1 ratio. The project will implement all applicable Caltrans Best Management Practices (BMPs) and 2018 Standard Specifications to minimize and avoid potential impacts. BIO 1 – BIO 4 are additional measures that will be implemented.

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

Twenty-three special-status avian species have the potential to occur within the USGS 7.5-minute quadrangles in which the project BSA is located, based on wildlife database queries. These species include Cooper's hawk, tricolored blackbird, southern California rufous-crowned sparrow, golden eagle, Bell's sage sparrow, burrowing owl, oak titmouse, ferruginous hawk, Costa's hummingbird, Vaux's swift, western snowy plover, northern harrier, white tailed kite, southwestern willow flycatcher, California horned lark, American peregrine falcon, loggerhead shrike, osprey, summer tanager, white-faced ibis, coastal California gnatcatcher, yellow warbler, and least Bell's vireo.

During the 2018 Arroyo Seco riparian bird surveys, least Bell's vireo and southwestern willow flycatchers were not detected even though suitable habitat was present in the BSA. Peregrine falcon, Cooper's hawk, southern California rufous-crowned sparrow, Bell's

sparrow, summer tanager, Vaux's swift, oak titmouse, and Costa's hummingbird were detected in the BSA. Old, deteriorated and remnant cliff swallow nests were observed on the side of the bridge.

No burrowing owls or signs of burrowing owls were observed in the Arroyo Seco BSA. Although no burrowing owls or signs thereof were observed on the project site within the adjacent BSA during the focused burrowing owl survey, the potential for this species to occur on-site and/or in adjacent areas at any time in the future is still present.

Least Bell's vireo has been documented in the Leach Canyon Channel location. Pile driving will be done as part of the construction for the footing necessary to support the widened south side of the bridge.

Habitat may be present within the BSA but not within the PIA for the following: golden eagle, burrowing owl, ferruginous hawk, northern harrier, white-tailed kite, California horned lark, loggerhead shrike, osprey, coastal California gnatcatcher, and yellow warbler.

Clearing, grubbing, and construction noise has the potential to impact nesting birds. To ensure that the project will not impact migratory bird species in the BSA or their nests or eggs, avoidance and minimization measures will be implemented. BIO-1, BIO-2, BIO-6, BIO-7, and BIO-8 will ensure that the project does not cause listed species to trend towards becoming extinct, or State Species of Special Concern to trend towards becoming listed.

### ***Amphibian Species***

Two special-status amphibian species, the arroyo toad and western spadefoot have the potential to occur at the Arroyo Seco Creek location. There is suitable habitat in the BSA. The arroyo toad is historically known to be present at Arroyo Seco Creek and the location is within designated critical habitat for arroyo toad. However, arroyo toads and western spadefoot toads were not detected during protocol surveys in 2018. Tadpoles were documented adjacent to the Arroyo Seco Bridge in Arroyo Seco Creek. Two arroyo toads in amplexus were documented 100 feet upstream from the Arroyo Seco Bridge on April 20, 2019. In addition, several egg strings were observed in the same location. Clearing, grubbing, and construction of new bridge piers have the potential to impact the species. Temporary impacts, in the form of construction activities, temporary roads, and staging areas, will occur. BIO-1, BIO-2, BIO-3, BIO-9, BIO-10, and BIO-11 will be implemented to ensure that the project will not cause the species to trend towards becoming extinct.

### ***Reptile Species***

Ten State and/or Federal special-status reptile species have the potential to occur within the BSA, based on the wildlife queries within the USGS 7.5-minute quadrangles in which the project is located. These species include southern California legless lizard, California glossy snake, orange-throated whiptail, coastal whiptail, San Diego banded gecko, red-diamond rattlesnake, western pond turtle, coast horned lizard, coast patch-nosed snake, and two-striped garter snake. During the Arroyo Seco plant surveys in 2018, the coast horned lizard was observed outside of the ROW on the ridgetops south of the roadway and east of

the USFS Dripping Springs campground. In addition, Belding's orange-throated whiptail was very common in the survey area. Northern red diamond rattlesnake was observed within the Arroyo Seco Creek BSA. Additional coast horned lizard (south of SR 79) and northern red diamond rattlesnake (north of SR 79) were spotted during butterfly surveys in 2018.

Habitat for western pond turtle was not suitable in the BSA. Suitable habitat may be present within the BSA but not within the PSA for the following: southern California legless lizard; California glossy snake; coastal whiptail; San Diego banded gecko; and coast patch-nosed snake. Therefore, the project will not impact these species.

Suitable habitat is present within the BSA for two-striped garter snake, orange-throated whiptail; red-diamond rattlesnake; and coast horned lizard. Clearing, grubbing, and construction of new bridge piers have the potential to impact these species. To ensure that the project will not cause State Species of Special Concern or Watch List Species to trend towards being listed, Measures BIO-1, BIO-2, BIO-3, and BIO-11 will be implemented.

### ***Mammalian Species***

Based on the wildlife database queries within the USGS 7.5-minute quadrangles in which the project is located, the following special-status mammal species have the potential to occur: pallid bat, Dulzura pocket mouse, northwestern San Diego pocket mouse, Aguanga (earthquake) Merriam's kangaroo rat, San Bernardino Merriam's Kangaroo rat, Stephens' kangaroo rat, western yellow bat, San Diego black-tailed jackrabbit, San Diego desert woodrat, southern grasshopper mouse, Los Angeles pocket mouse, and American badger.

Neither Los Angeles pocket mouse nor Aguanga kangaroo rat were detected in the Arroyo Seco BSA during focused trapping surveys; however, the northwestern San Diego pocket mouse was captured.

During 2018 surveys, bat guano was detected in the BSA. Furthermore, a night-roosting colony of up to 40 pallid bats was observed on multiple occasions beneath the Arroyo Seco Bridge. On April 25, 2018, Western pipistrel was also observed night-roosting beneath the Arroyo Seco Bridge.

October 25, 2019 surveys were conducted at the Arroyo Seco Bridge and found day-roosting bats.

There is no habitat in the BSA that is suitable for: San Bernardino Merriam's kangaroo rat; Stephens' kangaroo rat; or southern grasshopper mouse. Suitable habitat may be present within the BSA but not within the PIA for Aguanga (earthquake) Merriam's kangaroo rat (not detected during surveys); Los Angeles pocket mouse (not detected during surveys); Dulzura pocket mouse; San Diego desert woodrat; western yellow bat; San Diego black-tailed jackrabbit; and American badger. Therefore, the project will not impact these species.

Northwestern San Diego pocket mouse, pallid bats, and a western pipistrel were observed within the BSA and project activities have the potential to impact these species. Avoidance and Minimization measures BIO-1, BIO-2, BIO-3, BIO-11, BIO-12, and BIO-13 will be implemented.

### ***Insect Species***

According to the USG 7.5-minute quadrangles in which the project is located, the Quino checkerspot butterfly and crotch bumblebee have the potential to occur within the region surrounding the BSA.

The Quino checkerspot butterfly was not detected in the BSA during protocol surveys. However, its host plant, the California plantain was commonly found in patches in the hills and ridges between Temecula Creek and the USFS Dripping Springs campground.

There is suitable habitat for the Quino checkerspot butterfly within the Arroyo Seco Creek Bridge BSA but not within the PIA. Therefore, the project would not impact or take these species.

Suitable habitat for crotch bumblebee may be present in the BSA. Clearing and grubbing has the potential to impact these species. To ensure that the project will not cause special status species to trend towards becoming listed, avoid and minimization measure BIO-4 will be implemented.

### ***Western Riverside County Multiple Species Habitat Conservation Plan (WRMSHCP)***

The project bridges are located within the following WRMSHCP Area Plans: Leach Canyon Bridge is in the Elsinore Plan; Blue Ridge Wash Bridge is in the Harvest Valley/Winchester Plan; Arroyo Seco Bridge occurs in the Southwest Area Plan; and Cahuilla Creek Bridge is in the Southwest Area Plan.

Arroyo Seco Bridge falls in criteria cells and special linkage areas. In compliance with WRMSHCP, habitat assessments were performed and suitable habitat was found to be present for the following: arroyo toad, burrowing owl, criteria area plants (CAPS); Nevin's barberry, Vail Lake ceanothus, and round-leaved filaree, Aguanga kangaroo rat, Los Angeles pocket mouse, and narrow endemic plants (NEPS); slender-horned spineflower and many-stemmed dudleya), and least Bell's vireo.

The only rare plant observed at the Arroyo Seco Bridge was Nevin's barberry which was discussed above under subheading Special-Status Plant Species.

The proposed project would affect natural vegetation communities (Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, and Riversidian Alluvial Fan Sage Scrub). To minimize and avoid potential impact to Natural Communities potentially occurring near the project site, the project will implement all applicable Caltrans Best Management Practices and 2018 Standard Specifications.

While the project poses no risk of permanently decreasing the existing habitat connectivity, work associated with the Arroyo Seco Bridge replacement may temporarily impact wildlife movement due to construction disturbance and noise. The Arroyo Seco BSA lies within Criteria Cell No. 7462 and 7463. Conservation within Criteria Cell No. 7462 and 7463 will contribute to the assembly of Proposed Core 7. Conservation within this Cell Group will focus on water habitat associated with Vail Lake and surrounding habitat, including chaparral, coastal sage scrub, grassland, Riversidean alluvial fan sage scrub, riparian scrub, woodland, and forest. Areas conserved within this Cell Group will be connected to chaparral, coastal sage scrub, riparian scrub, woodland, and forest habitat proposed for conservation in Cell Group C to the northwest and to upland habitat proposed for conservation in Cell Groups F', G', H', and I' in the REMAP Area Plan to the north 61 and in Cell Groups E', F'' and G'' in the REMAP Area Plan to the east. Conservation within this Cell Group will range from 75%-85% of the Cell Group focusing in the central portion of the Cell Group. The BSA lies within the southeast quadrant of Criteria Cell #7462 and the southwest quadrant of Criteria Cell #7463 and contains some vegetation components focused for conservation.

Leach Canyon Channel, Blue Ridge Wash, and Cahuilla Creek were assessed to determine if a wildlife corridor occurs on or within a portion of the project site. Criteria Area Cells are lands where the MSHCP reserve system is being assembled. The Leach Canyon Channel, Blue Ridge Wash, and Cahuilla Creek BSAs are not within or located directly adjacent to any criteria cell and thus, will not contribute to any connectivity to the Criteria Cell(s) or its conservation objectives. The Leach Canyon Channel BSA lies within an Existing Core Linkage E that is located in Lake Elsinore and connected to other MSHCP conserved lands via the Proposed Extension of Existing Core 3 (Lake Elsinore Soils). The Leach Canyon Channel project site consists of the channel area only, and no impacts to areas outside of the channel are expected. Therefore, project construction associated with the Leach Canyon Channel will not impact the long-term conservation goals associated with Existing Core Linkage E.

A total of 0.023 acre of riverine resources (CDFW jurisdiction) will be permanently impacted and 0.087 acre will be temporarily impacted as a result of the Blue Ridge Wash Bridge project implementation.

### ***Arroyo Toad***

Arroyo toad breeding in the Arroyo Seco Bridge PIA was documented on April 18, 2019. The project is anticipated to permanently impact 0.043 acre of habitat that is both arroyo toad-occupied critical habitat and riverine habitat, due to the expanded footprint of the bridge support walls and addition of rip-rap. There will be permanent impacts to 0.15 acre of unsuitable, disturbed habitat adjacent to the existing road due to road widening in the Caltrans right-of-way. A total of 0.088 acre of arroyo toad-occupied critical habitat and riverine habitat will be temporarily impacted as a result of the Arroyo Seco Bridge project implementation.

Temporary impacts, in the form of construction activities, temporary roads, and staging areas, will occur. Arroyo toad have the potential to be crushed by equipment during project

activities. Noise and vibrations could disturb arroyo toad, possibly causing them to leave protected sites and increase their vulnerability to injury or death.

If potential runoff is not contained, road construction may cause increased sedimentation in adjoining aquatic habitats. Soil disturbance has been directly implicated in both lethal and sublethal effects on amphibians. Pollutants from exhaust and tire wear can build up along roadsides and enter riparian areas. Nonnative plant species, such as yellow star thistle (*Centaurea solstitialis*) and giant reed (*Arundo donax*), alter the natural hydrology of stream drainages by eliminating sandbars, breeding pools, and upland habitats for arroyo toad. To address these concerns, the avoidance and minimization measures below and Caltrans standard BMPs will be implemented. Caltrans has determined that the project is “Likely to Adversely Affect” the arroyo toad and is “Not Likely to Adversely Affect” arroyo toad critical habitat.

To ensure that the project will not cause the federally-endangered arroyo toad to trend towards becoming extinct, avoidance and minimization measures BIO-1, BIO-2, BIO-3, BIO-9, BIO-10 will be implemented.

Temporary impacts on arroyo toad-occupied critical habitat and riverine habitat will be restored at a 1:1 ratio. The project will mitigate for temporary impacts through restoration and enhancement of on-site riparian/riverine areas. A Habitat Mitigation and Monitoring Plan (HMMP) will be prepared that will detail the restoration techniques, identify success criteria, and provide for adaptive management techniques. This will provide riparian/riverine habitat that is of equivalent or better quality to the affected habitat and is contiguous with existing and anticipated conservation areas. On-site mitigation will include controlling or removing known threats from Arroyo Seco Creek, including eliminating bullfrogs and removing exotic vegetation. Permanent impacts on arroyo toad-occupied critical habitat and riverine habitat are proposed to be mitigated through the purchase of credits or MSHCP permittee-responsible creation/preservation at a 3:1 ratio.

In addition, to contribute to the WRMSHCP Arroyo Toad Conservation Objective 5 (“Within the MSHCP Conservation Area, Reserve Managers shall maintain or, if feasible, restore ecological processes within occupied habitat and suitable new areas within the Criteria Area, given existing constraints and activities covered under the MSHCP. At a minimum, these areas will include portions of San Juan Creek, San Jacinto River, Indian Creek, Bautista Creek, Wilson Creek, Temecula Creek, Arroyo Seco, and Vail Lake, which are important to the arroyo toad.”), the following mitigation measure will be implemented: On-site mitigation will include controlling or removing known threats from Arroyo Seco Creek, including eliminating bullfrogs and removing exotic vegetation.

Per species identified in MSCHP Section 6.3.2, in locations with positive survey results, such as the Arroyo Seco Bridge area, “. . .90% of those portions of the property that provide for long-term conservation value for the identified species shall be avoided. . .” Caltrans will work with the Wildlife Agencies to implement conservation alternatives that are equivalent or superior to avoidance. These alternatives include enhancement/restoration of suitable arroyo toad habitat.

Caltrans obligations to the WRCMSHCP will be satisfied through the implementation of measures BIO 1 – BIO 13, as well as any additional measures required by the Wildlife Agencies (CDFW and USFWS) for MSHCP consistency approval; preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report; the construction guidelines provided in the WRCMSHCP Volume 1, Section 7.5.3; and the Standard Best Management Practices outlined in the WRCMPSHCP Appendix C.

**b) Less than Significant Impact with Mitigation:** Riparian areas are permanently affected by the project, compensatory mitigation for the habitat will be required where it is associated with jurisdictional waters that are subject to United States Army Corps of Engineers (USACE) regulatory authority under the Section 404 permitting requirements and California Department of Fish and Wildlife (CDFW) under the Section 1600 permitting requirements. Permanent impacts on riparian/riverine habitat that supports arroyo toad is proposed to be mitigate through the purchase of credits or permittee-responsible creation/preservation at a 3:1 ratio.

On-site mitigation will include controlling or removing known threats from Arroyo Seco Creek, including eliminating bullfrogs and removing exotic vegetation.

Cahuilla Creek has Valley Foothill Riparian Vegetation within the project site that can potentially provide habitat for least Bell's vireo. However, the work at Cahuilla Creek will be limited to the replacement of brige railing; pre-construction nesting bird surveys and if necessary, implementation of noise attenuation measures, will ensure there are no impacts to sensitive nesting birds in the riparian area.

To ensure that the project does not cause or promote the introduction or spread of invasive species, Caltrans Standard BMPs will be implemented.

Preparation of a DBESP report is required under the WRCMSHCP for projects that involve impacts to riparian/riverine resources and/or vernal pools. The purpose of the DBESP report is to ensure replacement of any lost functions and values of habitat as it relates to covered species. Caltrans requested: a consistency determination with the WRMSHCP; a streamlined Biological Opinion through the WRMSHCP; and a DBESP for impacts to riparian and riverine resources. To ensure consistency with the MSHCP, wildlife agencies (i.e., USFWS, CDFW) would reviewed the documents and a consistency letter was provided to the permittees (Caltrans).

Less-than-significant impacts are anticipated with implementation of measures BIO -1 to BIO-13.

**c) Less than Significant Impact:** There are areas in the BSA that meet the USACE (Federal Register 1982) definition of wetlands: "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas." Therefore, the project will not impact wetlands.

The Arroyo Seco Bridge replacement and Blue Ridge Wash Bridge box culvert extension are anticipated to impact jurisdictional features and to require a *Section 404 Nationwide Permit or Jurisdictional Delineation from the USACE*, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement from the CDFW.

- d) No Impact:** Based on the Essential Fish Habitat consultation with the NOAA Fisheries, one species was identified as having the potential to occur within the project quads: southern California steelhead. However, none of the BSAs have suitable aquatic habitat that would support this species. Therefore, the proposed project has no potential to impact this or other NOAA Fisheries-protected resources.
- e) No Impact:** The proposed project would not conflict with any local policies or ordinances protecting biological resources. Therefore, the proposed project will have no impact.
- f) No Impact:** The project is consistent with the adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, there would be no impact.

#### ***Avoidance and Minimization Measures***

**BIO-1 Biological Monitor:** A qualified contractor-supplied biologist will be designated to oversee compliance of all protective measures and will monitor all construction-related activities. The biological monitor will notify the resident engineer of project activities that may not be in compliance. The resident engineer will stop work until the protective measures are implemented fully. The biological monitor will submit a final monitoring report no later than 20 days after completion of the project.

**BIO-2 Worker Environmental Awareness Training:** A qualified contractor-supplied biologist will present a worker environmental awareness training to each employee (including temporary, contractors, and subcontractors) prior to the initiation of work. They will be advised of the special status species in the project area, 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, and their sensitivity of the species to human activities; legal protection afforded these species, including 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 a handout with descriptions and color photos of the listed species, which will be shown to the employees. Following the education program, the photos will be posted in the office(s) of the contractor and resident engineer, as well as all construction field offices and on all information boards, where they will remain through the duration of the project. The contractor, resident engineer, and the qualified biologist will be responsible for ensuring that employees are aware of the special status species that may be present, and what actions, if any, are needed if any of those species are found

during project implementation. If additional employees are added to the project after initiation, they will receive instruction prior to working on the project.

**BIO-3 Biological Monitor:** Equipment, vehicles, and materials staged and stored in Caltrans right-of-way will be sited in previously paved or previously disturbed areas only and will avoid native vegetation. Approval of additional staging areas will require the Caltrans Biologist to analyze project impacts and provide authorization for additional staging areas. Equipment staging will be consistent with the Standard Best Management Practices outlined in the MSHCP Volume 1, Appendix C.

**BIO-4 Sensitive Plant / Host Plant Pre-Construction Clearance Survey, Flagging, and Fencing:** No more than one week prior to ground breaking activities, a qualified biologist must perform a pre-construction survey for sensitive plant species and rare insect host plants. Should any sensitive plants or rare insect host plants be found, 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 environmentally sensitive area temporary fencing. If sensitive, protected plant species have been documented in the area, but are not observed during pre-construction surveys, the biological monitor will flag the area for avoidance.

**BIO-5 Sensitive Plant Translocation:** If a sensitive plant species that cannot simply be fenced and can survive transplantation is found within the work area, the authorized contractor-supplied biologist will contact the Wildlife Agencies and the Regional Conservation Authority prior to ground-disturbing activities to determine the time and suitable translocation area for the plant species to be moved. Additional requirements and actions will be determined at the time in which such a situation occurs.

**BIO-6 Pre-Construction Clearance/Nesting Bird Survey:** If construction occurs within the bird nesting season (February 15 to September 1), then pre-construction surveys will be conducted by a qualified biologist to locate and avoid nesting birds. If an active nest is located, a 300-foot no-construction buffer (500-foot buffer for raptors) will be put in place until nesting has ceased or the young have fledged.

**BIO-7 Pre-Construction Burrowing Owl Survey:** The entire project area will be surveyed for burrowing owls and their burrows by the contractor-supplied biologist no more than 30 days prior to the start of any ground disturbing activities using WRCMSHCP survey guidelines. Use environmentally sensitive area fencing, clearly mark areas supporting burrows and a buffer zone setback area.

**BIO-8 Noise Attenuation:** If construction is within 500 feet of an active nest of a raptor, federally-protected bird species, or noise-sensitive listed bird species, such as least Bell's vireo, during the nesting season, noise attenuation measures will be implemented to ensure the noise level does not exceed 60 decibels at an active nest. Noise levels will be measured using a sound level meter.

**BIO-9 Pre-Construction Toad Survey:** Immediately prior to the start of ground disturbing activities, and prior to the installation of any arroyo toad exclusion fencing, surveys for the

arroyo toad will be conducted by the biologist. The entire project area will be surveyed for arroyo toad by the qualified contractor-supplied biologist prior to the start of any ground disturbing activities. If arroyo toads are found within these areas, they will need to be trapped and relocated to an appropriate habitat relocation area after fence installation by a qualified biologist permitted by the USFWS to handle arroyo toad. Prior to the onset of ground disturbing activities, the contractor-supplied biologist will provide the Wildlife Agencies with a pre-construction arroyo toad survey report and exclusion fencing plans for review and approval at least 30 days prior to the initiation of construction.

**BIO-10 Temporary Toad Fencing:** Prior to the beginning of construction, temporary exclusion fencing will be installed outlining the perimeter of any construction staging, storage, or batch plant areas to prevent entry by arroyo toads into the work site. The biologist must check the fencing weekly and make any necessary repairs, should it become damaged, and notify the Resident Engineer should it require extensive repair. Prior to the onset of ground disturbing activities, the contractor-supplied biologist will provide the Wildlife Agencies with arroyo toad exclusion fencing plans for review and approval at least 30 days prior to the initiation of construction.

**BIO-11 Animal Entrapment Avoidance:** To prevent inadvertent entrapment of animals during the construction phase of a project, all excavated, steep-walled holes or trenches should be covered at the close of each working day, by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. The contractor-supplied biologist will ensure compliance with entrapment avoidance at the close of the working day and conduct an inspection prior to the onset of work the following day.

**BIO-12 Pre-Construction Survey and Monitoring by a Qualified Bat Biologist:** Prior to construction start, a qualified bat biologist will conduct a survey to determine if bats are roosting on any of the bridges. If work on Arroyo Seco Bridge or other bridges that support bat roosting during the bat maternity season (April 1–August 31) cannot be avoided, a qualified bat biologist will perform a humane eviction/exclusion of roosting bats from the bridges prior to the maternity season. The exclusionary material will be inspected regularly and maintained during construction activities and will be removed at the completion of construction.

**BIO-13 Seasonal Avoidance During Bat Maternity Season:** Because Arroyo Seco Bridge is known to house bats, it is recommended that there is no work on Arroyo Seco Bridge during the bat maternity season (April 1 to August 31). If that is not feasible, use measure BIO-12 (install exclusion devices).

## 2.5 CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of formal cemeteries?                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

## Regulatory Setting

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

## CEQA Significance Determinations for Cultural Resources

- a) **No Impact.** According to the *Section 106 Compliance – Screened Undertaking Memo for EA IC680* completed January 22, 2019 for this project, there would be no potential to affect historic properties eligible for or listed in the National Register of Historic Places. No Historic Properties Affected. Therefore, there would be no impacts on historic resources.
- b) **No Impact.** There would be no substantial adverse changes in the significance of an archaeological resource because no archaeological resources were identified in the proposed project areas. The proposed work is minor in nature and is covered as a screened undertaking because there is no potential to affect any archaeological resources; therefore, there are no impacts anticipated.
- c) **No Impact.** Construction activities are not expected to be at a depth where they could possibly encounter human remains. Therefore, there would be no impact. However, standard Caltrans design features would be included in the project in the event that any inadvertent discoveries are encountered.

*Assembly Bill 52*

AB 52 consultation was conducted in October and November of 2019. Caltrans contracted The Cahuilla Band of Indians, Pala Band of Mission Indians, Pechanga Band of Luiseno Indians, Ramona Band of Cahuilla Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Indians, and Soboba Band of Luiseno Indians. No tribe expressed concerns with the project.

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

No measures are required for cultural resources; however, the following standard Caltrans design features will be included:

**CR-1:** If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.

**CR-2:** If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC who will then notify the Most Likely Descendant. At this time, the person who discovered the remains will contact Andrew Walters, Senior Environmental Planner, Cultural Studies [(909) 383-2647] or Gary Jones, District Native American Coordinator [(909) 383-7505] so that they may work with the Most Likely Descendant on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

**2.6 ENERGY**

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

**CEQA Significance Determinations for ENERGY**

**a) No Impact:** Caltrans implements best management practices (BMP’s) to prevent wasteful consumption of resources during construction or operation. As such, no impacts are anticipated.

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

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

No measures are required.

## 2.7. GEOLOGY AND SOILS

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial 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"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Regulatory Setting

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.

### **CEQA Significance Determinations for Geology and Soils**

**a i), a ii), aiii) No Impact:** According to the California Department of Conservation Earthquake Zones of Required Investigation Maps<sup>2</sup>, the bridges are not in an Alquist-Priolo Earthquake Fault Zone, and there is no known active or potentially active faults mapped as crossing or in the immediate vicinity.

Therefore, the improvements proposed under the Build Alternative is not expected to be exposed to effects associated with fault displacement and ground rupture. Compliance with the most current Caltrans procedures regarding seismic design, which is standard practice on all Caltrans projects, will be followed and implemented as applicable, based on the project's scope of work. Therefore, through the incorporation of standard seismic design practices, the proposed project would result in no impact because construction or operation would not cause any seismic-related ground failure, including liquefaction.

**a iv) No Impact:** Landslides are mass movements of the ground that include rock falls, relatively shallow slumping and sliding of soil, and deeper rotational or transitional movement of soil or rock. Impacts associated with landslides or mudslides are not anticipated. Based on a review of geologic mapping, there would be a low probability for a landslide. No impacts would occur.

**b) No Impact:** Project does not anticipate any substantial loss of soil erosion or top soil.

**c) No Impact:** The Riverside County Land Use Plan General Plan Geologic Hazard Overlay Map does not identify any geologic hazards for the project. It also does not identify any land within the project limits as susceptible to landslides or liquefaction. Therefore, no impacts are anticipated.

**d) No Impact:** The Riverside County Land Use Plan General Plan Geologic Hazard Overlay Map does not identify any geologic hazards for the project. It also does not identify any land within the project limits as susceptible to landslides or liquefaction, which implies the absence of expansive soil. Therefore, no impacts are anticipated.

**e) No Impact:** Septic tanks or alternative waste water disposal systems will not be part of the proposed project. Therefore, there will be no impacts.

**f) No Impact:** The proposed project is occurring on the bridges and would not destroy a unique paleontological resource or site or unique geologic feature. Therefore, there will be no impacts.

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<sup>2</sup> California Earthquake Hazards Zone Application. *Earthquake Zones of Required Investigation Maps*, 2019, California Department of Conservation, <https://www.conservation.ca.gov/cgs/geohazards/eq-zapp>. Accessed 8/26/2019.

**2.8 GREENHOUSE GAS EMISSIONS**

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

**CEQA Significance Determinations for Greenhouse Gas Emissions**

**a) No Impact:** While the project would result in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. With implementation of construction GHG-reduction measures, the impact would be less than significant.

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

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

No avoidance, minimization, or mitigation measures are required for greenhouse gas emissions.

**2.9. HAZARDS AND HAZARDOUS MATERIALS**

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

**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.

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.

### **CEQA Significance Determinations for Hazards and Hazardous Materials**

- a) **No Impact.** Implementation of the proposed project is not expected to result in the creation of any new hazards or expose people to potential new health hazards because the project involved minor improvements to existing bridge locations. No storage of toxic materials or chemicals would occur and the project is not anticipated to increase the potential hazardous materials in the project area. The Initial Site Assessment Checklist completed for the project determined the hazardous waste involvement to be low.

Following construction of the project, operations are not expected to result in the creation of any new health hazards or to expose people to potential new health hazards because the improved existing bridge infrastructure would not require the transport, use, or disposal of any hazardous materials and would not result in any reasonably foreseeable upset or accident conditions involving hazardous materials. As such, the proposed project is expected to result in no impacts.

- b) **No Impact.** The proposed project is not anticipated to result in a release of hazardous materials into the environment. Standard construction practices would be observed such that any materials released are appropriately contained as required by local and state law. Therefore, the proposed project is expected to result in no impacts.
- c) **No Impact.** The project is not anticipated to create a safety hazard for the high school near Bridge A, Leach Canyon Bridge. The project is not located within one-quarter mile of an existing school. The proposed project is expected to result in no impacts.
- d) **No Impact.** No potentially hazardous waste sites were listed on the GeoTracker database on or near the work sites for the bridge locations. No underground storage tanks, surface tanks, sumps, ponds, drums, basins, transformers, or landfills were identified. Furthermore, no surface staining, oil sheen, odors, or vegetation damage was identified on the ISA Checklist. No impacts are anticipated.
- e) **No Impact.** The proposed project is not within two miles of a public airport or public use airport. Nor would the project result in a safety hazard for people residing or working in the project area.

- f) **No Impact.** The project will not impair implementation of physically interfere with an adopted emergency response plan or emergency evacuation plan. The proposed project is expected to result in no impacts.
- g) **No Impact.** The proposed project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, no impacts are anticipated.

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

**Haz-1:** For Arroyo Seco Bridge: Notify the US EPA and the CA Air Resources Board of demolition activities even if the activities will not disturb asbestos-containing material.

**Haz-2:** If work will disturb existing paint system on bridge.

**Haz-3:** Surveying for Asbestos Containing Material during construction.

**Haz-4:** Specifications for handling, removing, and disposing of earth material containing lead.

**Haz-5:** Supplemental Project Information

**Haz-6:** Disposal of treated wood waste.

## ***2.10. HYDROLOGY AND WATER QUALITY***

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

## Regulatory Setting

### *Water Quality and Stormwater Runoff*

#### *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 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 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 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.

### **CEQA Significance Determinations for Hydrology and Water Quality**

**a) No Impact:** The Build Alternative would not violate any water quality standards or waste discharge requirements. The project would require implementation of BMPs during both construction and operation of the project. Upon adherence to these requirements and implementation of BMPs, no impacts would occur in this regard during construction. No measures are required.

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

**c) i), No Impact:** There are no planned changes to the existing drainage pattern of the site including the alteration of a stream or river that would result in substantial erosion or siltation on or off site. As such the proposed project is expected to result in no impacts.

**c) ii) No Impact:** The project would not result in planned changes to the existing drainage pattern of the site increase the rate or amount of surface runoff. As such the proposed project is expected to result in no impacts.

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

**d) Less Than Significant with Mitigation Incorporated:** The project risks the release of pollutants due to project inundation. Caltrans will implement the use of permanent treatment BMPs to mitigate pollutants from stormwater runoff.

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

No avoidance, minimization, or mitigation measures are required for hydrology and water quality.



**2.11 LAND USE AND PLANNING**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

**a) No Impact:** Implementation of the proposed project locations would not divide an established community, as the location is already disturbed and located on the State Route. Therefore, the project is expected to result in no impacts.

**b) No Impact:** The proposed project would not conflict with any applicable land use, plan, policy, or regulation. The project is expected to result in no impacts.

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

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

**2.12 MINERAL RESOURCES**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Regulatory Setting**

The Surface Mining and Reclamation Act (SMARA) was framed to address the loss of regionally substantial material deposits to land uses that preclude mining. SMARA mandates a two-phased mineral resource conservation process called classification-designation. The California Division of Mines and Geology (CDMG) is responsible under SMARA for carrying out the classification phase of the process. The State Mining and Geology Board is responsible for the second phase, which allows the State Mining and Geology Board to designate areas in production-consumption region that contain substantial deposits of Portland cement concrete grade aggregate (valued for its importance in construction and versatility) that may be needed to meet the region’s future demand.

**CEQA Significance Determinations for Mineral Resources**

**a) No Impact:** According to the General Plan Land Use Map, the proposed project is not located in an area designated as Mineral Resources. Therefore, there are no impacts expected.

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

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

No avoidance, minimization, or mitigation measures are required for mineral resources

**2.13 NOISE**

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) For a project 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"/>

## Regulatory Setting

### *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 significance 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.

### CEQA Significance Determinations for Noise

- a) **No Impact.** The project would not expose people to or generate noise levels in excess of standards established in a general plan or noise ordinance, or applicable standards of other agencies. The project is a Type III project under 23 CFR 772.7; therefore, Caltrans Engineering determined that a noise study report was not required for the project. There would be no noise impact.
- b) **No Impact.** Any groundborne noise or vibration would be limited to the construction period and would be short in duration. Because there are no noise- or vibration- sensitive uses located in the immediate project vicinity and because the proposed project would comply with Caltrans' Standard Specifications, no impacts would occur.

- c) **No Impact.** The proposed project is not within two miles of an airport and there are no habitable structures near the proposed project. Therefore, no noise impacts related to air traffic would occur.

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

No measures are required.

**2.14 POPULATION AND HOUSING**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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"/>

**Regulatory Setting**

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...”

**CEQA Significance Determinations for Population and Housing**

**a) No Impact:** The proposed project would not induce substantial population growth in an area, either directly or indirectly. Therefore, there will be no impacts.

**b) No Impact:** The proposed project would not necessitate the relocation of any developments and/or people. No impacts on population and housing would occur as a result of the proposed project.

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

No measures are required.

**2.15 PUBLIC SERVICES**

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

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Regulatory Setting**

In accordance with CEQA Guidelines, Environmental Checklist Form, Appendix G (XIII. Public Services), the effects of a project are evaluated to determine if they will result in a substantial adverse impact on the environment. A substantial impact would occur if the project would result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or result in the need for new or physically altered governmental facilities, the construction of which could cause substantial environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services including fire protection, police protection, or other public facilities.

**CEQA Significance Determinations for Public Services**

**a) No Impacts**

**Response to Fire protection and Police protection: No Impact.** The proposed project would not affect the level of services on SR-74, SR-79, and SR-371. The proposed project would not result in an increase in population, and therefore would not increase the demand for community services. No fire stations would be acquired or displaced. The project would not induce growth or increase population in the study area or the greater community beyond that previously planned for and would not result in the need for additional fire protection. During construction, the Arroyo Seco bridge will have a one lane traffic control by signalized lighting.

**Response to Schools: No Impact.** No schools are located near the project vicinity. The proposed project would not result in accessibility problems to existing schools and is not expecting to result in any other impacts on school services. As such, there are no impacts.

**Response to Parks: No Impact.** No parks exist that border the project limits; therefore, no impacts on parks are anticipated.

**Response to Other Public Facilities: No Impact.** There are no public facilities in the immediate project area. Therefore, there would be no impact on public facilities as a result of construction or operation of the project.

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

No mitigation is required; however, the following avoidance and/or minimization measures will be implemented to minimize potential impacts:

TRF-1: A Transportation Management Plan will be prepared and coordinated with the local emergency responders.

**2.16 RECREATION**

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Regulatory Setting**

In accordance with CEQA Guidelines, Environmental Checklist Form, Appendix G (XIV. Recreation), the effects of a project are evaluated to determine if they will result in a substantial adverse impact on the environment. A substantial impact would occur if the project would result in an increase in use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Impacts would also occur if the project were to include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect of the environment.

**CEQA Significance Determinations for Recreation**

**a) No Impact:** The proposed project does not have the capacity to generate a substantial increase to use of any existing neighborhood parks, regional parks, or other recreational facilities such that physical deterioration would occur. There are no impacts anticipated.

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

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

No measures are required.

**2.17 TRANSPORTATION/TRAFFIC**

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

**Regulatory Setting**

The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act (CEQA). Environmental impact thresholds as indicated in Appendix G of the CEQA Guidelines were also used in this analysis. The project would create a substantial impact if it would do on of the following: Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and nonmotorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways, and freeways, pedestrians and bicycle paths and mass transit, conflict with applicable congestion management program, result in a change to air traffic patterns, increase hazards due to a design feature, result in inadequate emergency access, or conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

**CEQA Significance Determinations for Transportation/Traffic**

**a) No Impact:** The proposed project would not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. No impacts are anticipated.

**b) No Impact:** The proposed project would not conflict or be inconsistent with CEQA guidelines section 15064.3, subdivision (b). The project is not a capacity increasing project and would not increase the “vehicle miles traveled.” Therefore, no impacts are anticipated.

**c) No Impact:** The proposed project is upgrading the bridge rail, extending a box culvert, and replacing a bridge. It will not substantially increase hazards due to geometric design features or incompatible uses. As such, the proposed project does not anticipate impacts.

**d) No Impact:** No impacts are anticipated. The project has a total of 240 working days. At the Arroyo Seco Bridge location, a one lane traffic control by signalized lighting will be present. Traffic during construction will be detailed in the Traffic Management Plan and shared with emergency responders. No impacts are anticipated.

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

No measures are required.

**2.18 TRIBAL CULTURAL RESOURCES**

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

- 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
- 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.

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Tribal Cultural Resources**

- a) **No Impact:** There are no tribal cultural resources near or within the project study area and, therefore, the project would have no impact on any tribal cultural resources.
- b) **No Impact:** There are no significant resources for a California Native American tribe identified near or within the project study area.

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

Implementation of measures **CR-1**, and **CR-2**, as described in the Cultural Resources Section above will reduce any potentially significant impacts from the proposed project to tribal cultural resources that may be inadvertently discovered during construction.

**2.19 UTILITIES AND SERVICE SYSTEMS**

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the construction of new water or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction 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 otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CEQA Significance Determinations for Utilities and Service Systems**

**a) No Impact:** Construction of the project would not require or result in the the need for new water or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunication facilities. No impacts would occur.

**b) No Impact:** The project would not require a water supply, as there are no existing entitlements or resources within the project area. No impacts would occur.

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

**d) No Impact:** The project would not generate solid waste in excess of State or local standards, or impair the attainment of solid waste reduction goals. No impacts are anticipated.

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

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

No measures are required.

**2.20 WILDFIRES**

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 Wildfires**

According to the map by CalFire’s Fire and Resource Assessment Program (<https://egis.fire.ca.gov/FHSZ/>), the Leach Canyon Bridge and the Blue Ridge Wash Bridge are located in a Locally Responsible Area. Arroyo Seco Bridge is located in a State Responsible Area but borders a Federally Responsible Area. Cahuilla Creek is located within a Federally Responsible Area.

The Wildfire Hazard Potential (WHP) map, developed by the USFS, designated Leach Canyon and Blue Ridge Wash to be in a “Non-burnable” area. The surrounding area outside of the project limits are considered to be “Moderate.” Arroyo Seco Bridge is in a “Very High” burn area. Cahuilla Creek is located within a “High” burning area. During construction, a California Inter-Agency Burning permit from the USFS will be obtained. The permit specifies the location, work that will be done, and the time frame of the project (in both hours and construction months). To reduce the potential of a fire being caused by the project, there are “BURN DAYS. “BURN DAYS” are days in which weather conditions are safe. It is unsafe to burn on hot, dry periods, when winds are strong enough to keep leaves and twigs in constant motion.

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

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

**c) No Impact:** The installation or maintenance of associated infrastructure is not part of the project scope. No impacts are expected.

**d) No Impact:** The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides. As mentioned under Section VII, Geology and Soils, the project locations are not within a landslide area and the probability is low.

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

No measures are required.

**2.21. MANDATORY FINDINGS OF SIGNIFICANCE**

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

**a) Less Than Significant with Mitigation Incorporated:** The proposed project would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal species. Avoidance and/or minimization measure **BIO-1** would be implemented to ensure the proposed project would result in less-than-significant impact with mitigation incorporated.

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

**c) No Impact:** The project would no have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. As such, the proposed project is expected to result in no impacts.

# Chapter 3 Climate Change

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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. Addressing these factors up front in the planning process will assist in decision-making and improve efficiency at the program level, and will inform the analysis and stewardship needs of project-level decision-making.

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 on the basis of 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<sup>3</sup> 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. The current standards require vehicles to meet an average fuel economy of 34.1 miles per gallon by 2016. EPA and NHTSA are currently considering appropriate mileage and GHG emissions standards for 2022–2025 light-duty vehicles for future rulemaking.

NHTSA and EPA issued a Final Rule for “Phase 2” for medium- and heavy-duty vehicles to improve fuel efficiency and cut carbon pollution in October 2016. The agencies estimate that the standards will save up to 2 billion barrels of oil and reduce CO<sub>2</sub> emissions by up to 1.1 billion metric tons over the lifetimes of model year 2018–2027 vehicles.

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<sup>3</sup> U.S. EPA’s authority to regulate GHG emissions stems from the U.S. Supreme Court decision in *Massachusetts v. EPA* (2007). The Supreme Court ruled that GHGs meet the definition of air pollutants under the existing Clean Air Act and must be regulated if these gases could be reasonably anticipated to endanger public health or welfare. Responding to the Court’s ruling, U.S. EPA finalized an endangerment finding in December 2009. Based on scientific evidence it found that six GHGs constitute a threat to public health and welfare. Thus, it is the Supreme Court’s interpretation of the existing Act and EPA’s assessment of the scientific evidence that form the basis for EPA’s regulatory actions (U.S. EPA 2009).

## 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.

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.

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>4</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.

Senate Bill 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 greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

Senate Bill 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.

Executive Order 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.

## **Environmental Setting**

The proposed project is located on various routes in Riverside County. Bridge A is located on SR-74 at PM 13.2 in the City of Lake Elsinore. Leach Canyon Bridge is located between the Orange County Line and I-15 freeway. This route is used by passenger vehicles and commercial trucks that are commuting to Orange County. This bridge includes the upgrade of bridge rail. Bridge B is located on SR-74 at PM 33.9 in the City of Hemet. The Blue Ridge

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<sup>4</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>.

Wash is located between I-215 and SR-79. The rails will be upgraded and the box culvert will be extended. Bridge C is located on SR-79 and the route is used by passenger vehicles. The Arroyo Seco bridge will be completely replaced. Bridge D, Cahuilla Creek, is located on the Route 371. Cahuilla Creek is located between SR-79 and SR-74. This bridge will receive an upgrade to the bridge rails. Bridges A and B are located near residences and businesses while Bridges C and D are located in areas where there are no residences in the immediate project vicinity.

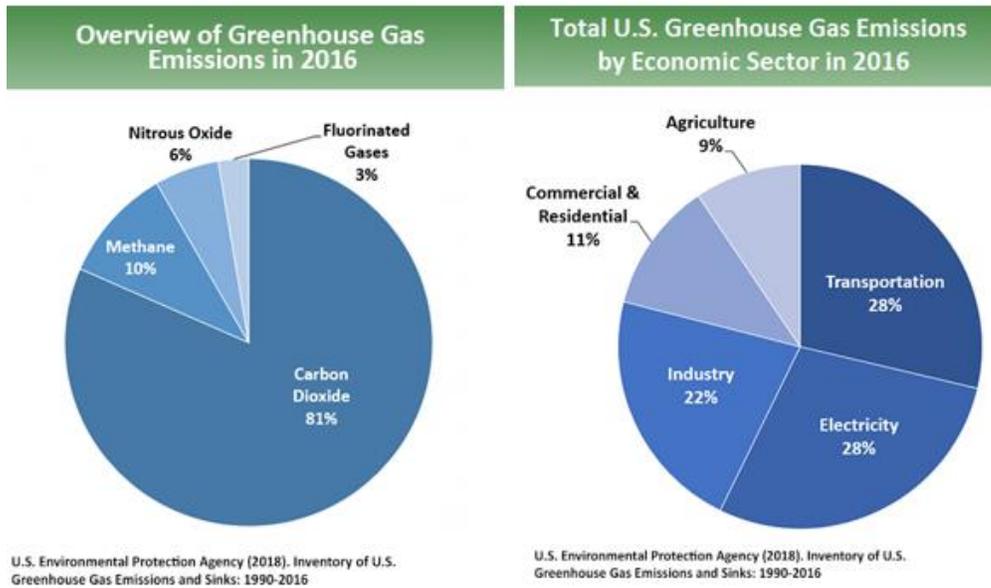
The Southern California Association of Governments (SCAG) Regional Transportation Plan guides transportation development in Riverside County; however, the project is not a highway or road project, and would not affect transportation in the project area; therefore the regional transportation plan would not apply.

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.

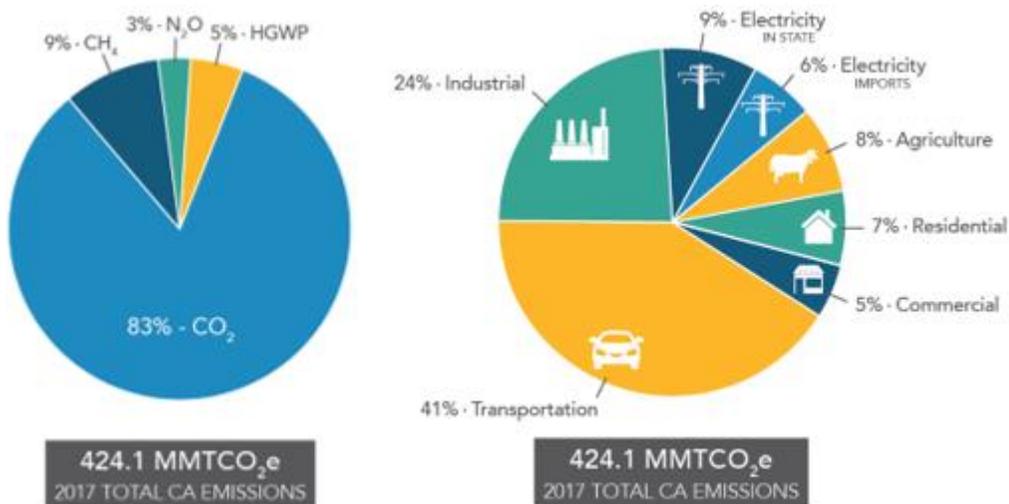
**Figure 4-1 U.S. Greenhouse Gas Emissions**



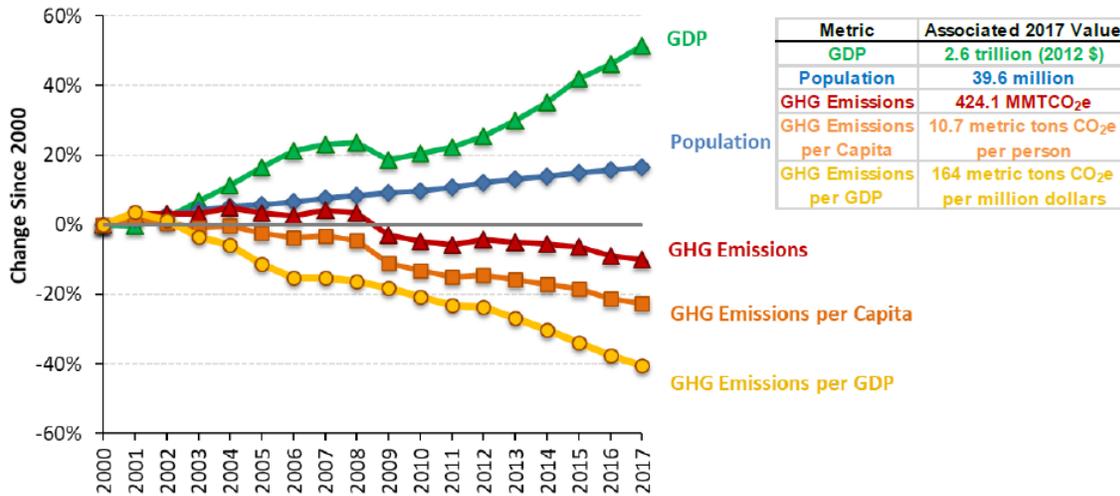
**State GHG Inventory**

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 4-2. California 2017 Greenhouse Gas Emissions**



**Figure 4-3. 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 RTP/SCSs 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 regional reduction target for SCAG is 8 percent by 2020 and 19 percent by 2035 (ARB 2019). The project area also is within the geography of the Western Riverside Council of Governments' Subregional Climate Action Plan (WRCOG 2014), which shares sustainability goals with the SCAG RTP/SCS and other local energy, GHG, and sustainability programs.

### 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**

The proposed project involves bridge rail upgrades, a box culvert extension, and a bridge replacement on SR-74, SR-79, and SR-371. Because the project would not increase the number of travel lanes, no increase in vehicle miles traveled (VMT) would occur as result of the project implementation, and traffic volumes are anticipated to be the same under the Build Alternative and No-Build Alternative. Although GHG emissions during the construction period (as discussed below) would be unavoidable, no increase in operational GHG emissions is expected.

### **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.

Construction-period GHG emissions were modeled using the Sacramento Metropolitan Air Quality Management District Road Construction Emissions Model, version 9.0.0. Short-term construction activities would result in GHG emissions from fuel combustion associated with off- and on-road construction equipment and vehicles, which would result in estimated emissions of 166 tons of CO<sub>2</sub>-equivalent (CO<sub>2</sub>e)<sup>5</sup> over the approximately 12-month construction period.

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<sup>5</sup> Because GHGs differ in how much heat each traps in the atmosphere, and CO<sub>2</sub> is the most important GHG, amounts of other gases are expressed relative to CO<sub>2</sub>. Measurements are then summed to yield a total in metric tons of CO<sub>2</sub>-equivalent over a given time period. The Road Construction Emissions Model calculates only CO<sub>2</sub>, methane, and nitrous oxide.

The project would comply with all requirements of the South Coast Air Quality Management District. In addition, Caltrans Standard Specifications Section 14-9, Air Quality, a part of all construction contracts, requires contractors to comply with all federal, state, regional, and local rules, regulations, and ordinances related to air quality. Measures that reduce vehicle emissions and energy use also reduce GHG emissions. Under Avoidance and Minimization Measure TRF-2, a traffic management plan will be implemented to minimize traffic delays and associated idling emissions during construction.

### **CEQA Conclusion**

While the project would result in a slight increase in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. With implementation of construction GHG-reduction measures, the impact would be less than significant.

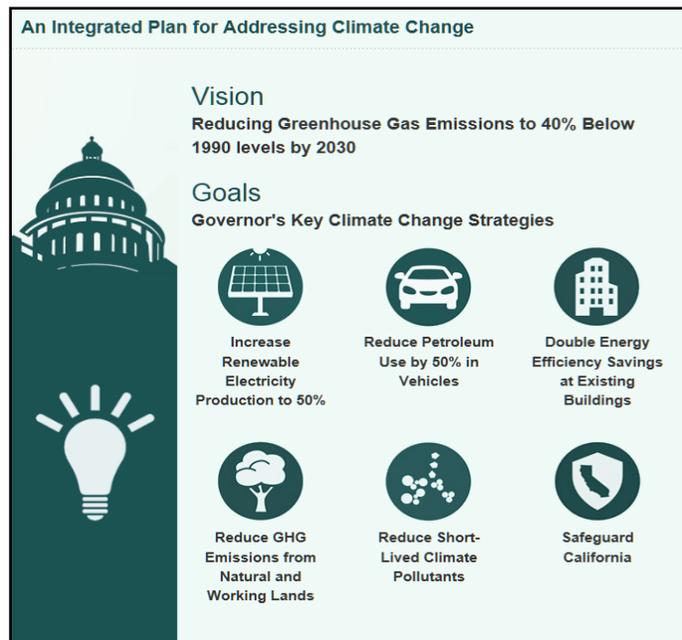
Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

### **GREENHOUSE GAS REDUCTION STRATEGIES**

#### ***Statewide Efforts***

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 4-4. 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 per capita

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.

Implementation of a TMP would involve strategies to maintain traffic safety through the construction zone and to minimize traffic delays (TRF-1). The reduction of traffic delays would also reduce short-term increases in GHG emissions from disruptions in traffic flow.

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.

Caltrans Standard Specifications Section 14-9, Air Quality, a part of all construction contracts, requires contractors to comply with all federal, state, regional, and local rules, regulations, and ordinances related to air quality.

Requirements of the SCAQMD would apply to this project. Requirements that reduce vehicle emissions, such as limits on idling time, may help reduce GHG emissions.

Caltrans Standard Specifications Section 14-9, Air Quality, a part of all construction contracts, requires contractors to comply with all federal, state, regional, and local rules, regulations, and ordinances related to air quality. South Coast Air Quality Management District regulations would apply in the project area. Measures that reduce vehicle emissions and energy use also reduce GHG emissions.

Consistent with the Program Environmental Impact Report prepared for the SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, the project will minimize GHG emissions by recycling construction debris to maximum extent feasible and using energy- and fuel-efficient vehicles and equipment that meet or exceed EPA/NHTSA/CARB standards.

### ***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 (USGRCP) 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).

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 latest 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 Analysis

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

#### Floodplain

At the Leach Canyon Bridge, the channel enters the study area near the middle of the northwest boundary and exits through the middle of the southeast boundary. However, the site is completely lined with concrete.

In the National Flood Hazard Layer, provided by FEMA, the Blue Ridge Wash Bridge is identified to be in Zone AE. Zone AE presents a 1 percent annual chance of flooding and is prone to flooding.

According to the NES(MI), the Arroyo Seco Bridge is located over the Arroyo Seco Creek. The creek enters the study area near the middle of the northern boundary and flows for 80 feet before exiting the site through the middle of the southern boundary.

The view in GoogleEarth (2019) shows no permanent water bodies in the project vicinity of all locations. The draft climate vulnerability assessment for District 8 (Caltrans 2018) maps

of projected precipitation changes indicate a potential increase of up to 9.9 percent in 100-year storm precipitation through 2085.

## Wildfire

According to the map by CalFire's Fire and Resource Assessment Program (<https://egis.fire.ca.gov/FHSZ/>), the Leach Canyon Bridge and the Blue Ridge Wash Bridge are located in a Locally Responsible Area. Arroyo Seco Bridge is located in a State Responsible Area but borders a Federally Responsible Area. Cahuilla Creek is located within a Federally Responsible Area.

Wildfires are a risk in the project area and modeling conducted for the District 8 Draft Climate Vulnerability Assessment Risk show an increased likelihood in wildfires throughout the area. However, the project itself would not introduce new structures to the area that would increase the risk of wildfire, regardless of long-term climate effects. Caltrans standard plans include provisions to prevent construction-related fire such as following Cal Fire and Forest Service guidelines for equipment use, control of flammable materials, use of fuel breaks, and fire monitoring when fire danger ratings are "very high", "extreme", or "red flag" warnings are issued, as provided in Caltrans Standard Plan section 7-1.02M(2). The proposed project activities would take place within Caltrans right-of-way.

## Chapter 4 Comments and Coordination

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Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings, public meetings, public notices, Project Development Team (PDT) meetings. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

Consultation with several agencies occurred in conjunction with preparation of the proposed project technical reports and this IS/CE. These agencies are identified in the various technical reports and include the United States Fish and Wildlife Service, California Department of Fish and Wildlife Service, United States Army Corp of Engineers, and

### 4.1 Consultation and Coordination with Public Agencies and Tribal Governments

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

#### 4.1.1 United States Fish and Wildlife Service

February 4, 2019, Caltrans Senior Environmental Planner Craig Wentworth and Associate Environmental Planner (Biologist) Nancy Frost participated in a call with John Taylor (USFWS contact), and Kim Romich (CDFW contact) regarding the Arroyo Seco Bridge work in arroyo toad critical habitat. Both Wildlife Agency representatives agreed that project impacts to arroyo toad critical habitat can be permitted through a Streamlined Biological Opinion (BO) through the WRMSHCP.

February 13, 2019, Craig Wentworth and Nancy Frost called John Taylor to inform him that there will be road widening (0.01 acre north of road and 0.03 acre south of road) on USFS land east of the Arroyo Seco Bridge. Since this impact area is minimal, in the disturbed right-of-way, and not suitable upland habitat for arroyo toad, John Taylor agreed that Caltrans can continue the plan to get a streamlined BO through the WRMSHCP.

February 27, 2019, Nancy Frost called Kirsten Winter to inform her of the following: Caltrans is replacing the Arroyo Seco Bridge; the bridge is in the MSHCP boundary but there will be a minimal amount of road widening east of the bridge in the Forest Service boundary but within the Caltrans ROW; and both CDFW and USFWS are in support of a streamlined BO for impacts to arroyo toad critical habitat done through the MSHCP. Kirsten Winter mentioned that the cliff swallows have abandoned the Arroyo Seco Bridge, perhaps due to the drought, but they may recolonize due to recent rains. Caltrans agreed to include a measure in this report to perform preconstruction bat surveys.

June 28, 2019, the Wildlife Agencies found the Project consistent with the Western Riverside MSHCP.

July 9, 2019, received Biological Opinion.

#### 4.1.2 California Department of Fish and Wildlife Service

February 14, 2019, during a pre-application meeting with Kim Romich agreed that Caltrans can continue the plan to get a streamlined BO through the WRMSHCP, even though there will be a minimal amount of road widening (0.04 acre) on USFS land east of Arroyo Seco Bridge.

#### 4.1.3 United States Forest Service (Cleveland National Forest):

May 2, 2018 an email to Caltrans Project Manager Rafael Youssef, with a cc to USFS staff, Kirsten Winter and Joseph Raffaele: "Our Forest Wildlife Biologist, Kirsten Winter, reports the Arroyo Seco Bridge has big nesting colony of cliff swallows, and possibly is a bat roost."

#### 4.1.2 AB 52 Consultation

October and November of 2019, Caltrans contracted The Cahuilla Band of Indians, Pala Band of Mission Indians, Pechanga Band of Luiseno Indians, Ramona Band of Cahuilla Indians, Rincon Band of Luiseno Indians, Santa Rosa Band of Indians, and Soboba Band of Luiseno Indians. No tribe expressed concerns with the project.

## Chapter 5 List of Preparers

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Malisa Lieng, Environmental Planner, Generalist

Gary Jones, Associate Environmental Planner, Archaeologist

Mary Smith, Associate Environmental Planner, Architectural Historian

Maria Hamlett, Environmental Planner, Biological Regulatory Permits

Nancy Frost, Associate Environmental Planner, Natural Sciences

Bahram Karimi, Associate Environmental Planner, Paleontology Coordinator

Rodrigo Panganiban, Transportation Engineer

Paul Phan, Senior Transportation Engineer

Kurt Heidelberg, Supervising Environmental Planner

Adam Compton, Senior of Biological Regulatory Permits

Andrew Walters, Senior of Environmental Cultural Studies

Craig Wentworth, Senior Environmental Planner

Shawn Oriaz, Senior Environmental Planner

## Chapter 6 Distribution List

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A compact disc copy of this Initial Study with Proposed Mitigated Negative Declaration (IS and/or a Notice of Availability) was distributed to the federal, state, regional, local agencies and elected officials. In addition, all interested groups, organizations, and individuals within a 0.5-mile radius of the project limits were provided the Notice of Availability for the Draft IS.

### Agencies

U.S. Forest Service, Cleveland National Forest  
10845 Rancho Bernardo Road, Ste. 200  
San Diego, CA 92408

Riverside County Planning Dept.  
4080 Lemon Street, 12<sup>th</sup> Floor  
PO Box 1409  
Riverside, CA 92502-1409

Santa Ana Regional Water Quality Control Board  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

San Diego Regional Water Quality Control Board  
2375 Northside Drive,  
San Diego, CA 92108

South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765

Riverside County Clerk  
2724 Gateway Drive,  
Riverside, CA 92507

U.S. Fish and Wildlife Service  
Region 8  
2800 Cottage Way  
Sacramento, CA 95825-1846

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

California State Assembly, District 67  
Melissa Melendez  
41391 Kalmia Street, Ste. 220,  
Murrieta, CA 92562

California State Assembly, District 71  
Randy Voepel  
8760 Cuyamaca Street, Ste. 201  
Santee, CA 92071

Riverside County Flood Control  
1995 Market Street  
Riverside, CA 92501

# Appendix A Title VI Policy Statement

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STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

EDMUND G. BROWN Jr., Governor

**DEPARTMENT OF TRANSPORTATION**  
OFFICE OF THE DIRECTOR  
P.O. BOX 942873, MS-49  
SACRAMENTO, CA 94273-0001  
PHONE (916) 654-6130  
FAX (916) 653-5776  
TTY 711  
www.dot.ca.gov



*Making Conservation  
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

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

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

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

Permit Type	Agency	Date Received	Expiration	Notes
1602	California Department of Fish & Wildlife			
401	Regional Water Quality Control Board			
404	US Army Corp of Engineers			

Date of ECR: Aug. 29, 2019  
Date: (June 28, 2019 CE/CE)

## ENVIRONMENTAL COMMITMENTS RECORD

### (RIV 74/79/371 Upgrade to Standard Bridge Rail, Bridge Replacement, and Extension of a Box Culvert)

08-SBd-40  
PM 0.2 / 0.6

Project Phase:  
 PA/ED (DED/FED)  
 PS&E Submittal 95 %  
 RTL  
 Construction

EA 08-1C6801  
PN 08120000343  
Generalist: Malisa Lieng  
ECL: John Stanton

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><u>CULTURAL RESOURCES</u></b>										
<b>CR-1</b> If buried cultural resources are encountered during Project Activities, it is Caltrans policy that work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.	N/A	District Environmental Cultural Resources Jan. 22, 2019	District Cultural Studies/ District Design/ Resident Engineer/ Contractor	Design/Construction	Standard Special Provision 14-2.03A					
<b>CR-2</b> In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to	N/A	District Environmental Cultural Resources	District Cultural Studies/ District Design/ Resident	Final Design, Construction	Standard Special Provision 14-2.03A					

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
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, DEBC: (909) 383-2647 and Gary Jones, DNAC: (909) 383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.		Jan. 22, 2019	Engineer/ Contractor							

<b>HAZARDOUS WASTE / MATERIALS</b>									
<p><b>HAZ-1:</b> Arroyo Seco Bridge:</p> <p>Notify the US EPA and the CA Air Resources Board of your demolition activities even if the activities will not disturb asbestos-containing material.</p>	N/A	ISA Checklist	<p>a. Division of Environmental Engineering/</p> <p>b. District Design/</p> <p>c. Resident Engineer/</p> <p>d. <b>Contractor</b></p>	Design/Construction	SSP 14-9.02				

## **Appendix C List of Technical Studies**

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- Section 106 Compliance – Screened Undertaking January 22, 2019.
- Initial Site Assessment Checklist June 13, 2019.
- Natural Environment Study (Minimal Impacts) June 28, 2019.
- The Structure Replacement and Improvement Needs Report (STRAIN) October 2014