

SR-74 BRIDGE REPLACEMENT PROJECT

RIVERSIDE COUNTY, CALIFORNIA
DISTRICT 8 – RIV – 74 (PM 2.9/3.2 & 53.3/53.5)
EA 08-1G470
PN 0816000001

Initial Study with Mitigated Negative Declaration/Environmental Assessment and Final Section 4(f) Evaluation with Finding of No Significant Impact



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

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



March 2021

This page intentionally left blank.

General Information about This Document

The California Department of Transportation (Department), as assigned by the Federal Highway Administration (FHWA), has prepared this Initial Study with Mitigated Negative Declaration/Environmental Assessment (IS/EA), for the proposed project located in Riverside County, California. The Department is the lead agency under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization and/or mitigation measures. The Initial Study/Draft Environmental Assessment circulated to the public for 30 days between January 8, 2021 and February 8, 2021. Comments received during this period are included in Chapter 4. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document circulation. Minor editorial changes and clarifications have not been so indicated. This document is available for review and download at the following website: SR74BridgeReplacement.com

Alternative formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Terri Kasinga, Chief, Public and Media Affairs, 464 W. 4th Street, 6th floor, San Bernardino, CA 92401-1400; (909) 383-4646; or use the California Relay Service 1-800-735-2929 (TTY to Voice), 1-800-735-2922 (Voice to TTY), 1-800-855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech to Speech), or 711.

This page intentionally left blank.

Replace Morrill Canyon Bridge (Bridge No. 56 0169, PM 3.08) and Strawberry Creek Bridge (Bridge No. 56 0180, PM 53.5) on State Route 74 in Riverside County, California.

**Initial Study with Mitigated Negative Declaration/
Environmental Assessment and Final Section 4(f) Evaluation
with Finding of No Significant Impact**

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

THE STATE OF CALIFORNIA
Department of Transportation

3/19/2021

Date of Approval



David Bricker
Deputy District Director
District 8 Division of Environmental Planning
California Department of Transportation
NEPA and CEQA Lead Agency

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

Renetta Cloud
Senior Environmental Planner
California Department of Transportation
464 W. Fourth Street, MS-823
San Bernardino, CA 92401-1400

This page intentionally left blank.



**CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)**

FOR

SR-74 Bridge Replacement Project

The California Department of Transportation (Caltrans) has determined that Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternative S1 will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA) which has been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA.

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

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

3/19/2021

Date

This page intentionally left blank.

Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (the Department or Caltrans) proposes to replace Morrill Canyon Bridge (Bridge No. 56 0169, Post Mile [PM] 3.08) and Strawberry Creek Bridge (Bridge No. 56 0180, PM 53.5) on State Route 74 (SR-74) in Riverside County.

Determination

The Department has prepared an Initial Study for this project, and following public review, has determined 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 hydrology and water quality, land use and planning, mineral resources, paleontological resources, population and housing, public services, recreation, and tribal cultural resources.
- In addition, the proposed project would have less-than-significant effects on aesthetics, agriculture and forest resources, air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, utilities and service systems, transportation, and wildfire.
- With the following mitigation measures incorporated, the proposed project would have less-than-significant effects on biological resources and cultural resources:

BIO-18 The project will mitigate for temporary impacts through restoration and enhancement of onsite riparian/riverine areas.

BIO-19 Permanent impacts on riparian/riverine habitat and federal/state jurisdictional waters are proposed to be mitigated by either purchase of suitable mitigation bank credits or through permittee-responsible mitigation. For either option, the mitigation will be done prior to project impacts, and Caltrans will coordinate with the Wildlife/Regulatory Agencies on which mitigation option is optimal/available based on project timelines.

BIO-20 Relocation Plan. An exclusionary fencing and relocation plan for arroyo toad must be submitted to the USFWS and CDFW for approval prior to commencing project activities.

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

CR-2 In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendant (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.

HIST-1 Historic American Engineering Record (HAER). Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior

Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.

Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).

Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.

Caltrans shall notify State Historic Preservation Officer (SHPO) that the documentation is complete and all copies distributed, as outlined in the paragraph above, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.

HIST-2 Caltrans District 8 Professionally Qualified Staff (PQS) shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures (masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original materials will be considered as an option.

HIST-3 Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway.

HIST-4 Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans Cultural Studies Office (CSO) Mitigation Website prior to termination of this Memorandum of Agreement (MOA). The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.

HIST-5 Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in the MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to MOA Stipulation IV F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor

shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of the MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in MOA Stipulation II.A-II.D (also identified as HIST-1 through HIST-5) of this stipulation have been met.

HIST-6 As legally mandated, human remains, and related items discovered during the implementation of the terms of the MOA and the undertaking will be treated in accordance with requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Section 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined the California Native American Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.

HIST-7 If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13 (c) assume any discovered property to be eligible for inclusion in the National Register.



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

3/19/2021

Date

This page intentionally left blank.

Table of Contents

Chapter 1	Proposed Project.....	1-1
1.1	NEPA Assignment.....	1-1
1.2	Introduction	1-1
1.2.1	Existing Facilities.....	1-1
1.3	Purpose and Need	1-11
1.3.1	Purpose.....	1-11
1.3.2	Need.....	1-11
1.3.3	Roadway Deficiencies.....	1-12
1.3.4	Social Demands or Economic Development.....	1-13
1.3.5	Air Quality Improvements.....	1-13
1.3.6	Independent Utility and Logical Termini	1-13
1.4	Project Description	1-14
1.5	Alternatives	1-14
1.5.1	Project Alternatives	1-14
1.5.2	Common Design Features of the Build Alternatives	1-21
1.5.3	Unique Features of the Build Alternatives	1-21
1.6	Project Features	1-22
1.7	Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives	1-22
1.7.1	No-Build Alternative	1-22
1.8	Comparison of Alternatives	1-23
1.9	Identification of a Preferred Alternative	1-23
1.10	Alternatives Considered But Eliminated from Further Discussion	1-23
1.10.1	Strawberry Creek Bridge Alternative S2	1-23
1.10.2	Strawberry Creek Bridge Alternative S4	1-23
1.10.3	Strawberry Creek Bridge Alternative S5	1-24
1.10.4	Morrill Canyon Bridge Alternative M2.....	1-24
1.10.5	Morrill Canyon Bridge Alternative M3.....	1-24
1.11	Permits and Approvals Needed.....	1-24
Chapter 2.	Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures	2-1
2.1	Human Environment	2-2
2.1.1	Parks and Recreational Facilities.....	2-2
2.1.2	Timberland	2-5
2.1.3	Utilities/Emergency Services.....	2-7
2.1.4	Traffic and Transportation/Pedestrian and Bicycle Facilities.....	2-8
2.1.5	Visual/Aesthetics.....	2-11
2.1.6	Cultural Resources.....	2-13

2.2	Physical Environment.....	2-21
2.2.1	Water Quality and Storm Water Runoff.....	2-21
2.2.2	Geology/Soils/Seismicity/Topography.....	2-27
2.2.3	Hazardous Waste/Materials	2-31
2.3	Biological Environment.....	2-37
2.3.1	Natural Communities.....	2-37
2.3.2	Wetlands and Other Waters.....	2-42
2.3.3	Plant Species	2-49
2.3.4	Animal Species	2-55
2.3.5	Threatened and Endangered Species	2-68
2.3.6	Invasive Species	2-73
2.4	Cumulative Impacts.....	2-75
2.4.1	Regulatory Setting.....	2-75
2.4.2	Methodology.....	2-75
2.4.3	Resources Evaluated for Potential Cumulative Impacts.....	2-76
2.4.4	Avoidance, Minimization, and Mitigation Measures	2-79
Chapter 3	CEQA Evaluation	3-1
3.1	Determining Significance under CEQA	3-1
3.2	CEQA Environmental Checklist.....	3-1
	I. Aesthetics.....	3-2
	II. Agriculture and Forest Resources.....	3-3
	III. Air Quality.....	3-4
	IV. Biological Resources	3-5
	V. Cultural Resources	3-9
	VI. Energy.....	3-14
	VII. Geology and Soils.....	3-14
	VIII. Greenhouse Gas Emissions	3-17
	IX. Hazards and Hazardous Materials.....	3-17
	X. Hydrology and Water Quality	3-19
	XI. Land Use and Planning.....	3-20
	XII. Mineral Resources	3-20
	XIII. Noise.....	3-21
	XIV. Population and Housing	3-22
	XV. Public Services	3-22
	XVI. Recreation	3-23
	XVII. Transportation	3-24
	XVIII. Tribal Cultural Resources	3-25
	XIX. Utilities and Service Systems	3-26
	XX. Wildfire.....	3-27
	XXI. Mandatory Findings of Significance.....	3-28
3.3	Climate Change	3-30
	Regulatory Setting.....	3-30
	Environmental Setting	3-33

	Project Analysis.....	3-37
	Greenhouse Gas Reduction Strategies.....	3-38
	Adaptation	3-41
Chapter 4	Comments and Coordination	4-1
4.1	Consultation and Coordination	4-1
4.1.1	Project Development Team Meetings	4-1
4.1.2	Public Hearing.....	4-1
4.1.3	U.S. Fish and Wildlife Service	4-2
4.1.4	Native American Coordination	4-2
4.1.5	Local Historical Society/Historic Preservation Group	4-3
4.1.6	United States Forest Service	4-4
4.1.7	Department of Parks and Recreation, Office of Historic Preservation	4-4
4.2	Agency Coordination Documentation	4-5
4.3	Public Participation.....	4-5
Chapter 5	List of Preparers	5-1
Chapter 6	Distribution List	6-1
6.1	Agencies	6-1
6.2	Interested Groups, Organizations, and Individuals	6-3
 Appendix A Section 4(f)		
Appendix B Title VI Policy Statement		
Appendix C Environmental Commitments Record		
Appendix D Acronyms and Abbreviations		
Appendix E References		
Appendix F List of Technical Studies		

Tables

Table		Page
1-1	Collision Data	1-11
1-2	Type of Collisions (in Percent)	1-11
1-3	Primary Collision Factors (in Percent).....	1-12
1-4	Design Exceptions Common to All Build Alternatives	1-21
1-5	Required Permits, Reviews, and Approvals	1-25
2.1-1	Public Parks, Trails and Other Recreational Facilities within 0.5 Mile of the Project Limits	2-3
2.1-2	Existing, Future Year ADT Volumes (Morrill Canyon Bridge PM 2.9/3.2)	2-9
2.1-3	Existing, Future Year ADT Volumes (Strawberry Creek Bridge PM 53.4/53.7)	2-9
2.3-1	Morrill Canyon Bridge Temporary Disturbance	2-39
2.3-2	Strawberry Creek Bridge Temporary Disturbance	2-39
2.3-3	Morrill Canyon Bridge Permanent Disturbance	2-40
2.3-4	Strawberry Creek Bridge Permanent Disturbance	2-41
2.3-5	Morrill Canyon Bridge Alternative M1 Impacts on Jurisdictional Areas	2-46
2.3-6	Strawberry Creek Bridge Alternative S1 Impacts on Jurisdictional Areas	2-46
2.3-7	Strawberry Creek Bridge Alternative S3 Impacts on Jurisdictional Areas	2-46
2.3-8	Plant Species	2-49
2.3-9	Animal Species – Amphibians.....	2-57
2.3-10	Animal Species – Birds	2-57
2.3-11	Animal Species – Crustaceans	2-58
2.3-12	Animal Species – Fish	2-59
2.3-13	Animal Species – Insects	2-59
2.3-14	Animal Species – Mammals	2-60
2.3-15	Animal Species – Reptiles.....	2-60
3-1	Regional Greenhouse Gas Reduction Policies	3-36

Figures

Figure		Page
1-1	Regional Vicinity.....	1-3
1-2	Project Location Map.....	1-5
1-2A	Morrill Canyon Bridge, Project Location Map	1-7
1-2B	Stawberry Creek Bridge, Project Location Map.....	1-9
1-3A	Morrill Canyon Bridge Alternative M1	1-15
1-3B	Strawberry Creek Bridge Alternative S1.....	1-17
1-3C	Strawberry Creek Bridge Alternative S3.....	1-19
3-1	U.S. 2016 Greenhouse Gas Emissions.....	3-34
3-2	California 2017 Greenhouse Gas Emissions	3-35
3-3	Change in California GDP, Population, and GHG Emissions Since 2000	3-35
3-4	California Climate Strategy.....	3-39

This page intentionally left blank.

Chapter 1 **Proposed Project**

1.1 NEPA Assignment

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

1.2 Introduction

The Department, as assigned by FHWA, is the lead agency under NEPA. It is also the lead agency under the California Environmental Quality Act (CEQA). The Department proposes to replace Morrill Canyon Bridge (Bridge No. 56-0169, post mile [PM] 3.08) and Strawberry Creek Bridge (Bridge No. 56-0180, PM 53.45) on State Route 74 (SR-74) in Riverside County. The existing bridges are rubble masonry arch culverts, which have nonstandard bridge rails that do not meet current federal crash standards. The existing bridges also have nonstandard lane and shoulder widths. Figures 1-1 and 1-2 are project location and vicinity maps.

1.2.1 Existing Facilities

1.2.1.1 State Route 74

SR-74 is a 2-lane undivided conventional highway with narrow right shoulders and steep embankments with a significant portion of it traversing mountainous terrain. It begins at Interstate 5 (I-5) near San Juan Capistrano in the County of Orange, and proceeds easterly to Interstate 10 (I-10) north of Palm Desert in Riverside County. SR-74 is not an Extralegal Load Network (ELLN) route. It is a Federal-Aid primary route and is included in the Freeway and Expressway System.

Morrill Canyon Bridge (Bridge No. 56-0169)

Morrill Canyon Bridge is located near Lake Elsinore at PM 3.08 along SR-74 and consists of 2 lanes with 10.5-foot lane widths, 1.5-foot paved left and right shoulder widths, with no median. The Morrill Canyon Bridge is a rubble masonry arch culvert structure built in 1931. Currently,

the bridge rails do not meet current federal crash standards, and the existing shoulder and lane widths do not comply with current design standards. There are also longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arch.

According to the June 2019 Preliminary Hydraulic Reports (PHR), the water surface elevation at Morrill Canyon Bridge for both 50-year and 100-year storm events exceed the bridge soffit for the existing condition. The existing bridge is not capable of accommodating storm events 50 years or higher and constructing a new bridge upstream or downstream of the existing bridge without removing the existing Morrill Canyon Bridge structure would impede the flow of water within Morrill Canyon. This impedance would flood the area upstream of the Morrill Canyon Bridge and overflow onto the roadway.

Strawberry Creek Bridge (Bridge No. 56-0180)

The Strawberry Creek Bridge is located near Hemet at PM 53.45 along SR-74 and consists of 2 lanes with 10.5-foot lane widths, 1.3-foot paved left and right shoulder widths, with no median. The Strawberry Creek Bridge is a rubble masonry arch culvert structure built in 1929. Currently, the bridge rails do not meet current federal crash standards, and the existing shoulder and lane widths do not comply with current design standards. There are also moderate transverse and map asphalt concrete (AC) cracks throughout the deck and minor to moderate longitudinal and transverse soffit cracks with efflorescence.

According to the June 2019 PHR, the existing Strawberry Creek Bridge structure would not accommodate 100-year storm events and would result in overtopping of the roadway. Based on the PHR, the existing bridge is not capable of accommodating storm events 100 years or higher, and constructing a new bridge upstream or downstream of the existing bridge would impede the flow of water within Strawberry Creek. This impedance would flood the area upstream of the Strawberry Creek Bridge and waterflow will overtop the roadway and the bridge.



Figure 1-1
Regional Vicinity Map
SR-74 Bridge Replacement Project

This page intentionally left blank.

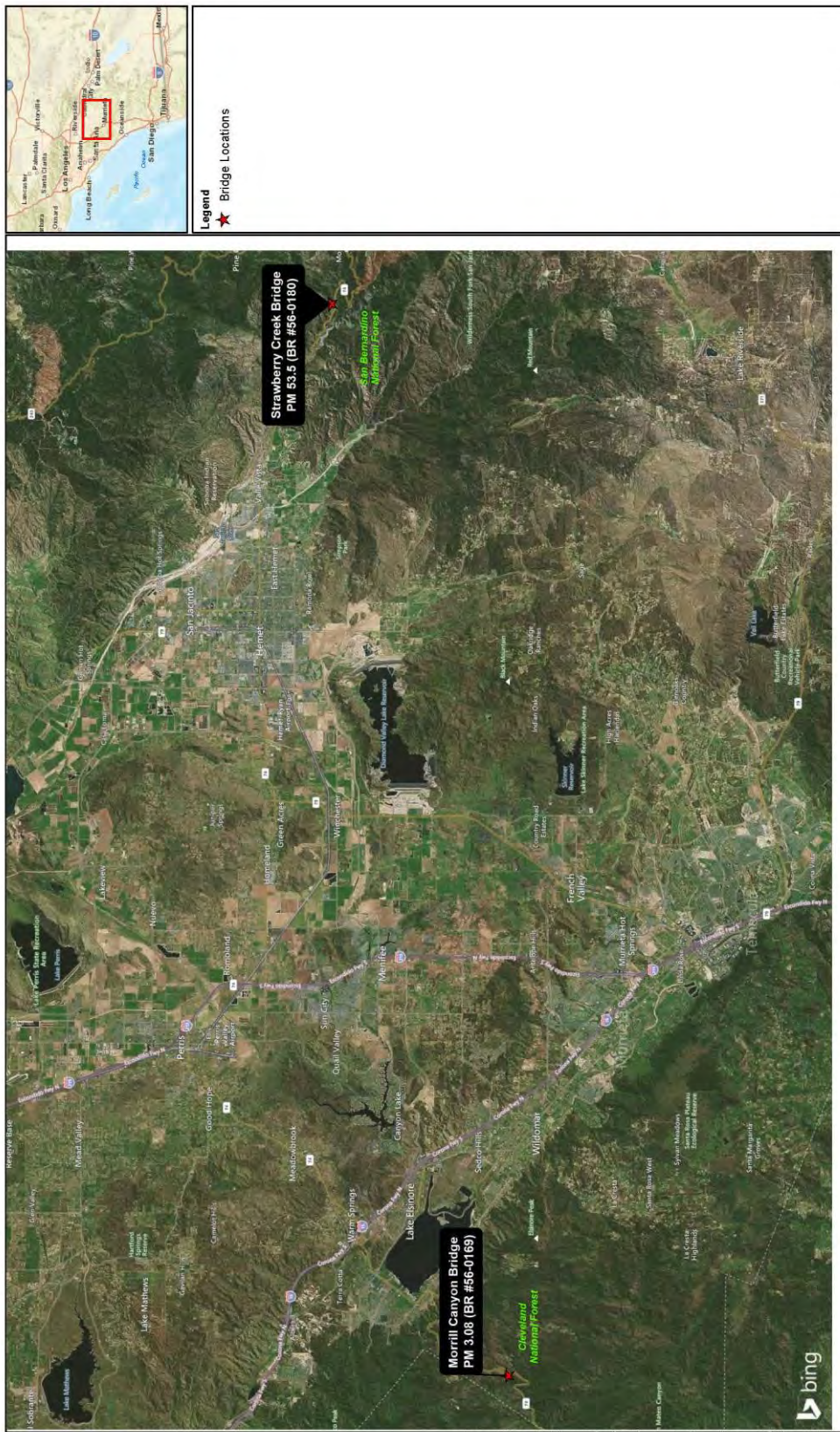


Figure 1-2
Project Location Map
SR-74 Bridge Replacement Project

This page intentionally left blank.

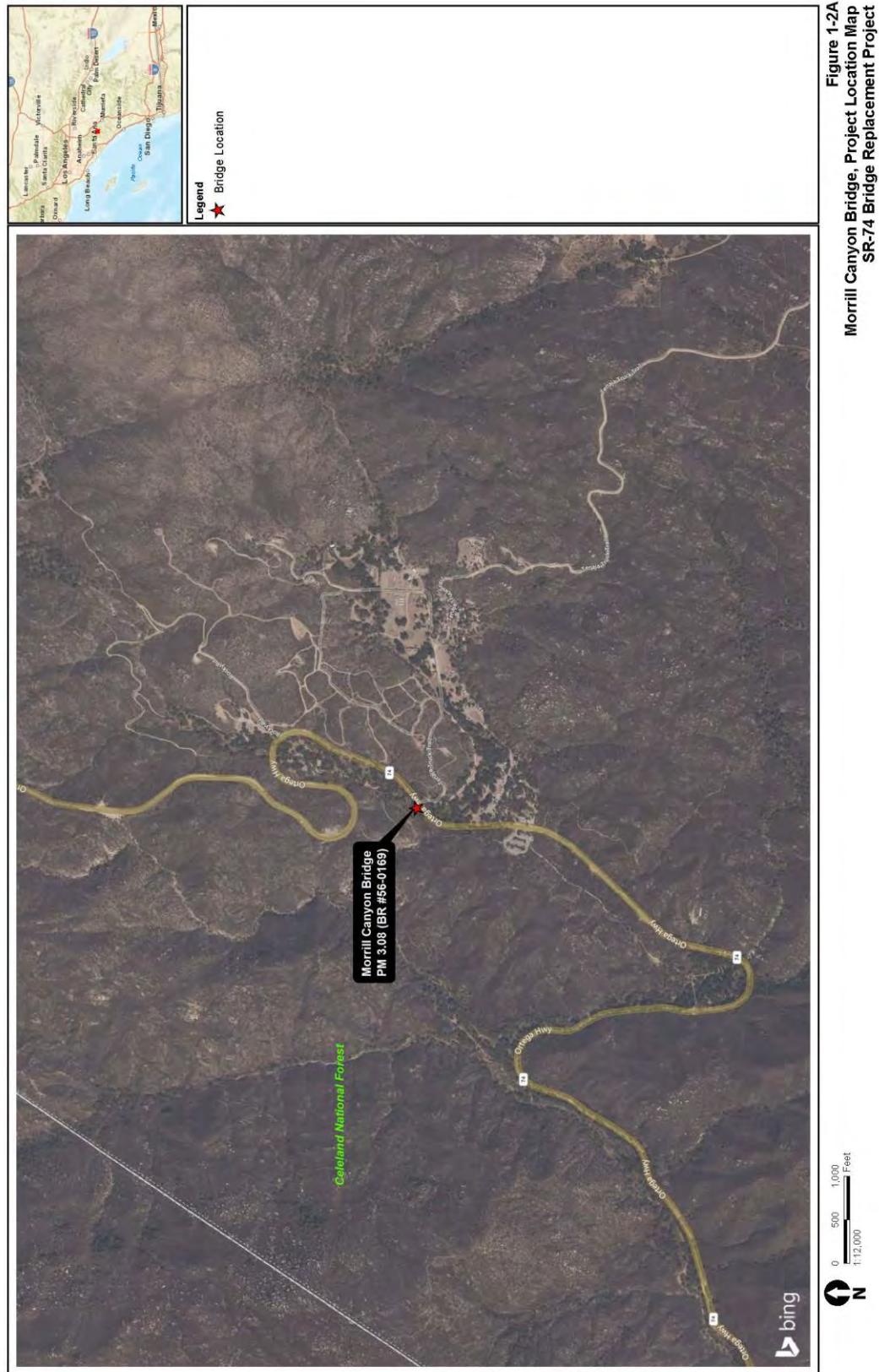
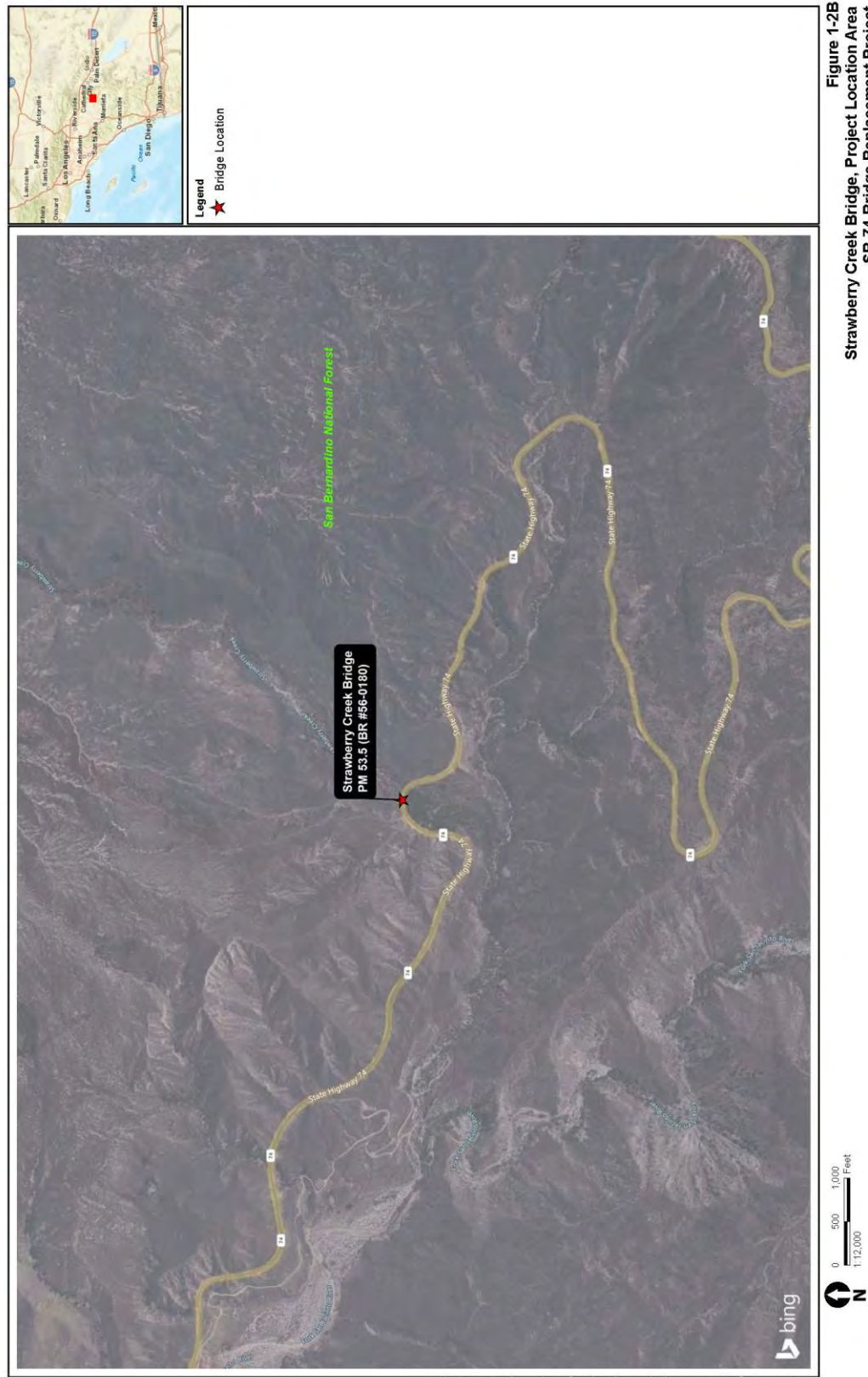


Figure 1-2A
Morrill Canyon Bridge, Project Location Map
SR-74 Bridge Replacement Project

This page intentionally left blank.



This page intentionally left blank.

1.3 Purpose and Need

1.3.1 Purpose

The purpose of this project is to improve safety and mobility for the traveling public by replacing the aging structures and upgrading the bridge rails at Morrill Canyon Bridge and Strawberry Creek Bridge.

1.3.2 Need

The bridges were initially identified for bridge rail upgrade or replacement in 1984. Due to the enormous number of rail upgrade/replacement needs statewide, the structures have been prioritized based on traffic volume and geometrics. The Structure Replacement and Improvement Needs (STRAIN) Report, dated October 2014, also identifies several longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arches. In addition, both structures have nonstandard lane and shoulder widths. Due to the significant deterioration and nonstandard features, there is a need to replace these structures to meet current design, crash, and safety standards.

1.3.2.1 Collision Analysis

The collision analysis related to this project was performed by Caltrans District 8 Traffic Operations Surveillance Region B and was summarized in a memo dated July 23, 2020. Caltrans Traffic Accident Surveillance & Analysis System (TASAS) indicates the following summary during the most current 3-year period from April 1, 2017, to March 31, 2020, for the project bridge locations shown below.

Table 1-1. Collision Data

Bridge/Location	Actual Accident Rates			State Average Rates		
	Fatal	Fatal + Injury	Total	Fatal	Fatal + Injury	Total
Morrill Canyon Bridge PM 2.9/3.2	0	0.853	1.451	0.014	0.215	0.475
Strawberry Creek Bridge PM 53.2/53.7	0	1.07	4.28	0.044	0.84	1.69

Source: Draft Project Report, Caltrans 2020

Table 1-2. Type of Collisions (in Percent)

Bridge/Location	Head-On	Sideswipe	Rear-End	Broadside	Hit Object	Overturn	Auto-Pedestrian	Other	Not Stated
Morrill Canyon Bridge PM 2.9/3.2	5.9	5.9	23.5	5.9	23.5	29.4	0	5.9	0
Strawberry Creek Bridge PM 53.2/53.7	0	25	12.5	0	62.5	0	0	0	0

Source: Draft Project Report, Caltrans 2020

Table 1-3. Primary Collision Factors (in Percent)

Bridge	HBD	FTC	FTY	IT	ESS	OV	ID	OTD	UNK	FA	NS
Morrill Canyon Bridge PM 2.9/3.2	0	0	11.8	35.3	47.1	5.9	0	0	0	0	0
Strawberry Creek Bridge PM 53.2/53.7	0	0	0	62.5	12.5	25	0	0	0	0	0

Source: Draft Project Report, Caltrans 2020.

Notes:

HBD = Influence of alcohol

ID = Improper driving

OV = Other violations

UNK = Unknown

FTC = Following too close

IT = Improper turn

NS = Not stated

FA = Fell asleep

FTY = Failure to yield

ESS = Speeding

OTD = Other than driver

According to the Caltrans TASAS, Traffic Selective Accident Retrieval (TSAR), and Selective Accident Rate Calculation, the 3 year traffic accident history at Morrill Canyon Bridge resulted in actual fatal plus injury and total rates higher than those of the statewide average; the actual fatal rate is lower than the statewide average. Similarly, at Strawberry Creek Bridge, the actual fatal plus injury and total accident rates are higher than the statewide average, while the actual fatal rate is lower than the statewide average. The project alternatives at both bridges propose a standard 12-foot lane width with a minimum shoulder width of 4 feet at Morrill Canyon Bridge, which may have a positive effect on the accident rate. In addition, the new bridge structures and rail will offer better protection for errant vehicles by providing a stronger and safer bridge rail configuration.

1.3.3 Roadway Deficiencies

The condition of the structures is described in the Bridge Inspection Reports, and is based on routine inspections of each bridge that were performed in August 2013. The findings were as follows:

- Morrill Canyon Bridge (Bridge No. 56-0169)
 - Bridge rails do not meet current federal crash standards.
 - There are longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arch.
 - The existing shoulder and lane width do not comply with current design standards.
 - This structure was built in 1931 and has exceeded its useful design life.
 - Cross sectional area of the bridge is not capable of accommodating 50-and 100-year storm events.
- Strawberry Creek Bridge (Bridge No. 56-0180)
 - Bridge rails do not meet current federal crash standards.
 - There are moderate transverse and map AC cracks throughout the deck.
 - There are minor to moderate longitudinal and transverse soffit cracks (less than 0.05-inch wide and 5-foot spacing) with efflorescence.
 - The existing shoulder and lane width do not comply with current design standards.

- This structure was built in 1929 and has exceeded its useful design life.
- Cross sectional area of the bridge is not capable of accommodating 100-year storm events.

Due to the significant deterioration and non-standard design features to correct these deficiencies, there is a need to replace these structures to meet current design, crash, and safety standards.

1.3.4 Social Demands or Economic Development

SR-74 is a 2-lane undivided conventional highway with narrow right shoulders and steep embankments, portions of which traverse mountainous terrain. The proposed project improvements are consistent with statewide, regional, and local mobility goals, and are being coordinated with impacted governmental, regulatory, and local agencies in the area to ensure consistency with specific local goals and objectives. Furthermore, the project improvements are consistent with regional planning goals. The configuration of the existing roadway facility would not be affected or impacted by the proposed project, and there are no major projects proposed in the project vicinity.

1.3.5 Air Quality Improvements

SR-74 is not a bicycle route at either project bridge location, and there are no pedestrian paths available for the public. There are no transportation control measures such as high occupancy vehicle (HOV) lanes, ramp metering, or park and ride facilities in the area. The project would not be needed due to an increase in congestion, or be needed as a result of extensive existing or approved planned development in the area that would generate additional trips, or needed due to an inadequate regional access to the area.

1.3.6 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance (be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made).
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Logical termini should encompass an entire project. Cutting a larger project into smaller projects may be considered “improper segmentation.” A project must have independent utility; that is, a project must be able to function on its own, without further improvements.

The project is of sufficient length, with project termini logically placed, to allow environmental issues to be addressed on a broad scope. The proposed project would have independent utility and would not restrict consideration of alternatives for other reasonably foreseeable

transportation improvements and without any additional transportation improvements being made in the area. As such, the proposed project is considered a project with independent utility.

1.4 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project, while avoiding or minimizing environmental impacts. The following alternatives have been considered:

- Morrill Canyon Bridge Alternative M1
- Strawberry Creek Bridge Alternative S1
- Strawberry Creek Bridge Alternative S3
- No-Build Alternative

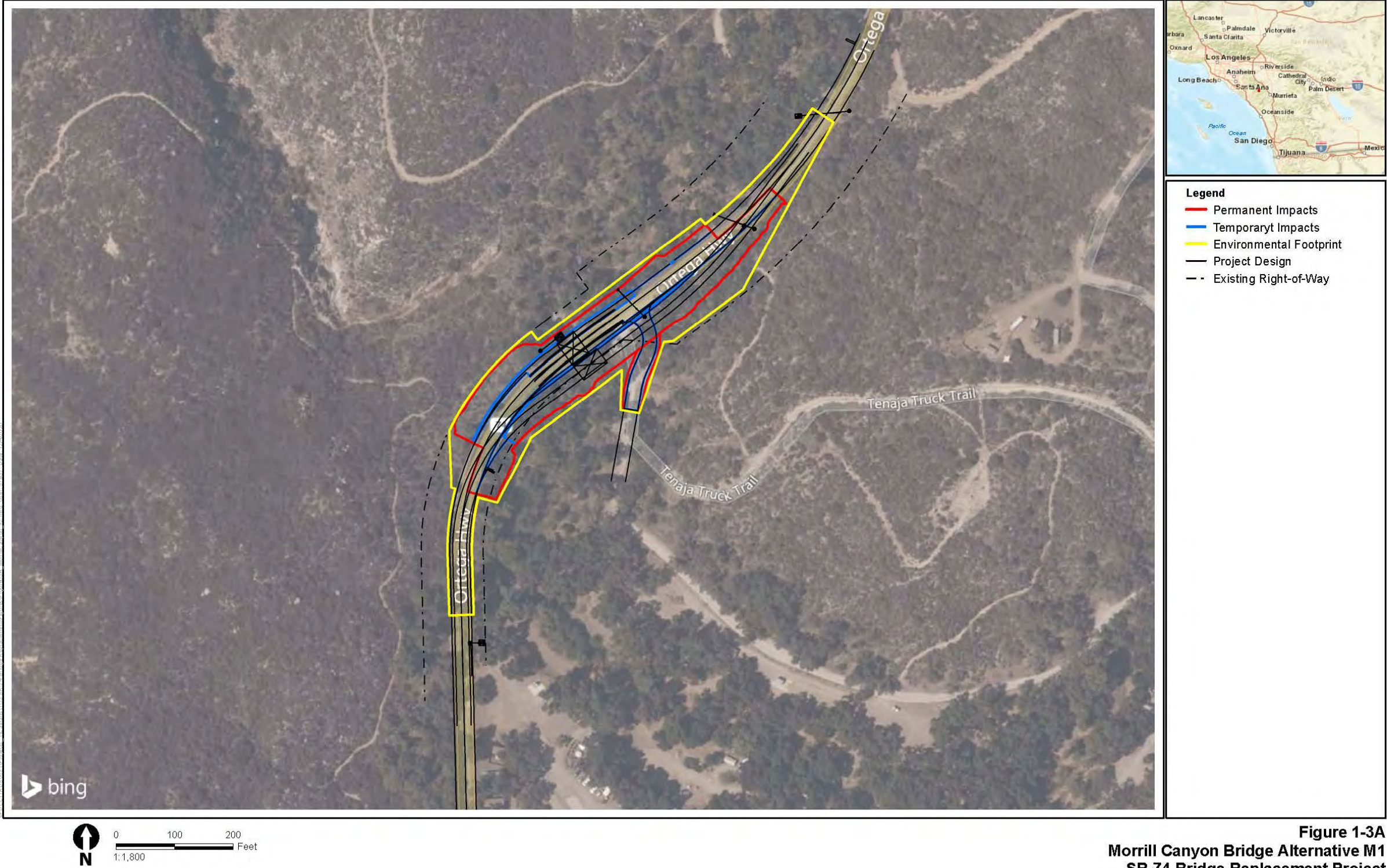
The project is located in Riverside County along SR-74 at Morrill Canyon Bridge (Bridge No. 56-0169, PM 3.08) and Strawberry Creek Bridge (Bridge No. 56-0180, PM 53.5). SR-74 is a 2-lane undivided conventional highway with narrow right shoulders and steep embankments within mountainous terrain. At the Morrill Canyon Bridge, the roadway is 10.5 feet wide in each direction with 1.5-foot shoulders. At the Strawberry Creek Bridge, the roadway is 10.5 feet wide in each direction with 1.3-foot shoulders. The 2 bridge locations are approximately fifty miles apart. The purpose of the project is to ensure the safety and mobility of the traveling public and to provide continued connectivity along SR-74. Both bridge structures have nonstandard lane and shoulder widths. Due to the significant deterioration and nonstandard features, there is a need to replace these structures to meet current design, crash, and safety standards. In addition, the existing Morrill Canyon Bridge structure is not capable of accommodating storm events 50 years or higher and the existing Strawberry Creek Bridge structure is not capable of accommodating storm events 100 years or higher.

1.5 Alternatives

1.5.1 Project Alternatives

The project proposes to replace Morrill Canyon Bridge and Strawberry Creek Bridge in Riverside County. The project has a no-build alternative, Morrill Canyon Bridge has 1 alternative, and Strawberry Creek Bridge has 2 alternatives. In order to replace each structure, the project would construct a temporary bridge at each location or use part of the existing bridge for reverse traffic control, detour traffic from the existing bridge to the temporary bridge if a temporary bridge is required, remove the existing structure, and construct the proposed bridge.

Figures 1-3A through 1-3C provide an overview of each of the alternatives.



This page intentionally left blank.

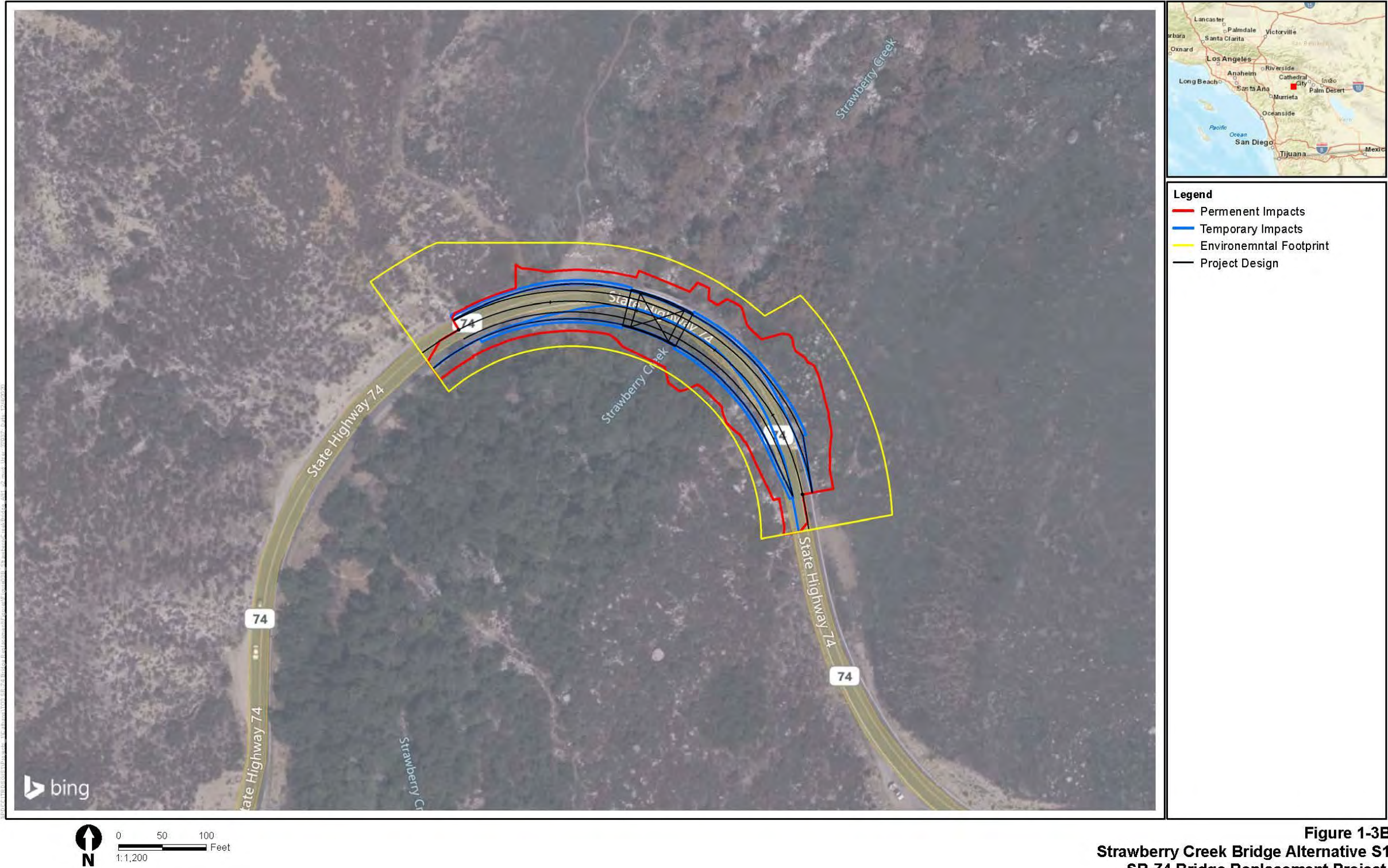


Figure 1-3B
Strawberry Creek Bridge Alternative S1
SR-74 Bridge Replacement Project

This page intentionally left blank.

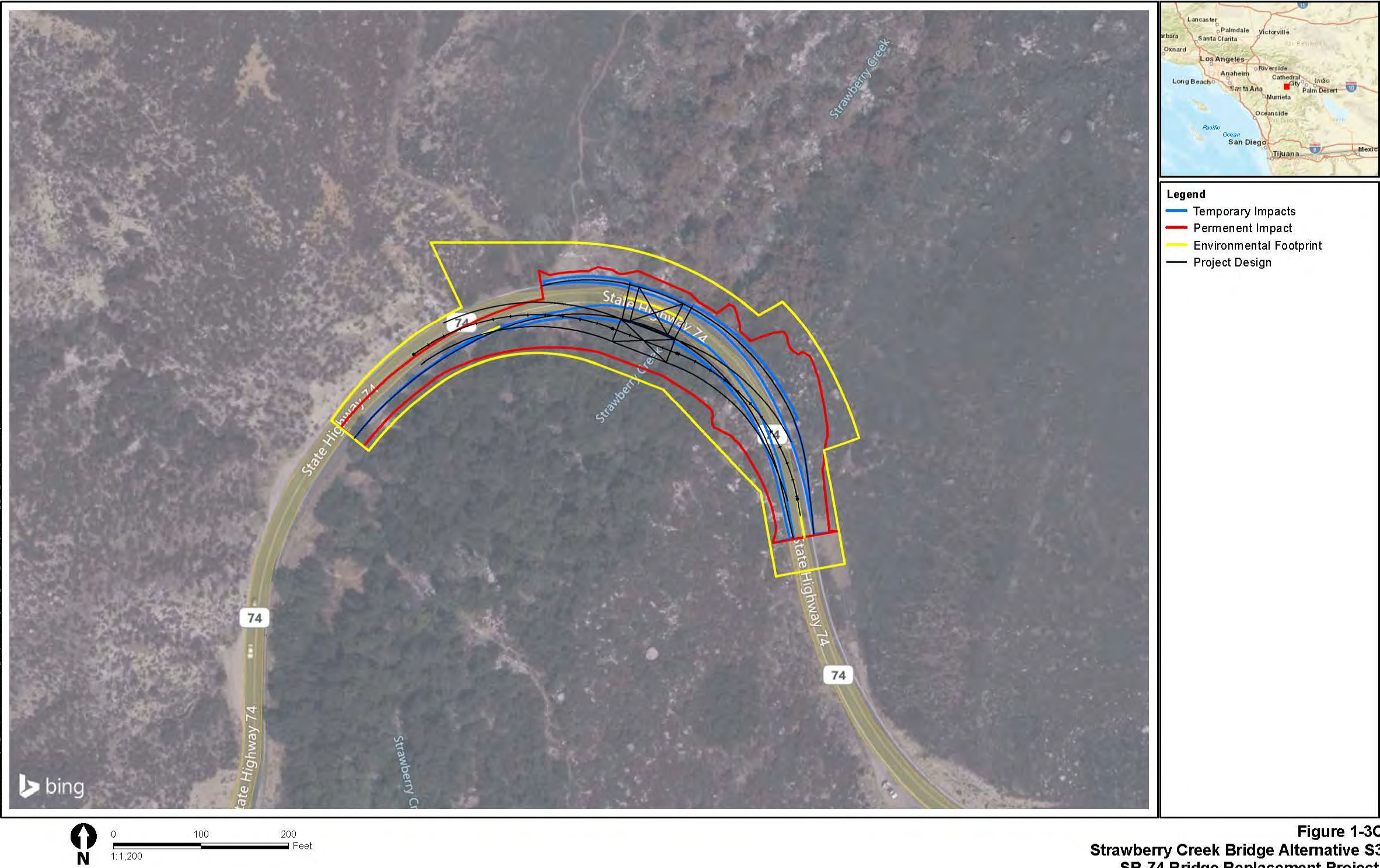


Figure 1-3C
Strawberry Creek Bridge Alternative S3
SR-74 Bridge Replacement Project

This page intentionally left blank.

1.5.2 Common Design Features of the Build Alternatives

The build alternatives have the following design elements in common:

- All build alternatives involve widening the roadway to 12-foot lanes in each direction of travel, regrading the impacted areas with imported materials, and incorporating a new Midwest Guardrail System (MGS).

1.5.2.1 Design Exceptions

Table 1-4 summarizes the nonstandard design features that would be constructed under the build alternatives.

Table 1-4. Design Exceptions Common to All Build Alternatives

Design Standard	Build Alternative
201.1 Stopping Sight Distance	Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 and S3
202.2 (1) – Standards for Superelevation	Strawberry Creek Bridge Alternatives S1 and S3
203.2 Standards for Curvature – Minimum Radius	Strawberry Creek Bridge Alternatives S1 and S3

Source: Draft Project Report, Caltrans 2020.

1.5.3 Unique Features of the Build Alternatives

1.5.3.1 Morrill Canyon Bridge

- Alternative M1 (12-foot lane in each direction, 2-foot median, and 8-foot shoulders)

The Morrill Canyon Bridge alternative involves reconstructing the approach of the roadway to the bridge ends, adding a new bridge rail that will match the current aesthetics of the structures, reconstructing 1 overside drain system, adding a new MGS, adding a 12-inch rumble strip, and building a temporary 2-lane bridge on the south side of the current bridge to provide a detour for vehicles and to avoid the Cleveland National Forest right of way. In addition, regrade the access driveway to Tenaja Truck Trail and proposed staging area at PM 2.9.

1.5.3.2 Strawberry Creek Bridge

- Alternative S1. The proposed alignment would be approximately 13 feet south of the existing yellow stripe (centerline). Reverse traffic control would be utilized for all stages of construction. As such, no temporary detour bridge would be required. This alternative would result in 12-foot lanes in each direction and standard 8-foot shoulders, reconstructing the roadway approach to the bridge's approach slabs, adding a new bridge rail that will match the current aesthetics of the structure, reconstructing 2 overside drain systems, and adding a new MGS. In addition, a potential staging area is proposed at PM 53.65.
- Alternative S3. The proposed alignment would be designed to closely match the existing yellow stripe to minimize permanent impacts. A 2-way detour is proposed approximately 42.5 feet south of the existing yellow stripe to maintain traffic flow during construction. This

alternative would result in a larger temporary environmental impact footprint than Strawberry Creek Bridge Alternative S1. This alternative involves 12-foot lanes in each direction and standard 8-foot shoulders; reconstructing the roadway approach to the bridge's approach slabs; adding a new bridge rail that will match the current aesthetics of the structure; reconstructing 1 overside drain system; adding a new MGS; and constructing a 2-way traffic detour bridge with a temporary pavement approach to accommodate 11-foot lanes, 1-foot shoulders, and temporary railing. In addition, a potential staging area is proposed at PM 53.65.

1.6 Project Features

This project contains a number of standardized project measures that are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in Chapter 2. Moreover, these measures represent Best Management Practices and measures included in the Standard Plans and Specifications or Standard Special Provisions to address air quality, biological resources, cultural resources, hazardous waste/materials, water quality, management of traffic during construction, noise, erosion control, and landscaping.

1.7 Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives

Transportation System Management (TSM) strategies increase the efficiency of existing facilities; they are actions that increase the number of vehicle trips a facility can carry without increasing the number of through lanes. Examples of TSM strategies include ramp metering, auxiliary lanes, turning lanes, reversible lanes, and traffic signal coordination. TSM also encourages automobile, public and private transit, ridesharing programs, and bicycle and pedestrian improvements as elements of a unified urban transportation system. Modal alternatives integrate multiple forms of transportation modes, such as pedestrian, bicycle, automobile, rail, and mass transit.

Although no specific TSM features are included as part of the project, the overall project serves a transportation system management purpose by providing safer and more efficient operation of SR-74 within the limits. The project provides widened existing lanes and widened shoulders that will enhance the operational efficiency of SR-74; therefore, the project is considered consistent with TSM goals and will support the continued safe and efficient operation of SR-74 at each of the bridge locations.

1.7.1 No-Build Alternative

The No-Build Alternative would maintain the existing bridge structures with nonstandard bridge rails, lane width, and shoulder width. These structures have exceeded their useful design life and will deteriorate further under this alternative, resulting in operational deficiencies, which will necessitate future costly maintenance measures. With no capital improvements, there would be no capital costs associated with this alternative. However, there would be continued costs

associated with maintenance, periodic rehabilitation, and any safety and operational improvements to the existing facility.

1.8 Comparison of Alternatives

Both the Morrill Canyon Bridge and the Strawberry Creek Bridge are rubble masonry arch structures with non-standard lane and shoulder width, and the existing bridge railings do not meet current design standards. All build alternatives would be constructed with standard lanes, shoulders, and railings. Morrill Canyon Bridge Alternative M1 would construct a 2-way traffic detour bridge with a temporary pavement approach to accommodate a temporary 11-foot-wide lane, 1-foot-wide shoulder with temporary railing. Lanes in each direction would be open during construction. The Strawberry Creek Bridge Alternative S1 alignment would be approximately 13 feet south of the existing yellow stripe and would implement reverse traffic control during construction using temporary traffic signals.

1.9 Identification of a Preferred Alternative

After the public circulation period, all comments received were considered, and the Department has identified a preferred alternative and has made a final determination of the project's effect on the environment. The preferred alternative is Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternative S1. Strawberry Creek Bridge Alternative S1 was selected as the preferred alternative over Strawberry Creek Bridge Alternative S3 because the S1 alternative has a smaller environmental footprint compared with Strawberry Creek Bridge Alternative S3, and no detour bridge would be constructed at Strawberry Creek. Under CEQA, no unmitigable significant adverse impacts were identified, as such the Department has prepared a Mitigated Negative Declaration. Similarly, the Department determined that the action does not result in significant impacts on the environment, as such, the Department, as assigned by FHWA, will issue a Finding of No Significant Impact (FONSI) in accordance with NEPA.

1.10 Alternatives Considered But Eliminated from Further Discussion Prior to the “draft” Initial Study/Environmental Assessment (IS/EA)

1.10.1 Strawberry Creek Bridge Alternative S2

Under this alternative, the proposed alignment would be approximately 17 feet north of the existing yellow stripe. The proposed engineering features and traffic management strategies are the same as Strawberry Creek Bridge Alternative S1. However, this alternative would require extensive excavation to the existing steep cut slope on the northwest corner of the bridge, resulting in a larger temporary environmental impact footprint than Strawberry Creek Bridge Alternative S1. Realigning the roadway closer to the cut slope would also potentially result in rockfall issues. In addition, this alignment would cross 2 existing streams on the upstream of Strawberry Creek and would need a longer bridge span to avoid permanent impacts on the stream, thus requiring a larger mitigation cost. As such, this alternative was eliminated from consideration.

1.10.2 Strawberry Creek Bridge Alternative S4

This alternative involved retrofitting the existing bridge to preserve in place and culvert extensions. The existing bridge would be extended 29 feet 9 inches to the south of the existing structure to accommodate two 12-foot lanes and 5-foot shoulders. The reinforced, corrugated steel lining of the existing structure would be further reduced and would not have capacity to accommodate 100-year storm events. This alternative would result in overtopped, flooding conditions and was rejected from further consideration.

1.10.3 Strawberry Creek Bridge Alternative S5

This alternative would preserve the existing masonry arch bridge and realign the roadbed approximately 54 feet south of the existing bridge. The proposed bridge would have two 12-foot lanes in each direction and 8-foot shoulders. As the existing bridge would be preserved, the proposed bridge would be required to be constructed away from the existing bridge to avoid overtopping flow of the existing bridge during 100-year storm events. Furthermore, by preserving the existing masonry arch bridge, maintenance would be required due to structural deterioration over time or caused by major storm events. A 100-foot wide Special Use Permit would be required from the USFS and this alternative would have the largest environmental footprint when compared with Strawberry Creek Bridge Alternatives S1 and S3.

1.10.4 Morrill Canyon Bridge Alternative M2

This alternative would retrofit the existing masonry arch with a 5.5-inch corrugated steel arch to preserve the structure in place and extend the existing bridge to the south approximately 29 feet 9 inches for two 12-foot lanes, 4-foot shoulders, and 2-foot medians. This alternative would reduce the already undersized, earth-filled arch capacity and would not be able to accommodate 50- and 100-year storm events. This alternative was rejected due to the potential overtopping and flooding issues.

1.10.5 Morrill Canyon Bridge Alternative M3

This alternative would preserve the existing masonry arch bridge by realigning the roadway approximately 62 feet south of the existing bridge. The proposed bridge would be required to be constructed away from the existing bridge to avoid backwater adverse effects caused by the under capacity to convey water during 50-year and 100-year storm events. Portions of the new alignment will fall within the upstream channel resulting in a 380 foot long bridge to span over the channel. Compared with Morrill Canyon Bridge Alternative M1, this bridge length for this alternative would be more than 10 times longer. Furthermore, part of the alignment, east of the replacement bridge on the eastbound roadway, cuts through the existing hillside and would require greater excavation. This alternative would have the largest environmental footprint when compared with Morrill Canyon Bridge Alternative M1. By preserving the existing masonry arch bridge, maintenance would be required due to structural deterioration over time or caused by major storm events.

1.11 Permits and Approvals Needed

The permits, licenses, agreements, and certifications listed in Table 1-5 would be required for project construction.

Table 1-5. Required Permits, Reviews, and Approvals

Agency	Permit/Approval	Status
State Water Resources Control Board (SWRCB)	National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, Department of Transportation order number 2012-0011-DWQ, NPDES No. CAS00003	The current NPDES General Construction Permit would be applied prior to project construction.
California Department of Fish and Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement	Application for 1602 permit will be submitted to CDFW after approval of the final Environmental Document.
Regional Water Quality Control Board (RWQCB), Region 8 (Santa Ana)	Porter-Cologne Act and Clean Water Act (CWA) Section 401 Water Quality Certification	Application for permit will be submitted to RWQCB after approval of the final Environmental Document. Permit will be acquired prior to completion of final design.
U.S. Army Corps of Engineers (USACE)	CWA Section 404 Nationwide Permit	Application for permit will be submitted to USACE after approval of the final Environmental Document. Permit will be acquired prior to completion of final design.
U.S. Fish and Wildlife Service (USFWS)	Endangered Species Act, Section 7 Consultation	Authorized through a Biological Opinion through WRMSHCP.
U.S. Forest Service (USFS)	Special Use Permit at Strawberry Creek Bridge	Ongoing coordination.

This page intentionally left blank.

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

Topics Considered but Determined Not to Be Relevant

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

- **Coastal Zone:** The project is not in the vicinity of a coastal zone.
- **Wild and Scenic Rivers:** The project is not in the vicinity of a designated Wild and Scenic River.
- **Land Use:** The project improvements are consistent with statewide, regional, and local mobility goals, and are being coordinated with impacted governmental, regulatory and local agencies in the area to ensure consistency with specific local goals and objectives. The project would not change the land use designation or result in any zoning changes.
- **Environmental Justice:** Based on the U.S. Census Bureau, American FactFinder database, no data is available for the project sites at Morrill Canyon Bridge or Strawberry Creek Bridge. As the project involves the replacement of 2 existing bridges due to deterioration and non-standard features, minority or low-income populations are not anticipated to be adversely affected by the project. No minority or low-income populations that would be adversely affected by the project have been identified, as determined above. Therefore, the project is not subject to the provisions of Executive Order 12898.
- **Community Character and Cohesion:** The project would replace the Morrill Canyon Bridge and Strawberry Creek Bridge on SR-74 and would not change the character or cohesiveness of the community. The project would not separate residences or divide neighborhoods or result in an increase or decrease to access to the area.
- **Relocations and Real Property Acquisition:** The project would not result in relocations of residences or businesses as the project involves the replacement of two bridges along SR-74.
- **Farmlands:** According to the California Department of Conservation's Farmland Mapping and Monitoring Program, no farmlands or vacant lands have been mapped as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance in the vicinity of the bridge locations.
- **Growth:** The project would replace the Morrill Canyon Bridge and Strawberry Creek Bridge on SR-74 in Riverside County. It would not change accessibility, increase capacity, or influence growth. As such, no growth impacts or indirect impacts on growth would occur.
- **Hydrology and Floodplains:** The project is not within a designated Federal Emergency Management Agency (FEMA) one-percent-annual-chance (i.e., 100-year) floodplain. Floodplain maps are not available for the Morrill Canyon Bridge area, and the area of

Strawberry Creek Bridge was designated as Zone D, indicating that the risk of flooding has not been determined. The Location Hydraulics Study Form and Summary Floodplain Encroachment Report concluded that the project, which consists of replacing 2 bridges along SR-74 in Riverside County, would not encroach upon the base floodplain, would not result in impacts upon natural and beneficial floodplain values, and considered a low level of risk.

- **Paleontology:** Due to the nature of the project, which involves replacement of the existing Morrill Canyon Bridge and Strawberry Creek Bridge, no paleontological studies were required for the project and impacts on paleontological resources are not anticipated to occur.
- **Air Quality:** The project is exempt from air quality conformity per 40 CFR 93.126 (Widening narrow pavements or reconstructing bridges [no additional travel lanes]). The project would result in safety improvements along an existing roadway. The project would not increase the capacity of the existing roadway or include the installation of traffic signals. No adverse effects on air quality are expected.
- **Energy:** The project would use a minimal amount of energy during construction activities, such as excavation, road cut and fill, demolition, and other construction-related activities. Construction-related effects on energy would likely be greatest during the site preparation phase because of energy use associated with the excavation, handling, and transport of soils and construction debris to and from the site. However, these construction activities would be short-term in duration and, therefore, would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction. During project operation, the project would accommodate existing traffic demand, and it would not create new demand, directly or indirectly. The project would not reduce congestion and/or improve the level of service of traffic. As such, the operation of the project would not result in a wasteful, inefficient, or unnecessary consumption of energy resources.
- **Noise:** No adverse noise impacts from project construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications, Section 14.8.02. This project falls under Type III project categories of 23 CFR 772.7 in the Traffic Noise Analysis Protocol dated April 2020. Per the Traffic Noise Analysis Protocol, Type III projects do not require a noise analysis. As such, it is considered an exempt project.

2.1 Human Environment

2.1.1 Parks and Recreational Facilities

2.1.1.1 Regulatory Setting

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

2.1.1.2 Affected Environment

Public parks and recreational facilities within 0.5 mile of the project site are presented in Table 2.1-1. The Morrill Canyon Bridge is within the Cleveland National Forest and the Strawberry Creek

Bridge is within the San Bernardino National Forest, both managed by the U.S. Department of Agriculture, Forest Service.

Table 2.1-1. Public Parks, Trails, and Other Recreational Facilities within 0.5 Mile of the Project Limits

Facility Type	Name	Distance from Project (miles)	Activities
Trail (non-motorized)	San Juan Loop Trailhead	0.23 mile south of Morrill Canyon Bridge	Hiking, walking, biking trail with toilet facilities.
Trail (non-motorized)	Bear Canyon Trailhead	0.23 mile south of Morrill Canyon Bridge	Hiking, walking, biking trail.
Creek	Strawberry Creek	Within 0.5 mile north of Strawberry Creek Bridge	Fishing in creek with license.

Source: U.S. Department of Agriculture, Forest Service web page: <https://www.fs.usda.gov/recarea/sbnf/>.

The San Juan Loop Trailhead and the Bear Canyon Trailhead are both located within the Cleveland National Forest which is managed by the U.S. Forest Service and offers hiking, walking, and non-motorized biking trails with toilet facilities. Strawberry Creek is located in the San Bernardino National Forest which is also managed by the U.S. Forest Service and offers fishing activities. As these resources are part of a public park, the Park Preservation Act prohibits local and state agencies from acquiring such properties without sufficient compensation or land. As the project would not affect these facilities and no acquisition of these resources would occur, the project would not violate the Park Preservation Act under California Public Resources Code Section 5400-5409.

Section 4(f) Resources

Section 4(f) of the U.S. Department of Transportation Act of 1966, codified in federal law at 49 United States Code (USC) 303, declares that “it is the policy of the United States government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project “requiring the use of the publicly owned land of a park, recreation area, or wildlife and waterfowl refuge of national, state, or local significance or land of a historic site of national, state, or local significance (as determined by the federal, state, or local officials with jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) further requires consultation with the Department of the Interior, as appropriate, and the involved offices of the Department of Agriculture and Department of Housing and Urban Development, as appropriate, in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

The San Juan Loop Trailhead and Bear Canyon Trailhead is a Section 4(f) resource within the project vicinity; however, no use of these resources would occur due to implementation of the project. Strawberry Creek also offers recreational activities for fishing and would be considered a Section 4(f) resource. No use of Strawberry Creek would occur due to implementation of the project. These resources would not be affected by the project, access would not be affected to these resources, and no changes to the use of these resources would occur as a result of the project. For further analysis of Section 4(f) historic resources, please refer to the Programmatic Section 4(f) and Individual Section 4(f) Evaluations in Appendix A.

2.1.1.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The project would not acquire public parkland for non-parkland use; therefore, the California Public Park Preservation Act of 1971 would not apply. Construction activities would result in temporary, localized, site-specific disruptions along SR-74 at Morrill Canyon Bridge and Strawberry Creek Bridge within the project's limits of disturbance. No temporary easements or temporary closures would be required at San Juan Loop Trailhead, Bear Canyon Trailhead, or Strawberry Creek. No temporary impacts on these facilities are anticipated.

No-Build Alternative

Under the No-Build Alternative, construction activities associated with the project would not occur. Therefore, no existing or planned parks or recreational facilities in the area would be temporarily affected, and no direct or indirect adverse short-term impacts on recreational and Section 4(f) resources would occur.

Section 4(f) Properties

The publicly owned parks and recreational areas within 0.5 mile of the project area were evaluated with respect to the requirements of Section 4(f) (see Appendix A). Historic Resources are evaluated in the Cultural Resources section of this document.

The San Juan Loop Trailhead, Bear Canyon Trailhead, and Strawberry Creek are the Section 4(f) recreational resources within the project area of Morrill Canyon Bridge and Strawberry Creek Bridge. Full closures of the San Juan Loop Trailhead, Bear Canyon Trailhead, and Strawberry Creek are not anticipated to occur during construction of the project. Construction is anticipated to last up to 12 months. During this time, no detours would be required to access the San Juan Loop Trailhead, Bear Canyon Trailhead or Strawberry Creek. No adverse effects on these resources are anticipated because the trailheads and creek would not be closed during construction, and the uses of the trails and creek that qualify these resources for protection under Section 4(f) would not be adversely affected during construction. However, during construction, trail and creek users would be exposed to indirect construction activities, such as increased noise

through the project area, visual changes from construction equipment, and potential increases in dust and air quality concerns. These indirect impacts on the trailheads and creek are temporary in nature, lasting only through the duration of construction, and would not constitute a use under Section 4(f) of the U.S. Department of Transportation (USDOT) Act.

Permanent

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The alternatives would not result in permanent impacts on the San Juan Loop Trailhead, Bear Canyon Trailhead, or Strawberry Creek. As such, no permanent impacts under CEQA or adverse effects under NEPA would occur.

No Build Alternative

Under the No-Build Alternative, replacement of the Morrill Canyon Bridge or Strawberry Creek Bridge would not occur. Therefore, no existing or planned parks or recreational facilities would be affected, and no direct or indirect adverse long-term impacts on recreational or Section 4(f) resources would occur.

Section 4(f) Properties

The publicly owned trails and recreational areas within 0.5 mile of the Morrill Canyon Bridge and Strawberry Creek Bridge were evaluated with respect to the requirements of Section 4(f). That evaluation, presented in Appendix A, concluded that the project would have no long-term, permanent use on Section 4(f) resources. Access would be maintained to the trailheads and creek, and the project would not require right of way at any Section 4(f) property.

2.1.1.4 Avoidance, Minimization, and/or Mitigation Measures

No additional measures are required. Temporary construction impacts would be minimized with implementation of the Traffic Management Plan (TMP); refer to measure TMP-1.

2.1.2 Timberlands

2.1.2.1 Regulatory Setting

Impacts to timberlands are analyzed as required by the California Timberland Productivity Act of 1982 (California Government Code Sections 51100 et seq.), which was enacted to preserve forest resources. Similar to the Williamson Act, this program gives landowners tax incentives to keep their land in timber production. Contracts involving Timber Production Zones (TPZs) are on 10-year cycles. Although state highways are exempt from provisions of the act, the California Secretary of Resources and the local governing body are notified in writing if a new or additional right of way from a TPZ will be required for a transportation project.

2.1.2.2 Affected Environment

The project would transverse the Cleveland National Forest and the San Bernardino National Forest and therefore fall within the protected open space of each of the national forests. The Cleveland National Forest is the southernmost national forest in California. Consisting of 460,000 acres, spanning from Orange and Riverside Counties to San Diego County, the forest

offers a wide variety of terrains and recreational opportunities including bicycling, camping, fishing, hiking, horseback riding, hunting, nature viewing, and picnicking. The Cleveland National Forest includes three mountain ranges: the Santa Ana, Palomar, and Laguna (Cuyamaca) Mountains. Elevations range from 1,140 feet to 5,687 feet with very steep topography in most places. The Morrill Canyon Bridge is located within the Cleveland National Forest. The San Bernardino National Forest consists of 811,571 acres and offers three visitors centers, family campgrounds, hiking trails, picnic areas, equestrian campgrounds, and fishing piers. Lakes include Big Bear Lake, Barton Flats, Lake Arrowhead, Lytle Creek, Lake Fulmor, and Lake Hemet. The forest is named for the San Bernardino Mountains, which are a range of mountains at the eastern end of the Sierra Madre chain. The Strawberry Creek Bridge is located within the San Bernardino National Forest. The project will require right of way, Morrill Canyon Bridge will require acquisition of right of way and Temporary Construction Easement and Strawberry Creek Bridge requires a Special Use Permit from the USFS. Based on information from the Riverside County General Plan, the project is not located on Timberland Production Zones (TPZ).

2.1.2.3 Environmental Consequences

Morrill Canyon Bridge Alternative M1

This alternative would result in 12-foot lanes in each direction, 8-foot shoulders, new bridge rail to match the existing aesthetics which will be coordinated with Caltrans Landscape Architecture and Structures during the Plans, Specifications, and Estimates (PS&E) phase, reconstructing one overside drain system, new MGS, rumble strip, and temporary two-lane detour bridge on the south side of the Morrill Canyon Bridge. This temporary two-lane detour bridge would be built on the south side of the existing bridge to avoid the Cleveland National Forest. Hydroseeding and fiber rolls will be required as part of erosion control measures for areas of disturbance and trees that are removed will be replaced at a 3:1 ratio, as required by the Caltrans Landscape Architect. Temporary construction impacts would occur outside of the existing right of way; however, once the project is constructed, the new bridge would be within the existing right of way.

Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Strawberry Creek Bridge Alternative S1 (Preferred Alternative) involves building one segment of the bridge on the south side of the existing alignment and utilizing reverse traffic control during construction. No temporary detour bridge would be required to be built under this alternative. Under Strawberry Creek Bridge Alternative S3, a two-way detour bridge is proposed to be built approximately 42.5 feet south of the existing yellow strip to maintain traffic flow during construction. Both Alternative S1 (Preferred Alternative) and S3 would result in right of way being acquired from the U.S. Forest Service for work on assessor parcel numbers (APNs) 557060011 and 55706002. As a result, a Special Use Permit will be required from the U.S. Forest Service for Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3. The additional right of way would not be required from a TPZ.

Furthermore, for all alternatives, during construction, the project would result in the removal of vegetation and trees. According to the U.S. Forest Service, once a tree has been cut, the tree must remain on site and be used as mulch within the post miles of the project limits. A 3:1 tree

replacement ratio is required by the Caltrans District Landscape Architect. Furthermore, hydroseeding and fiber roll methods will be implemented as part of erosion control measures.

2.1.2.4 Avoidance, Minimization, and/or Mitigation Measures

TMB-1 In accordance with U.S. Forest Service guidelines, trees that are cut will remain on site and be used as mulch within the project limits.

TMB-2 For every tree cut, a 3:1 tree replacement ratio is required by the Caltrans District Landscape Architect. Hydroseeding and fiber roll methods will also be implemented as part of the erosion control measures.

2.1.3 Utilities/Emergency Services

2.1.3.1 Affected Environment

No utilities would be affected by the project. There are no overhead electrical or utility lines within the project limits. The Riverside County Fire Department, in cooperation with the California Department of Forestry and Fire Protection (CAL FIRE), provides fire and emergency services in the area of Morrill Canyon Bridge. The nearest fire station to Morrill Canyon Bridge is the Riverside County Fire Department Station 51 located at 32353 Ortega Highway in Lake Elsinore. The Riverside County Sheriff's Department provides police services in the area of Morrill Canyon Bridge, and the nearest sheriff's station is the Lake Elsinore Station, located at 333 Limited Avenue in Lake Elsinore. Near the Strawberry Creek Bridge, the Cranston Station and the Keenwild Station of the San Bernardino National Forest are the nearest fire stations. The nearest sheriff's station to Strawberry Creek Bridge is the Riverside County Sheriff's Department's Hemet Station located at 43950 Acacia Avenue in Hemet.

2.1.3.2 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Construction activities, including nighttime construction, have the potential to result in traffic delays during the construction period. Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternative S3 would include a temporary two-lane detour bridge to be built on the south side of the bridge during construction. Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would utilize reverse traffic control for all stages of construction. The temporary detour bridge and reverse traffic control activities could increase response times for emergency vehicles during construction; however, the project would include preparation and implementation of a TMP. Construction impacts would be short term, lasting only the length of construction and cease upon completion of construction.

Although no utilities are located in the area of the bridges, for any unknown utilities affected during construction, all required coordination will be completed to establish exact procedures and specifications for addressing facilities affected by the project. Measures are provided below to ensure that disruption to services and impacts on the facilities are minimized or avoided

during the construction phase. In addition, if relocation of any utilities requires use of area(s) beyond the construction footprint associated with the current project, studies will be reviewed or performed as appropriate and applicable measures will be implemented.

No-Build Alternative

Under the No-Build Alternative, no construction would occur; therefore, temporary construction impacts on utilities and emergency service providers would not occur.

Permanent

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

No utilities are anticipated to be affected by the project. However, decisions regarding relocation of utilities, if any, would occur during final design. Prior to the final design, coordination with the affected utility providers in the vicinity of the improvements would be completed to verify that the project would not disrupt services. For any utilities affected, all required coordination would be completed to establish exact procedures and specifications for addressing facilities affected by the project. As necessary, additional analysis would be completed, and any measures identified in conjunction with the analysis would be implemented. Any required relocations of utilities would be completed prior to any project-related construction.

Morrill Canyon Bridge Alternatives M1 and Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3 would improve the safety and mobility for the traveling public. This would in turn improve the delivery of public services, including police, fire, and emergency vehicle response, in the area of both bridges that otherwise would not occur under the No-Build Alternative.

No-Build Alternative

Under the No-Build Alternative, the surrounding transportation network would be maintained, and no changes in the project area of Morrill Canyon Bridge and Strawberry Creek Bridge would occur. No long-term impacts on utilities or emergency service providers would occur under the No-Build Alternative.

2.1.3.3 Avoidance, Minimization, and/or Mitigation Measures

No avoidance or mitigation measures are required. Temporary construction impacts on emergency service providers would be addressed with implementation of a TMP, which would minimize disruption to emergency services.

2.1.4 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.1.4.1 Affected Environment

Information in this section is based on the Caltrans Traffic Accident Surveillance and Analysis System (TASAS) and the Project Report dated March 2021 prepared for the project.

SR-74 is a two-lane, undivided conventional highway with narrow right shoulders and steep embankments with a significant portion traversing mountainous terrain. At both project

locations, Morrill Canyon Bridge and Strawberry Creek Bridge, SR-74 is not a bicycle route and there are no existing pedestrian paths or bicycles lanes available. Both bridge structures currently have non-standard lane and shoulder widths.

Traffic forecasting has been prepared for the project to analyze the existing year (2020), construction year (2022), and future years (2044, 2064) traffic conditions along SR-74. Traffic forecasting of the SR-74 mainline within the project study limits are summarized in Tables 2.1-2 and 2.1-3.

Table 2.1-2. Existing, Future Year Average Daily Traffic Volumes (Morrill Canyon Bridge PM 2.9/3.2)

	2020	2022	2024	2044	2064
Annual Average Daily Traffic (AADT)	11,300	11,700	12,100	17,100	22,700
2-way Peak Hour Volume	1,110	1,150	1,190	1,680	2,230
One Way Peak Hour Volume	650	660	670	840	1,110
Truck % in AADT	7%	7%	7%	7%	7%
Truck % in Peak Hour Volume	4%	4%	4%	4%	4%

Table 2.1-3. Existing, Future Year Average Daily Traffic Volumes (Strawberry Creek Bridge PM 53.4/53.7)

	2020	2022	2024	2044	2064
Annual Average Daily Traffic (AADT)	3,800	3,900	4,100	5,800	7,600
2-way Peak Hour Volume	420	430	450	640	850
One way Peak Hour Volume	270	270	270	320	1,110
Truck % in AADT	7%	6%	6%	7%	7%
Truck % in Peak Hour Volume	4%	4%	3%	3%	3%

Collision Analysis

The TASAS for the most current three-year period from April 1, 2017, to March 31, 2020, indicated that for the Morrill Canyon Bridge location, the Actual Fatal plus Injury and total accident rates were higher than the statewide average. The most common types of collisions were vehicle overturn at 29.4 percent, followed by hit object and rear-end type collisions, each with 23.5 percent. The primary collision factor at the Morrill Canyon Bridge was attributed to speeding. At the Strawberry Creek Bridge location, the Actual Fatal plus Injury and total accident rates were also higher than the statewide average. The types of collisions were overwhelmingly caused by hit object at 62.5 percent followed by sideswipe at 25 percent. The primary collision factor at the Strawberry Creek Bridge was attributed to improper turns. Refer to Tables 1-1 to 1-3 in Chapter 1.

2.1.4.2 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

During construction, temporary impacts, such as nighttime construction, reverse traffic control for Strawberry Creek Bridge Alternative S1(Preferred Alternative), and temporary detour bridges for Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternative S3 would occur. These temporary impacts could result in traffic delays along SR-74 in the vicinity of the bridges. However, the project would include preparation and implementation of a TMP. The TMP could include, but not necessarily be limited to, public information communications, such as mailers, handouts, brochures, and press releases; information for motorists from changeable message signs or temporary signage; construction strategies, such as traffic plans; and information regarding construction staging and lane modifications. Construction impacts would be temporary, only lasting the length of construction and cease upon completion of the project. The start of construction is anticipated to begin in early 2023 and last up to 12 months.

No-Build Alternative

Under the No-Build Alternative, no construction would occur; therefore, temporary impacts—such as lane closures, nighttime construction, and flagging—would not occur.

Permanent

Morrill Canyon Bridge Alternatives M1, Strawberry Canyon Bridge Alternatives S1 (Preferred Alternative) and S3

The proposed replacements of Morrill Canyon Bridge and Strawberry Creek Bridge would result in widened lanes to standard 12-foot widths and widen shoulders to a minimum of 4 feet, depending on the alternative, which would provide greater surface recovery area for motorists and may result in a positive effect on the accident rates. In addition, the new bridge structures and rail will offer better protection to errant vehicles by providing a stronger and safer bridge rail configuration.

No-Build Alternative

Under the No-Build Alternative, no construction would occur; therefore, permanent impacts would not occur.

2.1.4.3 Avoidance, Minimization, and/or Mitigation Measures

- TMP-1** A TMP would be prepared and will be implemented during construction of the project. Public information and awareness campaigns, motorist information strategies, and incident management strategies in the TMP would inform the public of the proposed project.

2.1.5 Visual/Aesthetics

2.1.5.1 Regulatory Setting

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

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

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

2.1.5.2 Affected Environment

A Questionnaire to Determine Visual Impact Assessment (VIA) level was completed on September 14, 2020 for the project and indicated that visual changes to the existing environment would occur, however, a VIA report was not required. The project is located along SR-74 at the Morrill Canyon Bridge in the Cleveland National Forest and Strawberry Creek Bridge in the San Bernardino National Forest. The section of SR-74 within the project limits at Morrill Canyon Bridge is listed as an eligible State Scenic Highway and the section of SR-74 within the project limits at Strawberry Creek Bridge is Officially Designated as State Scenic Highway. Vehicles traveling along SR-74 have views of the mountainous terrain including vegetation, rock formations, and trees immediately adjacent to the roadway with pockets of dirt turnout areas. The rolling hills in the background can be seen between the trees, vegetation, and rocks of the foreground.

2.1.5.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Construction impacts could result from warning signage, equipment storage, and night-time construction that would require additional lighting. These construction activities may temporarily obscure views. Construction of the proposed improvements is expected to start in February 2023 and be completed in approximately 12 months. As mentioned, the potential exists for some nighttime construction to occur. This would create the need for high-intensity lighting. However, such lighting would not result in adverse impacts at most locations because sensitive residential receptors would be some distance away from or not within sight of the construction area. Furthermore, roadway travelers would be exposed to such lighting very briefly as they pass by.

Implementation of avoidance and minimization measure AES-1 would ensure that nighttime construction would not occur directly adjacent to residences and that the construction contractor would minimize project-related light and glare to the maximum extent feasible during nighttime construction activities.

No-Build Alternative

Under the No-Build Alternative, no new bridge or other improvements would be constructed at the project site; therefore, neither temporary nor construction-related effects on the existing visual setting or aesthetic condition would occur.

Permanent

Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The project would not result in substantial permanent impacts on the visual environment. The bridge rails would be aesthetically similar to current conditions. The matching aesthetics will be coordinated with Caltrans Landscape Architecture and Structures during the PS&E phase. The MGS railing will also be stained to blend in visually with the surroundings. The overall views at the bridge area would be similar to what viewers experience while traveling through this area of SR-74. The existing Strawberry Creek Bridge has a cobblestone texture, and the new bridge is expected to have architectural treatments resembling the existing bridge. Viewers traveling in vehicles along SR-74 would likely not notice any changes in the visual scenery with the new bridges. Furthermore, viewers would not be expected to focus on the roadway being widened to standard widths, or focus on widened shoulders.

Upon project completion, the site's graded elevation would be similar to existing conditions. For this reason, the project would not obstruct public views or other visual resources. As such, the project would not have a substantial adverse effect on a scenic view or vista.

No-Build Alternative

Under the No-Build Alternative, no new bridge replacements would be made at the project site; therefore, no long-term visual effects on the existing visual setting or aesthetic condition would occur.

2.1.5.4 Avoidance, Minimization, and/or Mitigation Measures

Implementation of the following measure would avoid or minimize visual impacts:

AES-1 Minimize Fugitive Light from Portable Sources Used for Construction. The construction contractor will minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height. For construction occurring on the ground, portable lights will be raised to a height no greater than 20 feet. All lights will be screened and directed downward, toward work activities, and away from the night sky and nearby residents to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible.

2.1.6 Cultural Resources

2.1.6.1 Regulatory Setting

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

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

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

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

Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU) between the Department and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

2.1.6.2 Affected Environment

Information from this section is based on the August 2020 *Historic Property Survey Report* (HPSR) prepared for this project, which included an *Archaeological Survey Report* (ASR), and November 2020 Supplemental HPSR.

Area of Potential Effect

In accordance with the Section 106 Programmatic Agreement, Stipulation VIII.A, the Area of Potential Effect (APE) for the project was established in consultation with Shannon Clarendon, Principal Investigator, Prehistoric Archaeology, the Department's Professional Qualified Staff (PQS); and Prakash Gowda, Project Manager, on January 6, 2020. The revised APE was prepared on November 23, 2020 and account for all direct/indirect impacts within the revised project's construction footprint. The revised APE maps are included in Attachment A of the Supplemental HPSR.

The discontinuous APE was established to account for all direct/indirect impacts within the project's horizontal and vertical construction footprint. The projected horizontal construction footprint encompasses Morrill Canyon Bridge and Strawberry Creek Bridge, four Temporary Construction Easements (TCEs), and the Caltrans right of way. The APE was delineated along SR-74 between PM 2.97 and 3.3 and between PM 53.4 and 53.56, and includes a total of 5.8 acres. The width of the APE fluctuates between 98.4 feet (30 meters) and 160.7 feet (49 meters) with the vertical component proposed to extend a maximum of 3.6 feet (1.1 meter) above the pavement to a maximum depth of 26.24 feet (8 meters) below pavement for construction of detours and bridge railing and/or bridge replacement. Based on the Supplemental HPSR prepared for the project, the APE was updated. The horizontal component of the APE has changed at both bridge locations, however, the vertical component or depth remains the same as the previous APE. For Morrill Canyon Bridge, the APE has been reduced from 5.8 acres to 3.115 acres and now includes a portion of the driveway to Tenaja Truck Trail. The overall post mile limits have been reduced and now extend from PM 2.9 to PM 3.2. At Strawberry Creek Bridge, the APE has been increased from approximately 1.0 acres to 1.6 acres. The cross section has also increased on the southside of the highway and now extends 17 to 45 feet from the original southern APE boundary delineation. The overall post mile limits now extend from PM 53.37 to PM 53.57.

Recent field verification and a review of previous projects concluded that the parcels adjacent to the APE lack archaeological and NRHP-eligible built-environment resources.

Native American Consultation

A request to the Native American Heritage Commission (NAHC) was made on September 17, 2019, and a response was received on October 7, 2019. The project area was negative for Sacred Lands File results. In consultation with the District Native American Coordinator (DNAC) the

following tribes were contacted for further information: Pala Band of Mission Indians, Pechanga Band of Luiseno Indians, Rincon Band of Luiseno Indians, and the Soboba Band of Luiseno Indians.

Chapter 4 (Comments and Coordination) of this Initial Study/Environmental Assessment (IS/EA) includes a summary of consultation efforts conducted with pertinent Native American contacts to satisfy the requirements of Section 106 of the NHPA, California Public Resources Code 21080.3.1, and Chapter 532 Statutes of 2014 (i.e., AB 52).

Local Historical Society / Historic Preservation Group

Several local historical societies were contacted in October 2019 for information requests regarding the project: Historical Society of Palm Desert, Coachella Valley Archaeological Society, Idyllwild Area Historical Society, Lake Elsinore Historical Society, and San Juan Capistrano Historical Society. The Lake Elsinore Historical Society responded and indicated the proposed project was located west of their area of interest, and they had no concerns regarding the Morrill Canyon Bridge. All others groups have not responded to the request from October 2019. Additional outreach was provided on September 2, 2020 for input on the forthcoming Memorandum of Agreement and the revised areas of the APE. No response has been received from the Historical Society of Palm Desert, Idyllwild Area Historical Society, or the San Juan Capistrano Historical Society. The Coachella Valley Archaeological Society indicated they would respond should they have any concerns, but no response has been received to date. The Lake Elsinore Historical Society responded and indicated no historic connotation of the bridges with regards to the City of Lake Elsinore.

Archaeological Resources

The following sources were consulted:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- National Historic Landmark (NHL)
- California Historical Landmarks (CHL)
- California Points of Historical Interest (CPHI)
- Sacred Lands File of the Native American Heritage Commission (NAHC)
- Caltrans Cultural Resources Database
- Caltrans Historic Bridge Inventory

The reconnaissance survey was conducted on November 25 and 26, 2019. However, a formal record search and intensive pedestrian survey were not warranted for this project due to previous Caltrans projects in the area.

The results of the research and survey conducted of the project APE culminated in the identification of five cultural resources within the APE:

- CA-RIV-8089H (P-33-015321), SR-74 Pines to Palms Highway: Eligible for NRHP.
- CA-RIV-10575H (P-33-006976), Strawberry Creek Bridge No. 56-0180, Category 2 bridge: Eligible for NRHP.
- CA-RIV-10574H (P-33-007236), Morrill Canyon Bridge No. 56-069, Category 2 bridge: Eligible for NRHP.
- CA-RIV-8046H (P-33-15132), Keen Camp Road: Exempt Property Type: 1 Isolated segment of bypassed or abandoned road.
- P-33-007234, Ortega Highway: Ineligible for NRHP.

The study area for this project is located at two highway bridge locations that experience consistent high-velocity-fluvial occurrences, in addition to the fact that the APE is mostly cut into Cretaceous-granite bedrock along the side slopes of the mountains. Therefore, most of the study area is underlain by, and cut into, granitic bedrock, ultimately placing the APE and all project activities well below any probable cultural layers. These factors create an unlikely potential for archaeological preservation. The HPSR indicated that the probability of encountering in situ cultural deposits during ground-disturbing activities associated with the project is extremely low.

2.1.6.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Alternatives S1 (Preferred Alternative) and S3

The field and research methods conducted for the project did not identify any archaeological cultural resources within the APE; however, three previously recorded Historic Properties were identified during the records search and literature review. They are the listed as follows:

- CA-RIV-8089H (P-33015321): Historic Pines to Palms Highway – NRHP Eligible.
- CA-RIV-10575H (P-33-006976): Strawberry Creek Bridge – NRHP Eligible.
- CA-RIV-10574H (P-33-007236): Morrill Canyon Bridge – NRHP Eligible.

The three consist of built-environment resources that are considered elements of, or connect to, the highway in some manner. Because these Historic Properties exist within the APE there is a potential for project-related activities to have an effect on these properties. The project has an “adverse effect” on the three properties listed above, and a Memorandum of Agreement has been prepared, outlining the mitigation agreed to by Caltrans and the SHPO. Overall, the project (undertaking) as a whole has an adverse effect on historic properties. There are historic properties protected by Section 4(f) of the Department of Transportation Act of 1966 within the project vicinity. The project would result in a “use” of those properties as defined by Section 4(f). Please see additional details in Appendix A, Section 4(f).

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

If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the NAHC, who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact Andrew Walters, District Environmental Branch Chief ([909] 383-2647) or Gary Jones, District Native American Coordinator ([909] 383-7505), so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

No-Build Alternative

The No-Build Alternative would not result in project construction; therefore, no construction-related impacts on cultural resources would occur under the No-Build Alternative.

Permanent

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

As stated above, the field and research methods conducted for the project did not identify any archaeological cultural resources within the APE; however, three previously recorded Historic Properties were identified during the records search and literature review. The three consist of built-environment resources that are considered elements of, or connect to, the highway in some manner. Because these Historic Properties exist within the APE there is a potential for project-related activities to have an effect on these properties. The project has an “adverse effect” on the three properties listed above, and a Memorandum of Agreement was prepared and executed on February 26, 2021, outlining the mitigation agreed to by Caltrans and the SHPO. Overall, the project (undertaking) as a whole has an adverse effect on historic properties. There are historic properties protected by Section 4(f) of the Department of Transportation Act of 1966 within the project vicinity. The project would result in a “use” of those properties as defined by Section 4(f). Please see additional details in Appendix A, Section 4(f).

Caltrans initiated consultation with the SHPO regarding the project in a letter dated April 17, 2020. A Finding of Effect (FOE) was prepared and proposed that a Finding of Adverse Effect is appropriate for the undertaking. SHPO concurrence on the finding of adverse effect was received on June 8, 2020. Caltrans has initiated further consultation with SHPO in December 2020 regarding the resolution of adverse effects through the execution of an Memorandum of Agreement (MOA). The MOA was executed on February 26, 2021 with SHPO and includes treatment measures, included as HIST-1 to HIST-7, to resolve adverse effects to the two bridges. Caltrans has determined that the adverse effects cannot be avoided, and that implementation of the treatment measures set forth in the MOA will satisfactorily take into account the adverse effects on the historic property.

No-Build Alternative

Under the No-Build Alternative, historic properties and archaeological resources would not be affected because no ground disturbance would take place.

2.1.6.4 Avoidance, Minimization, and/or Mitigation Measures

Measures CR-1 and CR-2, which are standard measures for all Caltrans projects, are included to ensure that potential effects on cultural resources and human remains, should they be discovered during construction, would be avoided. Additional mitigation measures HIST-1 to HIST-7 have been included in this section as Caltrans and the SHPO executed the MOA for the project.

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

CR-2 In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendant (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.

HIST-1 Historic American Engineering Record (HAER). Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.

Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).

Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.

Caltrans shall notify State Historic Preservation Officer (SHPO) that the documentation is complete and all copies distributed, as outlined in the paragraph

- above, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.
- HIST-2** Caltrans District 8 Professionally Qualified Staff (PQS) shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures (masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original materials will be considered as an option.
- HIST-3** Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway.
- HIST-4** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans Cultural Studies Office (CSO) Mitigation Website prior to termination of this Memorandum of Agreement (MOA). The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- HIST-5** Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in the MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to MOA Stipulation IV F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of the MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in MOA Stipulation II.A-II.D (also identified as HIST-1 through HIST-5) of this stipulation have been met.

- HIST-6** As legally mandated, human remains, and related items discovered during the implementation of the terms of the MOA and the undertaking will be treated in accordance with requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Section 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined the California Native American Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.
- HIST-7** If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13 (c) assume any discovered property to be eligible for inclusion in the National Register.

2.2 Physical Environment

2.2.1 Water Quality and Storm Water Runoff

2.2.1.1 Regulatory Setting

Federal Requirements

Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source¹ unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

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

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

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

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE’s Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE

¹ A point source is any discrete conveyance such as a pipe or man-made ditch.

decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent² standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State Requirements

Porter-Cologne Water Quality Control Act

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

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

² The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

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. RWCQB's 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.

2.2.1.2 Affected Environment

The primary source used in the preparation of this section is the November 2020 *Natural Environment Study* prepared for the project.

The project area contains four drainages including Strawberry Creek, Morrill Canyon Creek, and two unnamed small tributaries in the Morrill Canyon Bridge area. The three Morrill Canyon

drainages are within the Aliso-San Onofre Watershed and flow downstream to the west and eventually into the Pacific Ocean approximately 18.5 miles southwest of the project area. Strawberry Creek is within the San Jacinto Watershed and is in a TMDL area, flowing south and then west from the site into the San Jacinto River. When flows are present in the San Jacinto River, water flows to the west into Canyon Lake and eventually into Lake Elsinore. Caltrans is the stakeholder for nutrients in the San Jacinto Watershed. The Morrill Canyon Bridge occurs in the San Diego RWQCB (Region 9), and the Strawberry Creek Bridge occurs in the Santa Ana RWQCB (Region 8).

2.2.1.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Pollutants of concern during construction include sediments, rash, petroleum products, concrete waste, sanitary waste, and construction chemicals. During construction activities, excavated soil would be exposed, and there would be an increase in potential for soil erosion compared to existing conditions. In addition, chemicals, liquid products, and petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked, and have the potential to be transported via storm runoff into receiving waters.

Furthermore, construction would disturb soil and increase the potential for soil erosion and suspended particles that can be generated from vehicles operating on a roadway. It is anticipated that there will be cuts and fills associated with the project; however with implementation and maintenance of temporary construction site BMPs it is expected that there will be no decline in water quality as a result of the project. As the project will result in soil disturbance of greater than 1 acre, the project will utilize the following two permits:

- National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements for the State of California, department of Transportation Order Number 2012-0011-DWQ, NPDES No. CAS00003.
- NPDES General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activities (Order No. 2009-0009-DWQ-NPDES No. CAS000002).

Both the Morrill Canyon Bridge and Strawberry Creek Bridge are built over a jurisdictional feature and has riparian habitat. If the USACE asserts jurisdiction over the onsite drainages, then a 404 permit will be required. A 1602 Streambed Alteration Agreement is required for all activities that alter streams and lakes and their associated riparian habitat. As mentioned, the Morrill Canyon Bridge occurs in the San Diego RWQCB and the Strawberry Creek Bridge occurs in the Santa Ana RWQCB. Under Section 401 of the CWA, the RWQCB must certify that the discharge of dredged or fill material into waters of the U.S. does not violate state water quality standards. The RWQCB also regulates impacts on waters of the state under the Porter Cologne Water Quality Control Act through issuance of a Construction General Permit, State General Waste Discharge Order, or Waste Discharge Requirements, depending upon the level of

impacts and the properties of the waterway. Caltrans will obtain a Water Quality Certification for the project.

Construction activities will be limited to the smallest footprint possible within the drainage features, and fencing will be erected along the construction footprint to avoid inadvertent disturbances to additional areas within the drainage. In addition to the BMPs in the SWPPP and 2018 Standard Specifications, avoidance and minimization measures will also be implemented to minimize effects during construction.

No-Build Alternative

Under the No-Build Alternative, no bridge replacement would occur at Morrill Canyon Bridge or Strawberry Creek Bridge, and as such, no construction-related impacts on water quality would occur.

Permanent

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The project has the potential to affect water quality during the operation phase. Potential pollutant sources associated with operations include motor vehicles, bridge maintenance, illegal dumping, and unexpected spills. Increasing the lane and shoulder width would result in an increase in impervious surface area, which would increase storm water runoff. Caltrans will treat all of the water quality volume of the new impervious surface associated with the project. It is not anticipated that any of the build alternatives would cause a change to sedimentation in receiving water bodies within the project area because the project would result in relatively minor increases in runoff compared to the entire hydrologic area. The proposed slopes within the project would be stabilized with incorporation of the Department's standard Design Pollution Prevention (DPP) BMPs, and Treatment BMPs. These BMPs would be implemented to improve stormwater quality during the operation of the transportation facility to minimize potential stormwater and non-stormwater impacts on water quality. The Department's SWMP describes how the Department would comply with their Statewide National Pollutant Discharge Elimination System Permit. The SWMP characterizes the program that the Department would implement to minimize the discharge of pollutants associated with storm drainage systems that serve highway, highway-related properties, facilities, and activities. Post-construction erosion control will be required to ensure that the project site does not pose any additional sediment discharge risk than it did prior to the beginning of construction. The project would not alter the alignment of a stream or other waterbody.

No-Build Alternative

Under the No-Build Alternative no bridge replacements would occur at Morrill Canyon Bridge or Strawberry Creek Bridge. As such, no increase in runoff flow velocities, volumes, or peak flow rates would occur. This alternative would not increase the impervious surface area of the project area. Therefore, drainage and surface runoff would remain as it currently does, and roadway runoff in the area would remain unchanged from existing conditions.

2.2.1.4 Avoidance, Minimization, and/or Mitigation Measures

The following standard measures would be implemented to minimize potential water quality and hydrological impacts associated with construction and operation:

- WQ-1** The project will comply with Caltrans Standard Specifications for construction site Best Management Practices (BMPs), including complying with U.S. Environmental Protection Agency's (U.S. EPA's) Construction General Permit, discharges of stormwater from the job site, compliance with permits issued by Regional Water Quality Control Board (RWQCB) for National Pollutant Discharge Elimination System (NPDES) Permit, and permits governing stormwater and non-stormwater discharges resulting from construction activities at the job site.
- WQ-2** The project will comply with Caltrans Standard Specifications related to complying with the provisions of the current NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, and any subsequent permit, as they relate to construction activities for the project. This will include submission of the permit registration documents, including a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board (SWRCB) at least 14 days prior to the start of construction activity. The SWPPP will (1) meet the requirements of the Construction General Permit and identify potential pollutant sources associated with construction activities; (2) identify non-stormwater discharges; and (3) identify, implement, and maintain BMPs to reduce or eliminate pollutants associated with the construction site. The BMPs identified in the SWPPP will be implemented during the project construction. A Notice of Termination will be submitted to SWRCB upon completion of construction and the stabilization of the site.
- WQ-3** The project will comply with Caltrans Standard Specifications related to complying with the provisions of the current General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (*De Minimis*) Threat to Water Quality as they relate to discharge of non-storm water dewatering wastes for the project.
- WQ-4** The project will comply with Caltrans Standard Specifications related to complying with the provisions of the Section 401 Water Quality Certification, a Section 404 permit from the U.S. Army Corps of Engineers (USACE), and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife will be obtained prior to impacts within identified jurisdictional areas.
- WQ-5** Specifications related to complying with the provisions of the Department's current Statewide NPDES Permit, effective July 1, 2013 (known as the Department's MS4 permit). Project-specific BMPs and any applicable hydromodification features will be incorporated into final design. The BMPs will be properly designed and maintained to target pollutants of concern and reduce runoff from the project site.

2.2.2 Geology/Soils/Seismicity/Topography

2.2.2.1 Regulatory Setting

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

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

2.2.2.2 Affected Environment

Morrill Canyon Bridge is located 1,946 feet above mean sea level (amsl) and Strawberry Creek Bridge is 2,988 feet amsl. The bridges are located in the following U.S. Geological Survey (USGS) 7.5-minute California quadrangles: Morrill Canyon Bridge is in the Sitton Peak quadrangle, and Strawberry Creek Bridge is in the Blackburn Canyon quadrangle. Morrill Canyon Bridge is in Township 6 South – Range 5 West. Strawberry Creek Bridge is in Township 5 South – Range 2 East. Both bridges are located within the U.S. Forest Service with Morrill Canyon Bridge bordered by the Trabuco Ranger District to the north and the Strawberry Creek Bridge in the San Jacinto Ranger District. Soils in the project area include the following:

- Capistrano Sandy Loam: The Capistrano series consists of very deep, well drained soils that formed in alluvium from sedimentary or granitic sources. Capistrano soils are on alluvial fans and flood plains in small valleys.
- Cienega Rocky Sandy Loam (15 to 50 percent slopes, eroded): A somewhat deep and somewhat excessively drained soil that formed in alluvium derived primarily from residuum weathered from igneous rock that occurs on hills.
- Soboba-Hanford Family Association (2 to 8 percent slopes): A deep and well-drained soil that occurs on alluvial fans with many areas dissected by deep intermittent drainages. This soil type was formed in alluvium, primarily derived from granite.

Geologic Hazards

Landslides

Both bridges are located in hilly, mountainous terrain. The County of Riverside General Plan, Elsinore Area Plan, Slope Instability map indicates that the area of Morrill Canyon Bridge is not located within an area designated for slope instability. The County of Riverside General Plan, Riverside Extended Mountain Area Plan (REMAP), Slope Instability map indicates that the area

of Strawberry Bridge is partially located in an area designated as Low to Locally Moderate Susceptibility to Seismically Induced Landslides and Rockfalls.

Seismicity

According to the County of Riverside General Plan Elsinore Area Plan, the nearest earthquake fault to the Morrill Canyon Bridge is the Elsinore Fault Zone located approximately 5 miles east in the City of Lake Elsinore. The Southern California Earthquake Data Center indicates the Elsinore Fault Zone as running north-south along Lake Elsinore and is considered one of the largest in southern California, as well as one of quietest, with the last major rupture occurring in 1910. The probable magnitude capable from the Lake Elsinore Fault Zone is 6.5 to 7.5.

According to the County of Riverside General Plan REMAP, Hot Springs fault, Buck Ridge fault, and San Jacinto fault zone are the nearest faults to the Strawberry Creek Bridge. The Hot Springs and Buck Ridge faults have a length of approximately 75 kilometers and are considered the least active strands of the San Jacinto fault zone. The San Jacinto fault zone is approximately 210 kilometers in length with an interval between surface ruptures of approximately 100 and 300 years with a probable magnitude of 6.5 to 7.5.

Liquefaction Potential

Liquefaction is defined as the phenomenon in which a cohesionless soil mass within the upper 50 feet of the ground surface suffers a substantial reduction in its shear strength, due to the development of excess pore pressures. During earthquakes, excess pore pressures in saturated soil deposits may develop as a result of induced cyclic shear stresses, resulting in liquefaction.

Soil liquefaction generally occurs in submerged granular soils and non-plastic silts during or after strong ground shaking. There are several general requirements for liquefaction to occur. They are as follows.

- Soils must be submerged.
- Soils must be primarily granular.
- Soils must be loose to medium-dense.
- Ground motion must be intense.
- Duration of shaking must be sufficient for the soils to lose shear resistance.

According to the County of Riverside General Plan, Elsinore Area Plan, Seismic Hazards Map, the Morrill Canyon Bridge is not located in any liquefaction susceptible designated area. Furthermore, according to the County of Riverside General Plan, REMAP, Seismic Hazards Map, the Strawberry Creek Bridge is located in an area designated as Deep Groundwater with Moderate levels of liquefaction susceptibility.

Seiches and Tsunamis

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. According to the County of Riverside General Plan, Elsinore Area Plan, the Temescal Wash, Murrieta Creek, San Jacinto River, and Lake Elsinore pose significant flood hazards within the area covered by the Elsinore Area Plan. However, the Morrill Creek Bridge is not within the Lake Elsinore Dam Inundation Area or the Lake Elsinore Special Flood Hazard

Area. The Morrill Creek Bridge is identified as being within a Special Flood Hazard Area due to the Morrill Canyon Creek crossing. The Morrill Canyon Bridge is outside and beyond the Temescal Wash, Murrieta Creek, and San Jacinto River inundation areas. According to the County of Riverside General Plan, REMAP, the San Jacinto River and several creeks in the Garner and Anza Valleys in the lowland areas pose flood hazards within the REMAP area. However, the Strawberry Creek Bridge is not located in an area designated as a flood prone area and not within a special flood hazard area. A review of the California Geological Society Tsunami Inundation Map did not include Riverside County or the proposed bridges as within a tsunami inundation area.

2.2.2.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

During construction of the build alternatives, excavated soil would be exposed, increasing the potential for soil erosion. Additionally, during a storm event, unprotected soils including slopes would be subject to erosion. Short-term, temporary impacts related to construction activities could occur along the project limits due to grading and construction of cut and fill slopes related to the bridge replacements at both Morrill Canyon Bridge and Strawberry Creek Bridge. Construction activities may also temporarily disturb soils in work areas and heavy equipment traffic areas.

The temporary effects due to soil erosion within the project areas are discussed in Section 2.2.1, *Water Quality and Storm Water Runoff*. Erosion potential would be addressed through the implementation of standardized measures as part of the project design. These include erosion control BMPs as part of the SWPPP. With implementation of these standardized measures, no short-term or indirect adverse impacts related to soil compaction or erosion would occur during construction of the build alternatives at Morrill Canyon Bridge and Strawberry Creek Bridge.

The project could expose construction workers and the traveling public to potential impacts associated with seismic ground shaking. Compliance with the most current Department procedures regarding seismic design, which is standard practice on all Department projects, is anticipated to prevent any adverse effects related to seismic ground shaking. Conformance with the California Building Code (CBC) as well as adherence to standard engineering practices and the Department's design criteria, would reduce the effects of seismic ground shaking. Therefore, the project would not result in or contribute to seismic related hazards to the degree that would result in a significant impact on construction workers or the traveling public.

No-Build Alternative

Under the No-Build Alternative, no project construction would occur; therefore, no impacts on geology, soils, seismicity, or topography would occur. The No-Build Alternative would not expose construction workers or the traveling public to risks associated with seismic ground shaking.

Permanent**Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3**

The build alternatives are not anticipated to adversely affect geologic or topographic conditions or be affected by fault rupture within the project limits. The project is located in the seismically active southern California region. Design and construction of the project following the Department's current highway and structure seismic design standards would minimize potential impacts. With implementation of these standard measures, no direct or indirect, adverse, long-term impacts on seismic shaking would occur as a result of the build alternatives.

As previously discussed, based on the County of Riverside General Plan, Elsinore Area Plan, Seismic Hazards Map, the Morrill Canyon Bridge is not located in any liquefaction susceptible designated area, and according to the County of Riverside General Plan, REMAP, Seismic Hazards Map, the Strawberry Creek Bridge is located in an area designated as Deep Groundwater with moderate levels of liquefaction susceptibility. The project would follow the Department's latest design requirements to minimize any potential effects related to liquefaction and seismically induced settlement. With implementation of these standard measures, no direct or indirect, adverse, long-term impacts would occur as a result of the project.

No-Build Alternative

Under the No-Build Alternative, construction of the project would not occur. The existing topography and soils would not be affected by construction activities; however, sedimentation and erosion of existing embankment slopes and exposure to seismic activity and ground shaking could continue.

2.2.2.4 Avoidance, Minimization, and/or Mitigation Measures

To ensure that, during construction, potential effects involving geology, soils, seismicity, and topography are minimized to an acceptable level, the following standard avoidance and minimization measures will be implemented.

- GEO-1** The project will implement Caltrans Standard Specifications Sections 13-05 and 21 related to erosion control during construction.
- GEO-2** Earthwork will be performed in accordance with the Department's Standard Specifications, Section 19, which require standardized measures related to compacted fill, overexcavation, recompaction, and retaining walls, among other requirements.
- GEO-3** Construction will be conducted in accordance with Division III, "Earthwork and Landscape" Section 21-1 through 21-3 of the Department's Standard Specifications, requiring erosion protection and drainage control.

2.2.3 Hazardous Waste/Materials

2.2.3.1 Regulatory Setting

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

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

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

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

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

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

2.2.3.2 Affected Environment

The primary sources used in the preparation of this section is the November 2020 *Initial Site Assessment (ISA) Checklist*.

Environmental Records Review

The California Department of Toxic Substances Control (DTSC) tracks and identifies sites within known or potential contamination through its EnviroStor database, and the SWRCB tracks and identifies sites that may affect groundwater through its GeoTracker database. The EnviroStor database and GeoTracker database were reviewed and identified the following potential hazardous waste sites near the project site.

EnviroStor:

Near Morrill Canyon Bridge:

- Elsinore Elementary School Annex Project (33550001) (N. Langstaff Street/Poe Street, Lake Elsinore, CA 92530): Potential contaminants of concern include fluoranthene and lead in the soil. A site cleanup program was initiated and no further action was required as of June 26, 2001.

Near Strawberry Creek Bridge:

No EnviroStor sites were listed near Strawberry Creek Bridge.

GeoTracker:

Near Morrill Canyon Bridge:

- El Cariso Country Store (T0606501128)(32692 Ortega Highway, Lake Elsinore, CA 92530): Identified as a leaking underground storage tank (LUST) cleanup site. Cleanup status indicates the cleanup was completed and the case was closed as of July 22, 2005.
- Los Pinos Forestry Camp (T060502487) (39251 Ortega Highway, San Juan Capistrano, CA 92675): Identified as a LUST cleanup site. Cleanup status indicates the cleanup was completed and the case was closed as of February 28, 2003.

Near Strawberry Creek Bridge:

- Idyllwild WD WWTP (T10000009195)(52335 Apela Drive, Idyllwild, CA 92549): Identified as a cleanup program site with potential contaminants of concern including waste oil, motor oil, hydraulic, and lubricating oil. Cleanup status indicates the cleanup was completed and the case closed as of April 25, 2016.
- Keenwild Ranger Station (T0606500572)(28500 Highway 243, Mountain Center, CA 92561): Identified as a LUST cleanup site with a potential contaminant concern of gasoline. Cleanup status indicates the status as open, with remediation as of May 30, 2012.

According to the ISA Checklist prepared for the project, there are no underground storage tanks, surface tanks, sumps, ponds, drums, basins, transformers, or landfills on the project site at Morrill Canyon Bridge or Strawberry Creek Bridge. No surface staining, oil sheen, odors, or vegetation damage was observed at the bridge sites. The ISA Checklist concluded that both project bridge sites are considered a low risk for having the potential for hazardous waste involvement.

2.2.3.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Implementation of the build alternatives is not expected to result in the creation of any new health hazards or expose people to potential new health hazards because the project involves the replacement of two bridges and widening of lanes to provide for standard lane widths and the widening of shoulders. No storage of materials or chemicals would occur, and the project is not anticipated to increase the potential hazardous materials in the project area. The ISA Checklist completed for the project determined that the potential for hazardous waste involvement is at a low risk.

Aerially deposited lead (ADL) from the historical use of leaded gasoline exists along roadways throughout California. If encountered, soil with elevated concentrations of lead as a result of ADL on the state highway stem right of way within the project limits will be managed under the July 1, 2016, ADL Agreement between Caltrans and the California Department of Toxic Substances Control. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met.

Appropriate health and safety measures will be taken to minimize the exposure of lead during construction of the build alternatives. The project will include a Lead Compliance Plan, testing of the bridges for ADL, lead based paint, and asbestos-containing construction materials. Furthermore, appropriate measures will also be included for removal of yellow or white traffic stripes, treated wood waste, paint, and thermoplastics. Standard specifications will also apply for removal and management of asbestos-containing construction materials in the bridges.

No-Build Alternative

Under the No-Build Alternative, no construction is proposed; therefore, no adverse effects under NEPA or significant impacts under CEQA would occur with respect to hazardous waste and materials.

Permanent

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Following construction of the project, long-term operations are not expected to result in the creation of any new health hazards or expose people to potential new health hazards. As such, the build alternatives would not result in adverse effects. Permanent impacts (direct or indirect) related to hazardous materials are not anticipated as a result of the build alternatives because operation of the project would not generate, handle, or store hazardous waste.

No-Build Alternative

Under the No-Build Alternative, no improvements would be made to the existing interchange; therefore, no adverse effects under NEPA or significant impacts under CEQA would occur with respect to hazardous waste and materials.

2.2.3.4 Avoidance, Minimization, and/or Mitigation Measures

To ensure potential effects involving hazardous materials/waste during construction are avoided or reduced, the following avoidance, minimization, and/or mitigation measures will be implemented.

- HAZ-1** Section 7-1.02K(6)(j)(ii) - Preparation of a lead compliance plan if applicable.
- HAZ-2** Section 7-1.02K(6)(j)(iii) – Applies if earth material will be disturbed; and work could result in lead exposure; earth material is not a hazardous waste and does not exceed 320 mg/kg lead; earth material does not require disposal in a permitted landfill.
- HAZ-3** Section 14-11.08 – Applies if material containing ADL at regulated concentrations as defined in the ADL Agreement with DTSC is present at the job site and will be excavated, stockpiled, transported, placed within project limits, or disposed of in a landfill.
- HAZ-4** Section 14-11.09 – Applies if the project includes minimal disturbance of areas with regulated material containing ADL.
- HAZ-5** Section 14-11.12 - Specifications for removing yellow traffic stripe and pavement markings with hazardous waste residue.
- HAZ-6** Section 14-11.13 – Applies if work will disturb the existing paint system on a bridge.
- HAZ-7** Section 14-11.16 – Applies for the removal and management of asbestos-containing construction materials in bridges.
- HAZ-8** Section 36-4 - Specifications related to residue containing lead from paint and thermoplastic.
- HAZ-9** Section 49-1.03 - Applies if expected difficult pile installation and the management of hazardous waste, contaminated materials, and naturally occurring asbestos, including serpentine rock. This specification applies for all types of pile installation.
- HAZ-10** Section 14-9.02 – Applies for the demolition or rehabilitation of a bridge or building requiring notification to the U.S. EPA, California Air Resources Board, APCD, or AQMD to comply with air quality regulations.
- HAZ-11** Section 14-11.14 – Applies if the project will generate treated wood waste.

This page intentionally left blank.

2.3 Biological Environment

2.3.1 Natural Communities

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

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in Section 2.3.5, Threatened and Endangered Species. Wetlands and other waters are discussed in Section 2.3.2.

2.3.1.1 Affected Environment

Information used in this section is based on the *Natural Environment Study* (NES) dated November 2020 prepared for the project.

The project limits include the Morrill Canyon Bridge located 1,946 feet amsl near San Juan Hot Springs on the west and Strawberry Creek Bridge located 2,988 feet amsl near Idyllwild on the east. Land uses surrounding both project bridges include open space within the U.S. Forest Service. The Morrill Canyon Bridge is bordered by the Trabuco Ranger District to the north and sporadic rural residential to the south. The Strawberry Creek Bridge is near the San Jacinto Ranger District. Soils in the two bridge areas consist of Capistrano Sandy Loam, Cienega Rocky Sandy Loam, and Soboba-Hanford Family Association. The Project Impact Area (PIA) is limited to the construction footprint associated with the Morrill Canyon Bridge and Strawberry Creek Bridge that comprise this project. The Biological Study Area (BSA) includes the construction footprint associated with the two bridges plus a 500-foot buffer.

The Morrill Canyon Bridge is built over Morrill Canyon Creek, a jurisdictional feature, with Freshwater Forested/Shrub Wetland habitat that is classified as a Palustrine System, Forested Class, and Temporary Flooded Water Regime (PFOA). Morrill Canyon Creek is dominated by Coast live oak (*Quercus agrifolia*) riparian forest, with intermittent areas of southern willow scrub and small thickets of mule fat scrub. Common and representative species within these communities include Coast live oak, arroyo willow (*Salix lasiolepis*), Goodding's willow (*Salix gooddingii*), California sycamore (*Platanus racemosa*), and mule fat (*Baccharis salicifolia*).

The Strawberry Creek Bridge is built over Strawberry Creek, a jurisdictional feature, with Freshwater Forested/Shrub Wetland habitat that is classified as a PFOA. Strawberry Creek is steep and rocky and is dominated by coast live oaks on the upland banks with white alder (*Alnus rhombifolia*), California sycamore, and willows dominating in the active channel. Habitat upstream of the bridge was damaged by the 2018 Cranston Fire, but not destroyed.

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP) is designed to meet the challenge of rapid urbanization by providing for the conservation of significant habitat and the preservation of endangered, threatened, and rare species in a coordinated and efficient process. The WRCMSHCP allows participating jurisdictions to authorize “take permits” of both plant and wildlife Covered Species Adequately Conserved in exchange for the assembly and management of a coordinated WRCMSHCP Conservation Area. Both project bridges and their corresponding BSAs are located within the WRCMSHCP.

Plant Communities

Four Natural Communities of Concern have the potential to occur within the region surrounding the BSA in which the two bridges are located. They include Canyon Live Oak Ravine Forest, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. Based on the California Natural Diversity Database (CNDDB), the Southern Sycamore Alder Riparian Woodland is presumed extant within the Strawberry Creek Bridge BSA.

The Morrill Canyon Creek is primarily dominated by Southern Coast Live Oak Riparian Forest, with intermittent areas of southern willow scrub and small thickets of mule fat scrub. Common species present within these communities include coast live oak, arroyo willow (*Salix lasiolepis*), Goodding’s willow (*Salix gooddingii*), California sycamore (*Plantanus racemose*), and mule fat.

Strawberry Creek is dominated by coast live oak on the upland banks with Southern Sycamore Alder Riparian Woodland, composed of white alder (*Alnus rhombifolia*), California sycamore, and willows in the active channel area.

The Canyon Live Oak Ravine Forest and Southern Cottonwood Willow Riparian Forest were not present in the BSA during surveys conducted for the project.

Habitat Connectivity

Habitat linkages provide links between large undeveloped habitat areas that have become separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature, with adequate width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species but inadequate for others. Wildlife corridors are significant features for dispersal, seasonal migration, breeding, and foraging. In addition, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

Transportation facilities, particularly freeways, constitute barriers to habitat connectivity. The Morrill Canyon Bridge and Strawberry Creek Bridge are not within or located directly adjacent to multiple species habitat conservation plan (MSHCP) Criteria Cells and thus, will not contribute to Criteria Cell connectivity and conservation objectives.

2.3.1.2 Environmental Consequences

Temporary

Clearing, grubbing, and bridge pier construction are anticipated to directly impact Southern Coast Live Oak Riparian Forest within the Morrill Canyon Bridge PIA and Southern Sycamore Alder Riparian woodland in the Strawberry Creek Bridge PIA. Temporary impacts would generally be caused by access for construction equipment and the grading limits at both bridge locations.

Morrill Canyon Bridge Alternative M1

Implementation of Morrill Canyon Bridge Alternative M1 would result in 0.973 acre of temporary disturbance within the project footprint area. This includes 0.116 acre of temporary disturbance to chaparral vegetation community, and 0.857 acre of temporary disturbance to woodlands and forest vegetation communities. There is no temporary disturbance to riparian vegetation communities to be impacted under this alternative.

Table 2.3-1 summarizes the temporary disturbance acreages at Morrill Canyon Bridge.

Table 2.3-1. Morrill Canyon Bridge Temporary Disturbance

	Chaparral (acre)	Woodland/Forest (acre)	Riparian (acre)
Alternative M1 Temporary	0.116	0.857	0

Source: Natural Environment Study, 2020.

Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Implementation of Alternative S1 (Preferred Alternative) at the Strawberry Creek Bridge site would result in 0.501 acre of temporary disturbance within the project footprint. This includes 0.251 acre of temporary disturbance to chaparral vegetation community and 0.192 acre of temporary disturbance to riparian vegetation communities and 0.059 acre of temporary disturbance to upland woodlands and forest vegetation communities.

Implementation of Alternative S3 at the Strawberry Creek Bridge site would result in 0.619 acre of temporary disturbance within the project footprint. This includes 0.281 acre of temporary disturbance to chaparral vegetation community, 0.216 acre of temporary disturbance to riparian vegetation communities and 0.122 acre of temporary disturbance to upland woodlands and forest vegetation communities.

Table 2.3-2 summarizes the temporary disturbance acreages at Strawberry Creek Bridge.

Table 2.3-2. Strawberry Creek Bridge Temporary Disturbance

	Chaparral (acre)	Upland Woodlands/Forest	Riparian
Alternative S1 (Preferred Alternative) Temporary	0.251	0.059	0.192
Alternative S3 Temporary	0.281	0.122	0.216

Source: Natural Environment Study, 2020.

No-Build Alternative

If the project is not constructed, it will not cause any impacts on natural communities of concern within the BSA, including depleted natural communities/habitats of concern.

Habitat Connectivity

Based on the NES prepared for the project, the majority of the Strawberry Creek Bridge PIA consists of moderate wildlife connectivity, and query results from the Caltrans Connectivity Tool indicate that the Strawberry Creek Bridge BSA is within an area identified as an Essential Habitat Connectivity Area (Santa Rosa Mountains – Cahuilla Mountain/Rouse Ridge) in the California Essential Habitat Connectivity Project. Based on reviews of the data layer “Wildlife Movement Barrier Priorities-CDFW-2020,” neither the Morrill Canyon Bridge or Strawberry Creek Bridge are identified as wildlife movement barrier priorities. Work associated with the two bridge replacements may temporarily impact wildlife movement due to construction disturbance and noise. However, neither the Morrill Canyon Bridge nor the Strawberry Creek Bridge are within or located directly adjacent to any Criteria Cell and, as such, will not contribute to any connectivity to the Criteria Cells or its conservation objectives.

Permanent**Morrill Canyon Bridge Alternative M1**

Implementation of Alternative M1 at Morrill Canyon Bridge would result in 0.283 acre of permanent disturbance within the project footprint. This includes 0.010 acre of permanent disturbance to chaparral vegetation community, 0.173 acre of permanent disturbance to woodlands and forest vegetation communities, and 0.1 acre of permanent impact to the disturbed habitat (Tenaja Truck Trail) that will be paved. There is no permanent disturbance to riparian vegetation communities proposed to be impacted under this alternative.

Table 2.3-3 summarizes the permanent disturbance acreages at Morrill Canyon Bridge.

Table 2.3-3. Morrill Canyon Bridge Permanent Disturbance

	Chaparral (acre)	Woodlands/Forest (acre)	Riparian acre)
Alternative M1 Permanent	0.010	0.173	0

Source: Natural Environment Study, 2020.

Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Implementation of Alternative S1 (Preferred Alternative) at Strawberry Creek Bridge would result in 0.232 acre of permanent disturbance within the project footprint. This includes 0.086 acre of permanent disturbance to chaparral vegetation community, 0.115 acre of permanent disturbance to riparian vegetation communities, and 0.031 acre of permanent disturbance to upland woodlands and forest vegetation communities.

Implementation of Alternative S3 at Strawberry Creek Bridge would result in a total of 0.220 acre of permanent disturbance within the footprint. This includes 0.092 acre of permanent disturbance to chaparral vegetation community, 0.100 acre of permanent disturbance to riparian vegetation communities, and 0.028 acre of permanent disturbance to upland woodlands and forest vegetation communities.

Table 2.3-4 summarizes the permanent disturbance acreages at Strawberry Creek Bridge.

Table 2.3-4. Strawberry Creek Bridge Permanent Disturbance

	Chaparral (acre)	Upland Woodlands/Forest (acre)	Riparian (acre)
Alternative S1 (Preferred Alternative) Permanent	0.086	0.031	0.115
Alternative S3 Permanent	0.092	0.028	0.100

Source: Natural Environment Study, 2020.

No-Build Alternative

If the project is not constructed, it will not cause any impacts on natural communities of concern within the BSA, including depleted natural communities/habitats of concern.

Habitat Connectivity

As indicated in the NES, the project would pose no risk of permanently decreasing the existing habitat connectivity at either bridge location.

WRCMSHCP

The project bridges are located within the WRCMSHCP. In compliance with the WRCMSHCP, habitat assessments were performed in the BSA for both bridge locations. No narrow endemic plants (NEPS) were detected within the BSAs, and as such, the project has fulfilled MSHCP requirements for those species by conducting the surveys. The project would affect natural vegetation communities for Southern Coast Live Oak Riparian Forest and Southern Sycamore Alder Riparian Woodland. To minimize and avoid potential impacts on natural communities potentially occurring near the project site, the project will implement all applicable Caltrans Best Management Practices (BMPs) and 2018 Standard Specifications (or latest version). Obligations for WRCMSHCP will be satisfied through the implementation of avoidance, minimization, and mitigation measures, as well as any measure required by CDFW and USFWS for MSHCP consistency approval; develop and implement an Arroyo Toad Relocation Plan; preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) report; and construction guidelines provided in the WRCMSHCP Volume 1, Section 7.5.3; and Standard Best Management Practices outlined in WRCMSHCP Appendix C. The DBESP report and request for WRCMSHCP consistency was submitted to the USFWS and CDFW on November 13, 2020. A revised DBESP, based on coordination with USFWS and CDFW, was resubmitted on February 18, 2021 and included clarification of impacts to occupied arroyo toad habitat, updates regarding the use of exclusionary fencing, and clarification of MSHCP riparian and riverine offsets. The USFWS and CDFW provided WRCMSHCP consistency determination on March 9, 2021, with implementation of measure HCP-1.

2.3.1.3 Avoidance, Minimization, and/or Mitigation Measures

Measures to avoid indirect, temporary impacts from human activity during construction will be required if the California Department of Fish and Wildlife (CDFW) determined that the vegetation outside of the bed and bank feature is under CDFW jurisdiction. To minimize and avoid potential impacts on Natural Communities of Concern potentially occurring near the project site, the project will implement all applicable Caltrans BMPs and 2018 Standard

Specifications (or latest version) including equipment staging, storing, and borrow sites, worker environmental awareness training (WEAP), biological monitor, and flagging and fencing.

- BIO-1** Equipment Staging, Storing, and Borrow Sites: Equipment, vehicles, and materials staged and stored in Caltrans right of way must be sited in previously paved or previously disturbed areas only and must avoid native vegetation. Approval of additional staging, storing or borrow sites must require the Caltrans Biologist to analyze project impacts and provide authorization.
- BIO-6** Worker Environmental Awareness Program (WEAP): A qualified contractor-supplied biologist must present a biological resource information program/WEAP prior to ground-disturbing activities to all personnel that must be present within the project limits for longer than 30 minutes at any given time.
- BIO-7** Biological Monitor: The qualified contractor-supplied biologist must monitor project-related activities to ensure that measures (including the construction guidelines in WRCMSHCP Volume 1 Section 7.5.3 and the Standard Best Management Practices in WRCMSHCP Appendix C) are being implemented and documented.
- BIO-15** Flagging and Fencing: Within one week prior to construction a pre-construction survey must be conducted for special status plant species and must be flagged by the Contractor-supplied biologist for visual identification to construction personnel for work avoidance. Portions of the BSA that feature multiple plants in a single location must be fenced with environmentally sensitive area temporary fencing.

Based on submittal of the revised DBESP, the USFWS and CDFW provided MSHCP consistency determination for the project with the following stipulations:

- HCP-1** To address impacts to occupied arroyo toad habitat, and per requirements set forth within MSHCP species objectives, Caltrans will pursue full replacement mitigation for impacts to arroyo toad. To achieve this, Caltrans will continue to work with the Wildlife Agencies (USFWS and CDFW) and the Western Riverside Conservation Authority to identify whether mitigation will be achieved through acquisition and conservation of occupied arroyo toad habitat, or via installation of a conservation easement within occupied arroyo toad habitat.

Once a MSHCP offset has been identified and acquired, Caltrans will provide the Wildlife Agencies with a revised DBESP to address arroyo toad impacts, thereby ensuring consistency with the MSHCP; and

The items in HCP-1 will be addressed prior to the onset of ground disturbing activities.

2.3.2 Wetlands and Other Waters

2.3.2.1 Regulatory Setting

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

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

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

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

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all

practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

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

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

2.3.2.2 Affected Environment

Information used in this section is based on the *Natural Environment Study* dated November 2020 prepared for the project.

Prior to conducting the jurisdictional delineation fieldwork in the Morrill Canyon Bridge and Strawberry Creek Bridge BSAs, literature and other materials were reviewed including aerial photographs of the bridge sites to determine the potential locations of jurisdictional waters or wetlands, USGS topographic maps to determine the presence of any blue-line drainages and other mapped water features, U.S. Department of Agriculture soil mapping data, and other U.S. Fish and Wildlife Service (USFWS) maps to identify areas mapped as wetland features. The surveys conducted for the project consisted of walking the entire survey area and identifying potential jurisdictional water features. Visual observations of vegetation types and changes in hydrology and culvert locations were used to locate areas for evaluation.

The Morrill Canyon Bridge is built over a jurisdictional feature with Freshwater Forested/Shrub Wetland habitat that is classified as a PFOA. Morrill Canyon Creek is dominated by coast live oak riparian forest, with intermittent areas of southern willow scrub and small thickets of mule fat scrub. During field surveys the Morrill Canyon Creek was observed with surface water. The Strawberry Creek Bridge is built over a jurisdictional feature with Freshwater Forested/Shrub Wetland habitat that is classified as PFOA. Strawberry Creek is steep and rocky and is dominated by coast live oaks on the upland banks with white alder (*Alnus rhombifolia*),

California sycamore, and willows dominating in the active channel. During field surveys conducted for the project, the Strawberry Creek was observed with surface water.

The project area contains four drainages including Morrill Canyon Creek (Drainage 1) and two unnamed small tributaries (Drainage 2 and 3) in the Morrill Canyon Bridge PIA with live oak habitat, and Strawberry Creek with alder sycamore riparian habitat. The three Morrill Canyon drainages are within the Aliso-San Onofre Watershed and flow downstream to the west and eventually into the Pacific Ocean. Strawberry Creek is within the San Jacinto Watershed and flows south and then west from the site into the San Jacinto River.

The Morrill Canyon BSA contains *Quercus agrifolia* Forest & Woodland Alliance (Coast live oak woodland and forest), with *Adenostoma fasciculatum* Shrubland Alliance (Chamise chaparral) observed on the slopes outside of the proposed work area. The dominant tree species observed was coast live oak (*Quercus agrifolia*) with some small patches of Goodling's black willow (*Salix goodingii*) and California sycamore (*Platanus racemose*) observed with the channel of Drainage 1. A small area of mulefat were also observed along Drainages 1 and 2. The dominant understory shrub observed was poison oak (*Toxicodendron diversilobum*) and common snowberry (*Symphoricarpos albus*). Herbaceous riparian vegetation observed within the creek and on the banks include watercress (*Nasturtium officinale*), fringed willow-herb (*Epilobium ciliatum*), seep monkeyflower (*Erythranthe guttata*), tall flats edge (*Cyperus eragrostis*), umbrella plant (*Cyperus involucratus*), and Mexican rush (*Juncus mexicanus*).

The Strawberry Creek BSA along the creek contains *Alnus rhombifolia* Forest & Woodland Alliance (White alder groves), with *Adenostoma fasciculatum* Shrubland Alliance (Chamise chaparral) observed on the slopes outside of the proposed work area. The dominant tree species observed were white alder (*Alnus rhombifolia*), California sycamore within the channel, and interior live oak (*Quercus wislizeni*) on the outside of the riparian area. The area north of SR-74 had burned recently due to wildfires and most trees were not identifiable. A small area with some patches of mule fat (*Baccharis salicifolia*) was observed along Drainage 1 and 2. The dominant understory shrub observed was poison oak (*Toxicodendron diversilobum*) and common snowberry (*Symphoricarpos albus*). Herbaceous riparian vegetation observed within the creek and on the banks included watercress (*Nasturtium officinale*), fringed willow-herb (*Epilobium ciliatum*), seep monkeyflower (*Erythranthe guttata*), tall flats edge (*Cyperus eragrostis*), umbrella plant (*Cyperus involucratus*), and cattail (*Typha sp.*), and Mexican rush (*Juncus mexicanus*). Soil pits were investigated within the channel and adjacent to the active drainage. The soil pits showed saturated soils consisting mainly of coarse sand and silt; however, there were no wetland indicators present.

2.3.2.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

For the Morrill Canyon Bridge and Strawberry Creek Bridge PIAs, temporary impacts will be caused by construction access. The following tables summarize the impacts on jurisdictional waters for each of the alternatives for Morrill Canyon Bridge and Strawberry Creek Bridge.

Table 2.3-5. Morrill Canyon Bridge Alternative M1 Impacts on Jurisdictional Areas

Drainage	USACE/ RWQCB Perm Impact (acres)	USACE/ RWQB Perm Impact (feet)	USACE/ RWQCB Temp Impact (acres)	USACE/ RWQCB Temp Impact (feet)	CDFW Perm Impact (acres)	CDFW Perm Impact (feet)	CDFW Temp Impact (acres)	CDFW Temp Impact (feet)	Classification
Morrill Creek (D1)	0.003	26	0.011	64	0.021	26	0.066	64	Non-Section 10- Non Wetland
D2	0	0	0	0	0	0	0	0	Non-Section 10- Non Wetland
D3	0	0	0	0	0	0	0	0	Non-Section 10- Non Wetland
Total	0.003	26	0.011	64	0.021	26	0.066	64	

Source: Natural Environment Study, 2020.

Notes: USACE/RWQCB = U.S. Army Corps of Engineers/Regional Water Quality Control Board.

CDFW = California Department of Fish and Wildlife; D1 = Drainage 1; D2 = Drainage 2; D3 = Drainage 3.

Table 2.3-6. Strawberry Creek Bridge Alternative S1 (Preferred Alternative) Impacts on Jurisdictional Areas

Drainage	USACE/ RWQCB Perm Impact (acres)	USACE/ RWQB Perm Impact (feet)	USACE/ RWQCB Temp Impact (acres)	USACE/ RWQCB Temp Impact (feet)	CDFW Perm Impact (acres)	CDFW Perm Impact (feet)	CDFW Temp Impact (acres)	CDFW Temp Impact (feet)	Classification
Strawberry Creek	0.039	25	0.07	47	0.1	25	0.15	47	Non-Section 10- Non Wetland

Source: Natural Environment Study, 2020.

Notes: USACE/RWQCB = U.S. Army Corps of Engineers/Regional Water Quality Control Board.

CDFW = California Department of Fish and Wildlife; D1 = Drainage 1; D2 = Drainage 2; D3 = Drainage 3.

Table 2.3-7. Strawberry Creek Bridge Alternative S3 Impacts on Jurisdictional Areas

Drainage	USACE/ RWQCB Perm Impact (acres)	USACE/ RWQB Perm Impact (feet)	USACE/ RWQCB Temp Impact (acres)	USACE/ RWQCB Temp Impact (feet)	CDFW Perm Impact (acres)	CDFW Perm Impact (feet)	CDFW Temp Impact (acres)	CDFW Temp Impact (feet)	Classification
Strawberry Creek	0.03	21	0.1	57	0.08	21	0.2	57	Non-Section 10- Non Wetland

Source: Natural Environment Study, 2020.

Notes: USACE/RWQCB = U.S. Army Corps of Engineers/Regional Water Quality Control Board.

CDFW = California Department of Fish and Wildlife; D1 = Drainage 1; D2 = Drainage 2; D3 = Drainage 3.

Based on the preliminary design plans for Morrill Canyon Bridge Alternative M1, approximately 0.011 acre of temporary impact on USACE/RWQCB jurisdictional waters (non-wetlands waters) on Morrill Creek/Drainage 1 would occur. No temporary USACE/RWQCB impacts would occur on Drainage 2 or 3. In addition, Morrill Canyon Bridge Alternative M1 would result in approximately 0.066 acre of temporary impacts on CDFW jurisdictional areas. No CDFW temporary impacts would occur on Drainage 2 or 3.

Based on the preliminary design plans for Strawberry Creek Bridge Alternative S1 (Preferred Alternative), approximately 0.07 acre of temporary impact on USACE/RWQCB jurisdictional waters (non-wetlands waters) on Strawberry Creek would occur. In addition, Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would result in approximately 0.15 acre of temporary impacts on CDFW jurisdictional areas.

Based on the preliminary design plans for Strawberry Creek Bridge Alternative S3, approximately 0.01 acre of temporary impact on USACE/RWQB jurisdictional waters (non-wetlands waters) on Strawberry Creek would occur. In addition, Strawberry Creek Bridge Alternative S3 would result in approximately 0.19 acre of temporary impacts on CDFW jurisdictional areas.

A Section 404 Clean Water Act permit may be required with the two most common types of permits issued by the USACE being a nationwide permit (NWP) or an individual permit (IP). NWPs are general permits for specific categories of activities that result in minimal impacts on aquatic resources, with NWP 14 being used specifically for linear transportation projects. The project would likely qualify under a NWP 14 and would require a preconstruction notification. The Morrill Canyon Bridge occurs in the San Diego RWQCB (Region 9), and the Strawberry Creek Bridge occurs in the Santa Ana RWQCB (Region 8). Pursuant to Section 1600 of the Fish and Game Code, a Lake and Streambed Alteration Agreement would be required from the CDFW. Under Section 401 of the CWA, the RWQCB must certify that the discharge of dredged or fill material into waters of the U.S. does not violate state water quality standards. The project will mitigate for temporary impacts through restoration and enhancement of onsite riparian/riverine areas. Compensatory mitigation required by the RWQCB and CDFW will be determined in coordination with CDFW and RWQCB during the 1602 and 401 permitting process. The RWQCB also regulates impacts on waters of the state under the Porter-Cologne Water Quality Control Act through issuance of a Construction General Permit, State General Waste Discharge order, or Waste Discharge Requirements, depending upon the level of impact and the properties of the waterway.

No-Build Alternative

If the project is not constructed, project-related impacts on federal and state jurisdictional waters and wetlands would not occur.

Permanent

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Based on review of the preliminary design plans for Morrill Canyon Bridge Alternative M1, approximately 0.003 acre of permanent impacts on USACE/RWQCB jurisdictional waters (non-

wetland waters) would occur. In addition, Morrill Canyon Bridge Alternative M1 would result in approximately 0.021 acre of permanent impacts on CDFW jurisdictional areas.

Based on review of the preliminary design plans for Strawberry Creek Bridge Alternative S1 (Preferred Alternative), approximately 0.039 acre of permanent impacts on USACE/RWQCB jurisdictional waters (non-wetland waters) would occur. In addition, Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would result in approximately 0.1 acre of permanent impacts on CDFW jurisdictional areas.

Based on review of the preliminary design plans for Strawberry Creek Bridge Alternative S3, approximately 0.03 acre of permanent impacts on USACE/RWQCB jurisdictional waters (non-wetland waters) would occur. In addition, Strawberry Creek Bridge Alternative S3 would result in approximately 0.08 acre of permanent impacts on CDFW jurisdictional areas.

Under Section 401 of the CWA, the RWQCB must certify the discharge of dredged or fill materials into waters of the U.S. does not violate state water quality standards. Permanent impacts on riparian/riverine habitat and federal/state jurisdictional waters are proposed to be mitigated by either purchase of suitable mitigation bank credits or through permittee-responsible mitigation. For either option, the mitigation will be done prior to project impacts, and Caltrans will coordinate with the Wildlife/Regulatory Agencies on which mitigation option is optimal/available based on project timelines.

No-Build Alternative

If the project is not constructed, project-related impacts on federal and state jurisdictional waters and wetlands would not occur. Furthermore, maintenance activities would continue to occur.

2.3.2.4 Avoidance, Minimization, and/or Mitigation Measures

Any specific avoidance and minimization efforts will be identified during the regulatory permitting process. Construction activities will be limited to the smallest footprint possible within drainage features, and fencing will be erected along the construction footprint to avoid inadvertent disturbances to additional area within the drainage. In addition to the BMPs in the Storm Water Pollution Prevention Plan and 2018 Standard Specifications (or latest version), the following avoidance, and minimization measures will be implemented to minimize effects during construction: BIO-1, BIO-6, and BIO-7 as listed in Section 2.3.1.3.

BIO-18 The project will mitigate for temporary impacts through restoration and enhancement of onsite riparian/riverine areas.

BIO-19 Permanent impacts on riparian/riverine habitat and federal/state jurisdictional waters are proposed to be mitigated by either purchase of suitable mitigation bank credits or through permittee-responsible mitigation. For either option, the mitigation will be done prior to project impacts, and Caltrans will coordinate with the Wildlife/Regulatory Agencies on which mitigation option is optimal/available based on project timelines.

2.3.2.5 Wetlands Only Practicable Alternative Finding

The Executive Order for the Protection of Wetlands (EO 11990) regulates the activities of federal agencies with regard to wetlands. This executive order states that a federal agency, such as the FHWA and/or Caltrans, 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.

In the Morrill Canyon Bridge and Strawberry Creek Bridge project impact areas, permanent impacts to jurisdictional waters will be caused by the placement of the new bridge supports. Temporary impacts will be caused by construction access. The project has been designed to avoid aquatic features to the maximum extent feasible. Construction activities will be limited to the smallest footprint possible within drainage features, and fencing will be erected along the construction footprint to avoid inadvertent disturbances to additional area within the drainage. In addition to the BMPs in the Storm Water Pollution Prevention Plan and 2018 Standard Specifications (or latest version), avoidance, and minimization measures will be implemented to minimize effects during construction (BIO-1, BIO-6, BIO-7, BIO-18, and BIO-19). The No Build Alternative would not result in wetland impacts. However, the No Build Alternative would not meet the purpose and need of the project because it would not improve safety and mobility for travelers along this portion of SR-74 and would not replace the aging structures to meet current design, crash, and safety standards.

Based on the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize hard to wetlands that may result from such use.

2.3.3 Plant Species

2.3.3.1 Regulatory Setting

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

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

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. The regulatory

requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

2.3.3.2 Affected Environment

Information used in this section is based on the November 2020 *Natural Environment Study* prepared for the project.

The USFWS IPaC list, CNDDDB inventory database, and CNPS online databases indicate that 32 special-status plant species and one special-status moss species (California screw moss) have the potential to occur within the region surrounding the BSA.

The following table summarizes the listed plant species, candidate species, special-status species, and critical habitat potentially occurring or known to occur in the area in which the project area is located.

Table 2.3-8. Plant Species

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitats	Habitat Present/Absent	Rationale
<i>Tortula californica</i>	California screw moss	None/None	1B.2	Chenopod scrub, valley & foothill grassland	A	No suitable habitat present in Morrill Canyon BSA
<i>Abronia villosa</i> var. <i>aurita</i>	Chaparral sand-verbena	USFS_S/None	1B.1	Chaparral, coastal scrub, Desert dunes. Sandy areas	A	No suitable habitat present in Strawberry Creek BSA
<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	USFS_S/None	1B.1	Chaparral, ultramafic	A	No suitable habitat in Morrill Canyon BSA
<i>Astragalus pachypus</i> var. <i>jaegeri</i>	Jaeger's milk-vetch	USFS_S/None	1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland	HP	Suitable habitat present in Strawberry Creek BSA but not in PIA
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT/SE	1B.1	Chaparral (openings), cismontane woodland, coastal scrub; usually associated with annual grassland and vernal pools; often surrounded by shrubland habitats; occurs in openings on clay soils	A	No suitable habitat present in Morrill Canyon BSA
<i>Brodiaea santarosae</i>	Santa Rosa Basalt brodiaea	None/USFS_S	1B.2	Valley & foothill grassland, Santa Rosa Basalt	A	No Suitable habitat present

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitats	Habitat Present/Absent	Rationale
						in Morrill Canyon BSA
<i>Calochortus palmeri</i> var. <i>munzii</i>	San Jacinto mariposa-lily	USFS_S/ None	1B.2	Chaparral, Lower montane coniferous forest, Meadow & seep. Seen in open Jeffrey pine forest as well as in chaparral	HP	Suitable habitat present in Strawberry Creek BSA
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	None/None	4.2	Chaparral, Cismontane woodland, Coastal scrub, lower montane coniferous forest. Valley and foothill grassland	HP, O	Suitable habitat present in Strawberry Creek BSA. Species detected outside the BSA during 2020 surveys
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	USFS_S/ None	1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland	HP	Suitable habitat present in Strawberry Creek BSA
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Long spined spineflower	None/none	1B.2	Chaparral, coastal scrub, meadow and seep, ultramafic, valley and foothill grassland, vernal pool	A	No suitable habitat present in Morrill Canyon BSA
<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	White-bracted spineflower	USFS_S/ None	1B.2	Coastal scrub, Mojavean desert scrub, pinon & juniper woodlands. Sandy or gravelly places	A	No suitable habitat present in Strawberry Creek BSA
<i>Clinopodium chandleri</i>	San Miguel savory	USFS_S/ None	1B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, ultramafic, valley and foothill grassland, rocky, gabbroic or metavolcanic substrate	HP	Suitable habitat present in the Morrill Canyon BSA
<i>Comaristaphylis diversifolia</i> ssp. <i>diversifolia</i>	Summer holly	None/ None	1B.2	Chaparral, cismontane woodland	HP	Suitable habitat present in Morrill Canyon BSA
<i>Deinandra mohavensis</i>	Mojave tarplant	USFS_S/ SE	1B.3	Chaparral, coastal scrub, riparian scrub. Low sand bars in river bed	HP	Suitable habitat present in Strawberry Creek BSA
<i>Dodeclhema leptoceras</i>	Slender-horned spineflower	FE/SE	1B.1	Chaparral, cismontane woodland, coastal scrub	A	No suitable habitat present in Strawberry Creek BSA

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitats	Habitat Present/Absent	Rationale
<i>Dudleya multicaulis</i>	Many-stemmed dudleya	USFS_S/ None	1B.2	Chaparral, coastal scrub, valley and foothill grassland, in heavy, often clayey soils or grassy slopes	A	No suitable habitat in the Morrill Canyon BSA
<i>Dudleya viscida</i>	Sticky dudleya	None/None	1B.2	Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, on north and south facing cliffs and banks	A	No suitable habitat present in Morrill Canyon BSA
<i>Baccharis vanessae</i>	Encinitas baccharis	FT/CE	1B.1	Chaparral	A	No suitable habitat present in Morrill Canyon BSA
<i>Galium angustifolium</i> ssp. <i>jacinticum</i>	San Jacinto Mountains bedstraw	USFS_S/None	1B.3	Lower montane coniferous forest. Open mixed forest	A	No suitable habitat present in Strawberry Creek BSA
<i>Galium californicum</i> ssp. <i>primum</i>	Alvin Meadow bedstraw	USFS_S/ None	1B.2	Chaparral, lower montane coniferous forest	A	No suitable habitat present in Strawberry Creek BSA
<i>Horkelia cuneate</i> var. <i>puberula</i>	Mesa horkelia	USFS_S/ None	1B.1	Chaparral, cismontane woodland, coastal scrub, sandy or gravelly sites	HP	Suitable habitat present in Morrill Canyon BSA
<i>Lilium parryi</i>	Lemon lily	USFS_S/ None	1B.2	Lower montane coniferous forest, meadow and seep, riparian forest, upper montane coniferous forest	A	No suitable habitat present in Morrill Canyon BSA
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	Intermediate monardella	None/None	1B.3	Chaparral, cismontane woodland, lower montane coniferous forest, in steep brushy areas	HP	Suitable habitat present in the Morrill Canyon BSA
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	USFS_S/ None	1B.3	Broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley foothill grassland	A	No suitable habitat in Morrill Canyon BSA
<i>Nolina cismontane</i>	Chaparral nolina	USFS_S/ None	1B.2	Chaparral, coastal scrub, ultramafic	A	No suitable habitat present in Morrill Canyon BSA
<i>Penstemon californicus</i>	California beardtongue	USFS_S/ None	1B.2	Chaparral, lower montane coniferous forest, pinon and	HP	Suitable habitat present

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitats	Habitat Present/Absent	Rationale
				juniper woodlands. Stony slopes and shrubby openings		in Strawberry Creek BSA
<i>Pseudo-gnaphalium leucocephalum</i>	White rabbit-tobacco	None/None	2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland, sandy gravelly sites	A	No suitable habitat present in Morrill Canyon BSA
<i>Saltugilia latimeri</i>	Latimer's woodland-gilia	None/None	1B.2	Chaparral, limestone, mojavean desert scrub, pinon and juniper woodlands; rocky or sandy substrate sometimes in washes	A	No suitable habitat present in Strawberry Creek BSA
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	FE/SE	1B.1	Coastal scrub, valley and foothill grassland, vernal pools	A	No suitable habitat present in Morrill Canyon BSA
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	Southern mountains skullcap	USFS_S/None	1B.2	Chaparral, cismontane woodland, lower montane coniferous forest; in gravelly soils on streambanks or in mesic sites	HP	Suitable habitat present in Strawberry Creek BSA and Morrill Canyon BSA
<i>Navarretia fossalis</i>	Spreading navarretia	FT/None	1B.1	Chenopod scrub, marshes and swamps (assorted shallow freshwater)	A	No suitable habitat present in Morrill Canyon BSA
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	USFS_S/None	1B.2	Chaparral, coastal scrub, ultramafic, stony, decomposed gabbro soil	A	No suitable habitat present in Morrill Canyon BSA
<i>Viguiera purisimae</i>	La Purisima viguiera	None/None	2B.3	Chaparral, coastal bluff scrub, dry, rocky places in open shrubland	A	No suitable habitat present in the Morrill Canyon BSA

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

During the surveys conducted for the project, no narrow endemic plant species (NEPS) or any other special-status plant species were detected within the plant survey areas. Habitat suitable for the following species may be present within the Morrill Canyon BSA: San Miguel savory, summer holly, mesa horkelia, intermediate monardella, and southern mountains skullcap. Habitat suitable for Jaeger's milk-vetch may be present within the Morrill Canyon BSA but not the PIA. Habitat suitable for the following species may be present within the Strawberry Creek BSA: San

Jacinto mariposa-lily, Plummer's mariposa-lily, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California beardtongue, and southern mountains skullcap.

2.3.3.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Development of the project has the potential to result in indirect impacts on special-status plant species that may occur within habitats surrounding the BSA; such impacts could stem from fugitive dust or the spread of non-native seeds. With implementation of avoidance and minimization measures described below, the project would not result in indirect impacts on special-status plant species. Short-term construction impacts would be considered less than significant under CEQA and not adverse under NEPA.

No-Build Alternative

If the project is not constructed, the No-Build Alternative would not cause any impacts on non-listed special-status species.

Permanent

Morrill Canyon Bridge Alternative M1, and Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The project has the potential to impact San Miguel savory, summer holly, mesa horkelia, intermediate monardella, and southern mountains skullcap for which suitable habitat is present within the Morrill Canyon BSA; and San Jacinto mariposa-lily, Plummer's mariposa-lily, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California beardtongue, and southern mountains skullcap for which suitable habitat is present within the Strawberry Creek BSA. To ensure that the project will not impact special-status plant species with suitable habitat present in the BSA, avoidance and minimization measures will be implemented.

No-Build Alternative

If the project is not constructed, the No-Build Alternative would not cause any impacts on non-listed special-status species.

2.3.3.4 Avoidance, Minimization, and/or Mitigation Measures

To ensure that the project will not impact (i.e., clear and grub) special-status plant species with suitable habitat present in the BSA, avoidance and minimization measures will be implemented. These measures will ensure that the project minimizes impacts on suitable habitat for the special-status plant species. These measures include BIO-1, BIO-6, BIO-7 and the following:

- BIO-15** Flagging and Fencing: Within one week prior to construction a pre-construction survey must be conducted for special status plant species and must be flagged by the Contractor-supplied biologist for visual identification to construction personnel for work avoidance. Portions of the BSA that feature multiple plants in a single location must be fenced with environmentally sensitive area temporary fencing.

BIO-16 Rare Plant Translocation: If a special status plant species are found within the work area and cannot be fenced but can survive transplantation, the Contractor-supplied biologist must contact the Caltrans Biologist to determine the time and suitable translocation area for the plant species to be moved. Additional requirements and actions must be determined at the time in which such situation occurs.

2.3.4 Animal Species

2.3.4.1 Regulatory Setting

Many state and federal laws regulate impacts on wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries), and the California Department of Fish and Wildlife (CDFW) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species section, Section 2.3.5, 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 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.

2.3.4.2 Affected Environment

Information used in this section is based on the August 2020 *Natural Environment Study* prepared for the project.

Avian

Four special-status avian species have the potential to occur within the project BSAs based on wildlife database queries. These species include black swift, coastal California gnatcatcher, southwestern willow flycatcher, and least Bell's vireo. During riparian bird surveys conducted for the project, least Bell's vireo and southwestern willow flycatchers were not detected even though suitable habitat was present in the BSAs. Golden eagle, oak titmouse, Lawrence's goldfinch, southern California rufous-crowned sparrow, Costa's hummingbird, and yellow warbler were detected in the BSAs. Furthermore, habitat may be present within the BSAs,

however, not within the PIAs for black swift. Habitat is not present within the BSAs for coastal California gnatcatcher.

Amphibians

Four state and/or federal special-status amphibian species—the arroyo toad, southern mountain yellow-legged frog, western spadefoot, and Coast Range newt—have the potential to occur within the region surrounding the BSAs, based on wildlife database queries in the project area. Per the CNDDDB, southern mountain yellow-legged frog was documented in the Strawberry Creek Bridge BSA in 1966, but based on 2002 surveys, this species occurrence is possibly extirpated. During more recent surveys in 2020, surveys were conducted for arroyo toad in the Morrill Canyon Bridge BSA and for southern mountain yellow-legged frog in the Strawberry Creek Bridge BSA. No southern mountain yellow-legged frogs were detected at either survey area. Two adult arroyo toads were detected in the buffer survey area for the Morrill Canyon Bridge site on two occasions. Coast Range newts were found associated with the existing Morrill Canyon Stream bridge crossing, both under and immediately adjacent to the existing bridge, on three separate occasions.

Reptiles

Seven state and/or federal special-status reptile species have the potential to occur within the region surrounding the BSA, based on wildlife database queries conducted for the project site: southern California legless lizard, orange-throated whiptail, southern rubber boa, red-diamond rattlesnake, western pond turtle, coast horned lizard, and two-striped garter snake. No special-status reptiles were observed during surveys conducted in 2020.

Mammals

Four state and/or federal special-status mammal species have the potential to occur within the region surrounding the BSA, based on the wildlife database queries conducted for the project: San Bernardino kangaroo rat, Stephens' kangaroo rat, southern grasshopper mouse, and Los Angeles pocket mouse. Although the Morrill Canyon Creek Bridge and the Strawberry Creek Bridge do not have any crevices or cavity features that could be used by bats for day roosting, there is suitable night roosting habitat on the underside of these bridges. In addition, suitable day-roosting habitat for bats is present in the foliage, beneath exfoliating bark, or in crevices and hollows of the mature trees and snags present within the survey areas for both bridges. Bat species that may occur in the BSAs include pallid bat, big brown bat, California myotis, Yuma myotis, long-legged myotis, western long-eared myotis, and fringed myotis.

During the Morrill Canyon Creek Bridge nighttime emergence surveys, a single big brown bat (or possibly pallid bat) and a single myotis (Yuma myotis or California myotis) emerged from one of the trees, identified as having potential to house maternity colonies of bats. No other bats were observed emerging from any of the other trees surveyed. A high level of bat activity was observed shortly after sunset within the northern portion of the survey area of Morrill Canyon Bridge, which suggests that maternity roosts are likely nearby. Based on the analysis of acoustic detectors, the bat species conclusively detected in the Morrill Canyon Creek Bridge BSA include pallid bat, big brown bat, Mexican free-tailed bat, and canyon bat. At least two other and as

many as four more bat species were detected in addition to the four conclusively identified bat species.

No bats were observed emerging from any of the trees during the Strawberry Creek Bridge nighttime acoustic and emergence surveys. There was no evidence of day roosting in the immediate vicinity of the bridge, and no bats were observed night roosting at the Strawberry Creek Bridge. Based on analysis of acoustic detectors, two bat species (big brown bat and Mexican free-tailed bat) and two other groups were detected in the vicinity of Strawberry Creek Bridge.

Insects

Two state and/or federal special-status insect species, the Quino checkerspot butterfly and crotch bumblebee, have the potential to occur within the region surrounding the BSA. Based on survey results conducted for the project, there is no habitat in the Morrill Canyon Bridge or Strawberry Creek BSAs that is suitable for the Quino checkerspot butterfly. Suitable habitat for crotch bumblebee may be present in the Strawberry Creek BSA but not within the Morrill Canyon Bridge BSA.

Fish

One state and/or federal special-status fish species, the southern California steelhead, has the potential to occur within the region surrounding the BSA, based on wildlife database queries conducted for the project. Based on survey results conducted for the project, suitable habitat for the southern California steelhead may be present in the Morrill Canyon Bridge and Strawberry Creek Bridge BSAs but not in the PIAs.

Crustaceans

Two state and/or federal special-status crustacean species, the vernal pool fairy shrimp and Riverside fairy shrimp, have the potential to occur within the region surrounding the Morrill Canyon Bridge BSA, based on the wildlife database queries conducted for the project. However, during the surveys conducted for the project, no suitable vernal pool habitat was detected within the BSA.

The following tables summarize the listed animal species, candidate species, and special-status species potentially occurring or known to occur in the area in which the project area is located.

Table 2.3-9. Animal Species – Amphibians

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Anaxyrus californicus</i>	Arroyo toad	FE/SSC		Desert wash, riparian scrub, riparian woodland, south coast flowing waters/standing waters	O	Species observed during 2020 surveys in Morrill Canyon Bridge BSA
<i>Rana muscosa</i>	Southern mountain yellow-legged frog	FE, USFS_S/SE		Aquatic	HP	Suitable habitat is present in Strawberry Creek Bridge BSA but not detected during 2020 surveys
<i>Spea hammondi</i>	Western spadefoot	None/SSC		Cismontane woodland, coastal scrub, valley & foothill grassland, vernal pool wetland	A	Suitable habitat is not present in the Strawberry Creek BSA
<i>Taricha torosa</i>	Coast Range newt	None/SSC		Coastal drainages from Mendocino County to San Diego County	O	Species observed during surveys in Morrill Canyon BSA

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

Table 2.3-10. Animal Species – Birds

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Cypseloides niger</i>	Black swift	BCC/SSC		San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons, forages widely	HP	Suitable habitat present in the Strawberry Creek BSA but not the PIA
<i>Poliophtila californica californica</i>	Coastal California gnatcatcher	FT		Coastal sage scrub	A	No suitable habitat is present in Morrill Canyon or Strawberry Creek BSAs

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Empidonax traillii extimus</i>	Southwestern willow flycatcher	FE/SE		Dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands	HP	Suitable habitat is present in Morrill Canyon BSA and Strawberry Creek BSA; species not detected during 2020 surveys
<i>Vireo bellii pusillus</i>	Least Bell's vireo	FE/SE		Riparian forest, riparian scrub, riparian woodland below 2000 feet	HP	Suitable habitat is present in Morrill Canyon BSA but not Strawberry Creek BSA; species not detected during 2020 surveys

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

Table 2.3-11. Animal Species – Crustaceans

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE/None		Found only in vernal pools, ponds, and ephemeral pool-like bodies of water	A	No suitable habitat present in Morrill Canyon BSA; no vernal pools detected during 2020 surveys
<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	FT/None		Vernal pools, seasonal wetlands, stagnant ditches with water during fall/winter rains and dry up in spring/summer	A	No suitable habitat present in Morrill Canyon BSA; no vernal pools detected during 2020 surveys

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

Table 2.3-12. Animal Species – Fish

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Oncorhynchus mykiss irideus</i> pop. 10	Steelhead southern California DPS	FE/None		Aquatic, south coast flowing waters, Santa Maria River south to San Mateo Creek in San Diego County	HP	Suitable habitat may be present in the BSA but not in PIA

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

Table 2.3-13. Animal Species – Insects

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Bombus crotchii</i>	Crotch bumble bee	None/SCand		Coastal California east to Sierra-Cascade crest and south to Mexico	HP	Suitable habitat present in Strawberry Creek BSA
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE/None		Scrub habitat with California sagebrush, chamise, and non-native/ native grassland	A	No habitat present in Morrill Canyon BSA or Strawberry Canyon BSA

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

Table 2.3-14. Animal Species – Mammals

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Dipodomys merriami pavus</i>	San Bernardino kangaroo rat	FE/SCand	SSC	Coastal scrub, alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and floods	A	No suitable habitat present in Strawberry Creek BSA
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FE/ST		Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover	A	No suitable habitat present in Strawberry Creek BSA
<i>Onychomys torridus ramona</i>	Southern grasshopper mouse	None/none	SSC	Chenopod scrub, desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover	A	No suitable habitat present in Strawberry Creek BSA
<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse	None/SSC		Coastal scrub, lower elevation grasslands and coastal sage communities in L.A. basin	A	No suitable habitat present in Strawberry Creek BSA

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

Table 2.3-15. Animal Species – Reptiles

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
<i>Anniella stebbinsi</i>	Southern California legless lizard	USFS_S/None		Broadleaved upland forest, chaparral, coastal dunes, coastal scrub. In moist loose soils; prefers soils with high moisture content	A	No suitable habitat present in Strawberry Creek BSA
<i>Aspidoscelis hyperythra</i>	Orange-throated whiptail	USFS_S/None		Chaparral, cismontane woodland, coastal scrub, low elevation coastal scrub, chaparral, and valley foothill hardwood habitats	HP	Suitable habitat present in Morrill Canyon BSA and Strawberry Creek BSA
<i>Charina umbratica</i>	Southern rubber boa	USFS_S/ST		Meadow & seep, riparian forest, riparian woodland, upper montane coniferous forest, wetland; found in	HP	Suitable habitat is present in Strawberry Creek BSA

Scientific Name	Common Name	Federal/State Status	CNPS Rank	Habitat	Habitat Present/Absent	Rationale
				streams or wet meadows, requires loose, moist soil for burrowing		
<i>Crotalus ruber</i>	Red-diamond rattlesnake	USFS_S/ SSC		Chaparral, mojavean desert scrub, sonoran desert scrub	HP	Suitable habitat present in Morrill Canyon BSA
<i>Emys Marmorata</i>	Western pond turtle	USFS_S/ SSC		Aquatic wetland. Thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches	HP	Suitable habitat present in the Morrill Canyon BSA
<i>Phrynosoma blainvillii</i>	Coast horned lizard	None/SSC		Chaparral, cismontane woodland, coastal bluff scrub, coastal scrub, desert wash, pinon & juniper woodlands, riparian scrub, riparian woodland, valley & foothill grass	HP	Suitable habitat present in the Morrill Canyon BSA and Strawberry Creek BSA
<i>Thamnophis hammondi</i>	Two-striped gartersnake	USFS_S/SSC		Marsh & swamp, riparian scrub, riparian woodland, wetland	HP	Suitable habitat present in Morrill Canyon BSA.

Source: Natural Environment Study, 2020.

Notes:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] - habitat is or may be present. Observed [O] – species or vegetation community observed. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Candidate (FCand); Birds of Conservation Concern (BCC); U.S. Forest Service Sensitive (USFS_S); State Endangered (SE); State Threatened (ST); State Candidate (SCand); Fully Protected (FP); State Species of Special Concern (SSC); State Watch List (WL); CNPS Rank: 1B.1 presumed extirpated, seriously threatened; 1B.2 presumed extirpated, moderately threatened; 2B.2 rare in California but common elsewhere, moderately threatened; 3.1 plants about which more information is needed, seriously threatened; 4.2 limited distribution in California, moderately threatened; 4.3 limited distribution in California, not very threatened.

2.3.4.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Avian Species

Clearing, grubbing, and construction-related noise have the potential to impact nesting birds. Clearing and grubbing activities will remove vegetation where shoulder widening would occur. Removing vegetation will decrease foraging and nesting habitat availability for avian species. To ensure that the project will not impact migratory bird species in the BSA or their nest or eggs, avoidance and minimization measures will be implemented. This 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.

In the Morrill Canyon Bridge PIA, there would be 0.066 acre of temporary impacts on jurisdictional drainages and impacts on three California sycamores, 57 coast live oaks, and one Goodding's black willow. In the Strawberry Creek Bridge PIA, there will be 0.2 acre of temporary impact on jurisdictional drainage and impacts on five white alders, eight California sycamore, five interior live oaks, and one Goodding's black willow. The loss of vegetation may result in loss of avian foraging and sheltering habitat. Project-related activities could deter individuals from nesting within nearby suitable habitat. However, implementation of the avoidance and minimization measures provided below will ensure that there are no substantial impacts on avian species.

Amphibians

In the Morrill Canyon Bridge PIA, there will be 0.973 acre of temporary impacts on potential arroyo toad breeding and upland habitats resulting from the implementation of Morrill Canyon Bridge Alternative M1. This alternative includes impacts on chaparral vegetation and woodlands and forest vegetation communities. The alternative would not impact riparian vegetation communities. Implementation of Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would result in 0.50 acre of temporary disturbance within the project footprint. Implementation of Strawberry Creek Bridge Alternative S3 would result in 0.619 acre of temporary disturbance within the project footprint. Both alternatives would include impacts on chaparral vegetation, woodlands and forest, and riparian vegetation communities. Clearing, grubbing, and construction of new bridge piers has the potential to impact amphibian species. Temporary impacts, in the form of construction activities, temporary bridges, roads, and staging areas will occur. Arroyo toads and Coast Range newts have the potential to be crushed by equipment during project activities. Decreasing slopes to 2:1 in the areas adjacent to the Morrill Canyon Bridge project could potentially allow adult arroyo toads, where they occur, to climb up slopes in areas that were previously too steep to climb and access the roadway, which would in turn result in potential for higher mortalities and injuries along SR-74. Compaction associated with the new cut and fill slopes may result in areas that arroyo toads formerly used as aestivation habitat that are no longer suitable to be used by the species for that purpose. Temporary impact areas 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.

Reptiles

There is no habitat in the BSA suitable for southern California legless lizard. Therefore, the project will not impact this species. Suitable habitat is present within the Morrill Canyon BSA for coast horned lizard, orange throated whiptail, two-striped garter snake, western pond turtle, and red diamond rattlesnake. Suitable habitat is present within the Strawberry Creek BSA for the coast horned lizard, orange throated whiptail, and southern rubber boa. Clearing, grubbing, and construction of new bridge piers have the potential to impact these species.

Mammals

There is no habitat in the BSAs for either bridge that is suitable for San Bernardino kangaroo rat, Stephens' kangaroo rat, southern grasshopper mouse, and Los Angeles pocket mouse. Therefore, the project will not impact these species. No crevice or cavity habitat suitable for day-roosting bats is present at the Morrill Canyon Creek Bridge or the Strawberry Creek Bridge. Night-

roosting habitat is present at both bridges, but the lack of extensive bat signs including guano and staining at these structures suggests that neither of these bridge structures serves as a significant night roost. Although no day-roosting habitat for bats are present within either of the two bridge structures, day roosting habitat is present in the foliage, crevices, or cavities of mature trees and snags that will be removed during installation of the temporary bridges. To ensure that the project will not cause State Species of Special Concern to trend towards becoming listed, avoidance and minimization measures will be implemented.

Insects

Given the lack of suitable habitat, the project would not impact or take the Quino checkerspot butterfly. However, clearing and grubbing with the Strawberry Creek BSA has the potential to impact crotch bumblebee. As such, implementation of avoidance and minimization measures will be incorporated.

Fish

The project would not directly impact or take the federally listed southern California steelhead. Activities associated with both bridges include ground disturbance, clearing and grubbing, and cut and fill activities that could contribute to further impaired habitat and water quality downstream. To prevent potential impacts, the project will implement Caltrans Standard Stormwater BMPs.

Crustaceans

There is no suitable vernal pool habitat for federally listed crustacean species within the PIA. Therefore, the project would not impact or take the federally listed vernal pool fairy shrimp or Riverside fairy shrimp.

No Build Alternative

The No-Build Alternative would not add to impacts on special-status animals or potentially suitable habitat.

Permanent

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The project is anticipated to permanently impact suitable habitat for southern mountain yellow-legged frog in the Strawberry Creek Bridge PIA and habitat occupied by Coast Range newt and arroyo toad in the Morrill Canyon Bridge BSA. The USFWS considers all habitats (including upland areas) within 1 kilometer of arroyo toad-occupied habitat to also be potentially occupied. Therefore, quantification of impacts on potential arroyo toad breeding and upland habitats includes all impacted areas within 1 kilometer of the Morrill Canyon Bridge project area and survey areas. In the Morrill Canyon Bridge PIA, there will be 0.183 acre of permanent impacts on potential arroyo toad breeding and upland habitats resulting from Morrill Canyon Bridge Alternative M1. There will be an additional 0.1 acre of permanent impacts due to paving the Tenaja Truck Trail, an existing dirt road on which there is no suitable arroyo toad upland foraging habitat. The Morrill Canyon Bridge alternative include impacts on chaparral vegetation and woodlands and forest vegetation communities. No impacts on riparian vegetation communities would occur.

Implementation of Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would result in 0.232 acre of permanent disturbance within the project footprint. Implementation of Strawberry Creek Bridge Alternative S3 would result in 0.220 acre of permanent disturbance within the project footprint. Both Strawberry Creek Bridge alternatives would impact chaparral vegetation, woodlands, and forest and riparian vegetation communities.

Potential runoff resulting from future precipitation events and noise associated with traffic on the roadway are anticipated to be consistent with pre-project existing conditions, and thus indirect impacts associated with runoff and noise are not anticipated for both bridges.

Permanent impact on riparian/riverine habitat that supports arroyo toads and Coast Range newts is proposed to be mitigated through the purchase and conservation of arroyo toad occupied habitat within the WRCMSHCP area. Permanent impact on riparian/riverine habitat that has the potential to support southern mountain yellow-legged frog is proposed to be mitigated through the purchase and conservation of habitat that is suitable for the southern mountain yellow-legged frog within the WRCMSHCP. In addition to contributing to the WRCMSHCP Arroyo Toad Conservation Objective 5, the following measure will be implemented: onsite mitigation will include controlling or removing known threats from Morrill Canyon Creek and Strawberry Creek, including eliminating bullfrogs and removing exotic vegetation.

As previously mentioned, in the Morrill Canyon Bridge PIA, there will be up to 0.021 acre of permanent impact on jurisdictional drainages and impacts on three California sycamores, 57 Coast live oaks, and one Goodding's black willow. In the Strawberry Creek Bridge PIA, there will be up to 0.1 acre of permanent impacts on jurisdictional drainages and impacts on five White alders, eight California sycamores, five interior live oaks, and one Goodding's black willow.

No-Build Alternative

The No-Build Alternative would not add to impacts on special-status animals or potentially suitable habitat.

2.3.4.4 Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented to ensure that impacts would be avoided or minimized.

Bird Species

To ensure that the project will not impact migratory bird species in the BSAs or their nests or eggs, avoidance and minimization measures will be implemented. This will ensure that the project does not cause listed species to trend towards becoming extinct, or State Species of Special Concern to trend toward becoming listed. With implementation of avoidance and minimization measures BIO-6 and BIO-7, the project will not impact nesting birds, and the following measure will also be implemented:

- BIO-13** Preconstruction Nesting Bird Survey: If project-related activities cannot avoid the nesting season, generally regarded as February 1 through September 30, then pre-construction nesting bird surveys must be conducted 3 days prior to construction by a Contractor-supplied biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer must be established.

Amphibian

Avoidance and minimization measures for the special-status amphibian species with suitable habitat within the project area will include BIO-1, BIO-6, BIO-7, and the following:

- BIO-2** Artificial Lighting: Artificial lighting for the project site must be directed specifically at the work site only.
- BIO-3** Pre-Construction Surveys: Pre-construction arroyo toad, Coast Range newt, and mountain yellow-legged frog surveys must be conducted by an authorized Contractor-supplied biologist immediately prior to the start of ground-disturbing activities, including the installation of arroyo toad, Coast Range newt, and mountain yellow-legged frog exclusion fencing, within the project impact area. If an arroyo toad, Coast Range newt, or mountain yellow-legged frog individual is located, the Resident Engineer and a Caltrans biologist will be contacted, and avoidance and minimization measures must be required.
- BIO-4** Work Avoidance: Avoid blasting during the arroyo toad breeding season (March 1-June 30) within the Morrill Canyon Bridge project area.
- BIO-5** If during construction activities arroyo toad, Coast Range newt, and mountain yellow-legged frog is discovered within the project site, the Contractor-supplied biologist must have the authority to halt all construction activities and direct movements of equipment and personnel to avoid injury to mortality to arroyo toad, Coast Range newt, and mountain yellow-legged frog. Arroyo toad, Coast Range newt, and mountain yellow-legged frog cannot be handled or harassed and must leave the job site under their own accord.
- BIO-8** ESA Fencing: To prevent entry by arroyo toad, Coast Range newt, and mountain yellow-legged frog into the work site, temporary exclusion fencing must be installed outlining the perimeter of any construction staging, storage, or batch plant areas.
- BIO-9** ESA Fence Monitoring: Fence and enclosure (onsite cleared areas) inspections must occur daily throughout the duration of the project prior to commencing construction activities and after construction activities are completed. If during construction, the fence fails, work must stop until it is repaired and the Contractor-supplied biologist inspects (and clears) the site.
- BIO-10** ESA Fence Removal: All ESA fencing will be removed as a last order of work. During removal, a biological monitor will be present.

- BIO-11** Animal Entrapment: To prevent inadvertent entrapment of arroyo toad, Coast Range newt, and mountain yellow-legged frog during project activities, all excavated steep-walled holes or trenches more than one foot must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the Contractor-supplied biologist.
- BIO-12** Handling: The qualified biologist must avoid use of insecticides, sunscreens, or any other lotions, creams or products on their skin, clothing, footwear, or field equipment immediately prior to and during handling of arroyo toad, Coast Range newt, and mountain yellow-legged frog.

Reptiles

Avoidance and minimization measure for the special-status reptile species with suitable habitat within the project area will include the following: BIO-1, BIO-6, BIO-7, and BIO-11.

Mammals

To ensure that the project will not cause State Species of Special Concern to trend towards becoming listed, avoidance and minimization measures will be implemented. Avoidance and minimization measures for the special-status species with suitable habitat within the project area will include BIO-1, BIO-6, BIO-7, BIO-11, and the following:

- BIO-17** Tree Removal: All mature trees to be removed as part of the project must be more closely evaluated by a qualified bat biologist for their potential to support roosting bats. Trees that are identified as suitable bat roost sites must be removed using a two-step process that occurs over a 2-day period. On Day 1, branches and limbs that do not contain crevices or cavities must be removed using hand tools or chainsaws. On Day 2, the remainder of the tree may be removed. Trimming or removal of any mature trees (including untrimmed palm trees) and snags during the maternity season (April 1-August 31) must be avoided to prevent “take” of nonvolant (flightless) young. Tree removal should be performed between September 1 and October 31 to the greatest extent feasible to avoid direct impacts to bats roosting in foliage, crevices, and cavities of trees. This time period is after young are volant (flying), but before expected onset of torpor (winter inactivity). This work may also be conducted between February 15 and March 31, following winter torpor and prior to the start of the maternity season. If removal of mature trees (including trimming of palm fronds or removal of palm trees) during the bat maternity season is necessary for project construction, all mature trees to be removed that have also been identified as containing suitable bat roosting habitat should be surveyed at night prior to removal. Any trees confirmed during those surveys as housing bat maternity colonies must be avoided until the end of maternity season.

Insects

With implementation of the following avoidance and minimization measure, the project will not cause take of the State Candidate species or impact its host plant:

- BIO-14** Rare insect host plant pre-construction clearance survey, flagging, and fencing: No more than one week prior to project-related activities, a qualified biologist must perform a pre-construction survey for rare insect host plants. Should any rare insect host plants be found, the Resident Engineer and Caltrans Biologist must be contacted, and host plants must be flagged by the biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the groupings must be fenced with environmentally sensitive area temporary fencing.

2.3.5 Threatened and Endangered Species

2.3.5.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) 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 on 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 on CESA species by

issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

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

2.3.5.2 Affected Environment

Information used in this section is based on the November 2020 *Natural Environment Study* prepared for this project.

A species list was obtained from CDFW via the CNDDDB, in accordance with CESA. The BSA for the project includes all areas that could potentially be impacted by the project, plus a 500-foot buffer to account for any changes to the project limits and design that may occur during project development. The PIA consists of the area adjacent to and under the bridge decks within the Caltrans right of way. Caltrans has determined that the project will result in “No Take” to the following state-listed rare, threatened, endangered, candidate endangered, or fully protected species:

- San Bernardino kangaroo rat
- Encinitas baccharis
- Crotch bumble bee
- Southwestern willow flycatcher
- Least Bell’s vireo
- Slender-horned spineflower
- San Diego button-celery
- Southern mountain yellow-legged frog
- Thread-leaved brodiaea
- Mojave tarplant
- Stephen’s kangaroo rat
- Southern rubber boa

In accordance with Section 7(a)(2) of the Endangered Species Act, Caltrans has determined that the project “May Affect, and is Likely to Adversely Affect” federally listed arroyo toads and their habitat. This will be authorized through a Biological Opinion through the WRCMSHCP. On March 15, 2021, the USFWS issued a Streamlined Biological Opinion for arroyo toad. The USFWS determined that the project is consistent with relevant MSHCP policies and procedures. The status of the arroyo toad and the effects of implementing the MSHCP were addressed in the USFWS biological opinion dated June 22, 2004, which concluded that the level of anticipated take in the MSHCP Plan Area was not likely to result in jeopardy to arroyo toad. The USFWS does not anticipate any adverse effects to arroyo toad, or the habitat upon which it depends, that were not previously evaluated in the biological opinion for the MSHCP. Therefore, the USFWS concluded that the implementation of the project will not result in jeopardy to arroyo toad. Furthermore, Caltrans has determined that the project will have “No Effect” to the following federally listed threatened or endangered species:

- Southwestern willow flycatcher
- Least Bell’s vireo
- Riverside fairy shrimp
- Steelhead-southern California distinct population segment (DPS)
- Quino checkerspot butterfly
- San Bernardino kangaroo rat
- Stephens’ kangaroo rat
- Slender-horned spineflower
- San Diego button-celery
- Coastal California gnatcatcher
- Vernal pool fairy shrimp
- Thread-leaved brodiaea
- Encinitas baccharis
- Spreading navarrtia

Caltrans has determined that the project will not impact the following CNPS rare plants:

- California screw moss
- Chaparral sand-verbena
- Rainbow manzanita
- Jaeger’s milk-vetch
- Thread-leaved brodiaea
- Santa Rosa Basalt brodiaea

- San Jacinto mariposa-lily
- Plummer's mariposa-lily
- Parry's spineflower
- Long-spined spineflower
- White-bracted spineflower
- San Miguel savory
- Summer holly
- Mojave tarplant
- Slender-horned spineflower
- Many-stemmed dudleya
- Stick dudleya
- Encinitas baccharis
- San Jacinto Mountains bedstraw
- Alvin Meadow bedstraw
- Mesa horkelia
- Lemon lily
- Intermediate monardella
- Hall's monardella
- Chaparral nolina
- California beardtongue
- White rabbit-tobacco
- Latimer's woodland-gilia
- San Diego button-celery
- Southern mountains skullcap
- Spreading navarretia
- Parry's tetracoccus
- La Purisima viguiera

Based on the Essential Fish Habitat consultation with the NOAA Fisheries, one species was identified as having the potential to occur within the project quadrangle: southern California steelhead. However, there is no suitable aquatic habitat that would support this species in the PIAs. Therefore, the project has no potential to impact this or other NOAA Fisheries-protected resources.

Furthermore, there is no designated critical habitat in the Morrill Canyon Bridge BSA or in the Strawberry Creek Bridge BSA. As such, the project will not impact designated critical habitat.

2.3.5.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

During the 2020 surveys conducted for the project, two adult arroyo toads, a federally listed species, were detected in the buffer survey area at the Morrill Canyon Bridge site. In the Morrill Canyon Bridge PIA, there will be 0.973 acre of temporary impacts on potential arroyo toad breeding and upland habitats as a result of Morrill Canyon Bridge Alternative M1. Clearing, grubbing, construction activities, and construction of new bridge piers have the potential to impact arroyo toads. Caltrans has determined, in accordance with Section 7(a)(2) of the Endangered Species Act, the project “May Affect, and is Likely to Adversely Affect” federally listed arroyo toads and their habitat. This will be authorized through a Biological Opinion through the WRCMSHCP. On March 15, 2021, the USFWS issued a Streamlined Biological Opinion for arroyo toad.

No-Build Alternative

The No-Build Alternative would not be expected to affect threatened or endangered plant or animal species because there would be no change from existing conditions.

Permanent

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

The project is anticipated to permanently impact suitable habitat occupied by arroyo toad in the Morrill Canyon Bridge BSA. There will be 0.183 acre of permanent impact on potential arroyo toad breeding and upland habitats resulting from implementation of Morrill Canyon Bridge Alternative M1. As previously mentioned, Caltrans has determined, in accordance with Section 7(a)(2) of the Endangered Species Act, the project “May Affect, and is Likely to Adversely Affect” federally listed arroyo toads and their habitat. This will be authorized through a Biological Opinion through the WRCMSHCP. On March 15, 2021, the USFWS issued a Streamlined Biological Opinion for arroyo toad.

No-Build Alternative

Long-term operation of the No-Build Alternative would not be expected to affect threatened or endangered plant or animal species because there would be no change from existing conditions.

2.3.5.4 Avoidance, Minimization, and/or Mitigation Measures

Caltrans has determined, in accordance with Section 7(a)(2) of the Endangered Species Act, the project “May Affect, and is Likely to Adversely Affect” federally listed arroyo toads and their habitat. This will be authorized through a Biological Opinion through the WRCMSHCP. On March 15, 2021, the USFWS issued a Streamlined Biological Opinion for arroyo toad. To address impacts to arroyo toad habitat, the following will be implemented:

BIO-20 Relocation Plan. An exclusionary fencing and relocation plan for arroyo toad must be submitted to the USFWS and CDFW for approval prior to commencing project activities.

2.3.6 Invasive Species

2.3.6.1 Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as “any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.” Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State’s invasive species list, maintained by the [California Invasive Species Council](#) to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

2.3.6.2 Affected Environment

Information used in this section is based on the November 2020 *Natural Environment Study* prepared for the project.

Numerous invasive plant and animal species were identified in the BSAs during the biological surveys. Invasive animal species included the European starling (*Sturnus vulgaris*, extent widespread, already introduced). Numerous invasive grasses were also observed: slim oat (*Avena barbata*), wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis ssp. rubens*), downy chess (*Bromus tectorum*), Bermuda grass (*Cynodon dactylon*), rattail sixweeks grass (*Festuca myuros*), farmer’s foxtail (*Hordeum murinum ssp. leporinum*), and giant wild rye (*Elymus condensatus*), and rabbitfoot grass (*Polypogon monspeliensis*). The remaining invasive plant species observed in the BSA include the following: tocalote (*Centaurea melitensis*), prickly lettuce (*Lactuca serriola*), sow thistle (*Sonchus asper ssp. asper*), shepherd's purse (*Capsella bursa-pastoris*), mustard (*Hirschfeldia incana*), sweet alyssum (*Lobularia maritima*), London rocket (*Sisymbrium irio*), Russian thistle (*Salsola tragus*), spotted spurge (*Euphorbia maculata*), California burclover (*Medicago polymorpha*), alfalfa (*Medicago sativa*), annual yellow sweetclover (*Melilotus indicus*), puncture vine (*Tribulus terrestris*), coastal heron's bill (*Erodium cicutarium*), white horehound (*Marrubium vulgare*), cheeseweed (*Malva parviflora*), curly dock (*Rumex crispus*), and tree tobacco (*Nicotiana glauca*).

2.3.6.3 Environmental Consequences

Temporary

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

During construction activities, construction vehicles and equipment could transport invasive plant species from past work sites to the project area or between work areas within the study area. After construction is complete, areas left as bare ground could create favorable conditions for invasive plants and promote the spread of these species. Prior to implementation of the project, all construction equipment would be inspected and cleaned prior to use to minimize the importation and spread of non-native plant material. To ensure that the project does not cause or promote the introduction or spread of invasive species, Caltrans Standard BMPs will be implemented.

No-Build Alternative

The No-Build Alternative would not be expected to add to the temporary impacts from invasive species because it would not change existing conditions.

Permanent

Morrill Canyon Bridge Alternatives M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3

Although the transport of invasive plant species is a real threat to ecosystems, the build alternatives would not increase the risk above the existing baseline; therefore, impacts are considered less than significant under CEQA and not adverse under NEPA.

No-Build Alternative

The No-Build Alternative is not expected to add to the impacts from invasive species because it would not change existing conditions.

2.3.6.4 Avoidance, Minimization, and/or Mitigation Measures

To ensure that the build alternatives do not promote the introduction or spread of invasive plant species to the open space areas within the study area, standard Caltrans BMPs will be implemented.

2.4 Cumulative Impacts

2.4.1 Regulatory Setting

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

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

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

2.4.2 Methodology

The Department, in conjunction with FHWA and U.S. EPA, developed a guidance document titled *Guidance for Preparers of Cumulative Impact Analysis* (2005). The discussion below is based on the referenced guidance.

As specified in the guidance, if a proposed project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource. Furthermore, it is identified in the guidance that the cumulative impact analysis should focus only on (1) those resources significantly affected by the project or (2) resources currently in poor or declining health or at risk, even if the project impacts are relatively small. Therefore, less-than-significant impacts need not be included in the evaluation of potential cumulative impacts.

Resource Study Areas (RSAs) for those resources warranting analysis were identified for each respective resource. As discussed at the beginning of Chapter 2, or in the related sections of Chapter 2 of this environmental document, the proposed project would result in minor impacts but would not result in direct or indirect impacts for the topics listed below; therefore, no discussion is provided for the following topics in the evaluation of potential cumulative impacts:

- Coastal zone

- National Oceanic and Atmospheric Administration
- Wild and scenic rivers
- Land use
- Growth
- Hydrology and Floodplains
- Community impacts
- Utilities and emergency services
- Relocations and real property
- Environmental justice
- Visual impacts
- Cultural resources
- Floodplains
- Traffic and transportation/pedestrian and bicycle facilities
- Air quality
- Noise
- Energy
- Paleontology
- Hazardous Waste/Materials

2.4.3 Resources Evaluated for Potential Cumulative Impacts

The discussion of potential cumulative impacts is organized by environmental resource area, as follows:

- Parks and Recreational Facilities
- Emergency Services
- Natural Communities
- Jurisdictional Waters
- Plants and Animal Species
- Amphibians and Reptiles

The following cumulative projects are located in and near the project site. There were no other planned or reasonably foreseeable project improvements identified within the RSA for any of the environmental resources evaluated for potential cumulative impacts:

- Emergency Projects on State Route 74: Caltrans is continuing emergency repairs to SR-74 and SR-243 leading to the Idyllwild and Mountain Center communities due to damage incurred during the winter and spring rains of 2019 on both routes. The \$30 million emergency contract is replacing culverts, rebuilding slopes and roadbeds, replacing drains, scaling rock, repaving roadbeds, and reinstalling guardrail and signage.
- EA 1C850 SR-74 Widen Lanes and Shoulders Project (PM 0.0-5.78): The project proposes to widen SR-74, add shoulders, and rumble strips from PM 0.0 to PM 5.78.

2.4.3.1 Parks and Recreational Facilities

The RSA for parks and recreational facilities is the area within 0.50 mile of the SR-74 right of way. The San Juan Loop Trailhead and Bear Canyon Trailhead are located within 0.50 mile of the Morrill Canyon Bridge. Strawberry Creek crosses below the Strawberry Creek Bridge. The demand on parks and recreational facilities is not anticipated to increase due to the proposed project. The Emergency Projects along SR-74 and EA 1C850 SR-74 Widen Lanes and Shoulder Project would not negatively affect the San Juan Loop Trailhead, Bear Canyon Trailhead, or Strawberry Creek. The replacement of Morrill Bridge would be beneficial for those traveling along SR-74 to get to various recreational areas within the vicinity. The emergency repairs along SR-74 would also be beneficial and increase safety for the traveling public. The proposed project along with the above described cumulative projects would not have an adverse cumulative effect on the existing San Juan Loop Trailhead, Bear Canyon Trailhead, or Strawberry Creek.

2.4.3.2 Emergency Services

The RSAs for emergency services are the major transportation networks in the area, including SR-74, I-15, and SR-243. The proposed project would result in temporary and short-term traffic congestion and delays during the construction phase. The above described cumulative projects, if constructed during the same time period, may add to these traffic delays. However, each project would be required to prepare a Traffic Management Plan (TMP) or similar plan to mitigate and address detours and roadway closures, and include advance notice to emergency services in the area. Cumulative impacts on emergency services would be short term and last only the duration of construction. As such, the proposed project would not contribute to cumulative emergency services impacts.

2.4.3.3 Natural Communities

The RSA for cumulative biological resources impacts analysis encompasses the biological study area (BSA). The proposed project activities will result in direct, permanent impacts on Southern Coast Live Oak Riparian Forest within the Morrill Canyon Bridge PIA and on Southern Sycamore Alder Riparian Woodland in the Strawberry Creek Bridge PIA. In the Morrill Canyon Bridge PIA, there will be impacts on three California sycamores, 49 coast live oaks, and one Goodding's black willow. In the Strawberry Creek Bridge PIA, there will be impacts on five White alders, seven California sycamores, three interior live oaks, and one Goodding's black willow. The proposed project is located within the project limit of the EA 1C850 SR-74 Widen Lanes and Shoulder project and would permanently impact 1.30 acres of coast live oak-sycamore riparian habitat. However, these impacts will be fully compensated by compliance with state regulations such that no net loss of habitat functions or values occurs. The Emergency Projects on SR-74 will be analyzed for impacts on natural communities on a case by case basis and

comply with state regulations should any natural communities be affected. Because project impacts will be fully mitigated, the proposed construction will not contribute to regional cumulative loss of Natural Communities of Concern. Given that the permanently impacted acreage is small, the proposed project is anticipated to have negligible cumulative impacts on Natural Communities of Concern.

2.4.3.4 Jurisdictional Waters

In the Morrill Canyon Bridge PIA, there will be up to 0.021 acre of permanent impacts and 0.066 acre of temporary impacts on jurisdictional drainages. In the Strawberry Creek Bridge PIA, there will be up to 0.1 acre of permanent impacts and 0.19 acre of temporary impacts on jurisdictional drainages. The Morrill Canyon Bridge portion of the project is within the project limits of the EA 1C850 SR-74 Widen Lane and Shoulder project, which would permanently impact 0.01 acre of non-wetland waters of the U.S. and waters of the state, and 6.23 acres of CDFW jurisdiction and riparian/riverine areas. However, these impacts will be fully compensated by compliance with state regulations such that no net loss of habitat functions or values occurs. Because the project impacts associated with the EA 1C850 SR-74 Widen Lanes and Shoulders project and the proposed project will be fully mitigated, the proposed construction will not contribute to regional cumulative loss of riparian resources.

2.4.3.5 Plant and Animal Species

The project activities will result in direct, permanent impacts on Southern Coast Live Oak Riparian Forest within the Morrill Canyon Bridge PIA and direct, permanent impacts on Southern Sycamore Alder Riparian Woodland in the Strawberry Creek Bridge PIA. In the Morrill Canyon Bridge PIA, there will be up to 0.021 acre of permanent impacts and 0.066 acre of temporary impacts on jurisdictional drainages and impacts on three California sycamore, 49 coast live oaks, and one Goodding's black willow. In the Strawberry Creek Bridge PIA, there will be up to 0.1 acre of permanent impacts and 0.19 acre of temporary impacts on jurisdictional drainages and impacts on five White alders, seven California sycamores, three interior live oaks, and one Goodding's black willow. The Morrill Canyon Bridge is within the project limits of the EA 1C850 SR-74 Widen Lanes and Shoulders project, which would permanently impact 1.30 acres of coast live oak-sycamore riparian habitat. However, these impacts will be fully compensated by compliance with state regulations such that no net loss of habitat functions or values occurs. The loss of vegetation associated with the proposed project and EA 1G470 SR-74 Widen Lanes and Shoulders project may also result in the loss of avian foraging and sheltering habitat. However, implementation of avoidance and minimization measures on a project by project basis will ensure that there are no substantial cumulative impacts on avian species. There were no special-status plant species found within the project limits of the EA 1C850 SR-74 Widen Lane and Shoulders project, as such no cumulative impacts on special-status plant species would occur.

2.4.3.6 Amphibians and Reptiles

Morrill Canyon Bridge Alternative M1 would result in 0.183 acre of permanent impacts and 0.864 acre of temporary impacts on potential arroyo toad breeding and upland habitats. Implementation of Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would result in a total of 0.734 acre of disturbance within the project footprint. Implementation of Strawberry

Creek Bridge Alternative S3 would result in a total of 0.839 acre of disturbance. Morrill Canyon Bridge is within the limits of the EA 1C850 SR-74 Widen Lanes and Shoulder project that would result in 1.58 acres of permanent impacts on arroyo toad critical habitat. The loss of vegetation associated with both projects may result in loss of amphibian and reptile foraging and sheltering habitat. However, implementation of avoidance, minimization, and mitigation measures will ensure that there are no substantial cumulative impacts on amphibian and reptile species.

2.4.4 Avoidance, Minimization and/or Mitigation Measure

No additional measures are planned for cumulative impacts.

This page was intentionally left blank.

Chapter 3 CEQA Evaluation

3.1 Determining Significance under CEQA

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

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

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an Environmental Impact Report (EIR) must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

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

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

I. Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determinations for Aesthetics

a), b) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3. As discussed in Chapter 2, SR-74 within the area of Morrill Canyon Bridge and Strawberry Creek Bridge is listed as an Eligible State Scenic Highway. As the proposed project would increase safety at the two bridge locations, the project would not have a substantial adverse effect on a scenic vista. The replacement bridges would incorporate the existing design, to the extent feasible. No other new structures or facilities would be constructed with the project.

c), d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3. The proposed project would result in the replacement of the Morrill Canyon Bridge and Strawberry Creek Bridge. The replacement bridges would be aesthetically similar to the existing bridges and borrow design cues from the existing bridges. The project as designed

would not substantially degrade the visual character and quality of the site and would not create a new source of substantial light or glare in the area.

II. Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA Significance Determination for Agriculture and Forest Resources

a), b), c), e) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Based on the California Department of Conservation's Farmland Mapping and Monitoring Program, no farmlands or vacant lands have been mapped or designated as Prime Farmlands, Unique Farmlands, Farmlands of Statewide Importance, or Farmlands of Local Importance in the vicinity of the two bridge locations. There are no areas within Williamson Act contract.

d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Morrill Canyon Bridge is located in the Cleveland National Forest and Strawberry Creek Bridge is located in the San Bernardino National Forest of the United States Forest Service (USFS). Morrill Canyon Bridge Alternative M1 will impact three California sycamores, 57 coast live oaks, and one Goodding's black willow. Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3 will impact five white alders, eight California sycamores, five interior live oaks, and one Goodding's black willow. The USFS has a condition that once a tree has been cut, the tree must remain on site and used as mulch within the post miles of the project limits. Less than significant impacts are anticipated, as the project would coordinate and comply with the USFS condition.

III. Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA Significance Determinations for Air Quality**a), b) No Impact.**

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Construction of the project would not exceed any applicable local significance thresholds. The overall effects of the project on emissions of criteria air pollutants and their precursors would be very minor. Future emissions of reactive organic gases, nitrogen oxides, and carbon monoxide would be lower than at present with or without implementation of the project, due to improved fuel economy and pollution control technologies. Air pollutant emissions would not increase overall due to operation of the proposed project. Operational impacts would be negligible, as the proposed improvements are not capacity-increasing, and would not result in any trip generation or traffic redistribution. Therefore, the proposed project would not conflict with the Air Quality Management Plan, violate any air quality standard, or result in a net increase of any criteria pollutants.

c) Less than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project would comply with the South Coast Air Quality Management District's Rule 403, Fugitive Dust, by implementing the rule-stipulated best available control measures to minimize fugitive dust emissions. Sensitive receptors would be exposed to pollutants for a small portion of the total construction period because equipment would not be operated at a particular location along the alignment for an extended period of time. The diesel particulate matter emissions generated from construction equipment would be sporadic, transitory, and short term in nature. Therefore, the project would not expose receptors to acute and/or chronically hazardous toxic air contaminant pollutants.

Due to the rural nature of the project site, distance to the nearest sensitive receptor was assumed to be approximately 328 feet (100 meters). Emissions from construction of the proposed project would not exceed any applicable local significance threshold and, therefore, could not result in a violation of an air quality standard. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations during the construction period.

d) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project would not create new sources of motor vehicle traffic but could induce some motorists to alter their existing routes. Air pollutant emissions would not increase overall due to operation of the proposed project. Operational impacts would be negligible, and no mitigation measures or further analysis are required.

The project would result in replacement of two bridges along SR-74, and any odors generated by the project would be similar in nature to odors generated by the existing bridge structures. Exhaust emissions from construction vehicles and equipment and fugitive emissions from other construction activities would be tightly controlled. The minor amounts of odors generated by onsite construction activities would be substantially dispersed and diluted to negligible levels in adjacent offsite areas. The proposed project would not result in emissions (such as those leading to odors) that would affect a substantial number of people; therefore, no impacts would occur.

IV. Biological Resources

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

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determination for Biological Resources

a), b), c) Less Than Significant With Mitigation Incorporated.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: A total of 62 special-status species and Natural Communities of Concern were reported by the IPaC (U.S. Fish and Wildlife Service [USFWS]), National Oceanic and Atmospheric Administration (NOAA) Fisheries, California Natural Diversity Database (CNDDB), and California Native Plant Society (CNPS), as having the potential to occur within the Biological Study Areas (BSAs) for the two bridge locations. These include state- and federally listed threatened, endangered, rare, or candidate species, state species of special concern, state watch list species, and CNPS rare plants. There is no designated USFWS critical habitat in the two bridge BSAs. The project has the potential to impact plant species including San Miguel savory, summer holly, mesa horkelia, intermediate monardella, and southern mountains skullcap, for which suitable habitat is present within the Morrill Canyon Bridge BSA, and San Jacinto mariposa-lily, Plummer's mariposa-lily, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California beardtongue, and southern mountains skullcap, for which suitable habitat is present in the Strawberry Creek Bridge BSA.

The clearing, grubbing, and construction noise associated with construction have the potential to impact nesting birds. Clearing and grubbing activities will remove vegetation where shoulder widening will occur at both bridge locations. Removing vegetation would decrease foraging and nesting habitat availability for avian species.

The project is anticipated to permanently impact suitable habitat for southern mountain yellow-legged frog in the Strawberry Creek Bridge Project Impact Area (PIA) and habitat occupied by Coast Range newt and arroyo toad in the Morrill Canyon Bridge BSA. In the Morrill Canyon Bridge PIA, there will be 0.183 acre of permanent impacts and 0.973 acre of temporary impacts on arroyo toad breeding and upland habitats resulting from Morrill Canyon Bridge Alternative M1. There will be an additional 0.1 acre of permanent impacts due to the paving of the Tenaja Truck Trail, an existing dirt road on which there is no suitable arroyo toad upland foraging habitat. Implementation of Strawberry Creek Bridge Alternative S1 (Preferred Alternative) will result in 0.232 acre of permanent and 0.501 acre of temporary disturbance impacts within the project footprint. Implementation of Strawberry Creek Bridge Alternative S3 would result in 0.220 acre of permanent disturbance and 0.619 acre of temporary disturbance within the proposed footprint. Clearing, grubbing, construction of the new bridge piers, and other construction activities can potentially crush arroyo toad and Coast Range newts; also, the new cut and fill slopes may create access to the roadway that would result in higher mortality and/or injuries along SR-74.

The Morrill Canyon Bridge has riparian habitat and is built over a jurisdictional feature with Freshwater Forested/Shrub Wetland habitat. The Strawberry Creek Bridge BSA has riparian habitat and is also built over a jurisdictional feature with Freshwater Forested/Shrub Wetland habitat. Permanent impacts on jurisdictional waters will be caused by the placement of the new bridge supports and temporary impacts will be caused by construction access. The Morrill Canyon Bridge and Strawberry Creek Bridge replacements are anticipated to impact jurisdictional features and to require a Section 404 Nationwide Permit or Jurisdictional Delineation from the U.S. Army Corps of Engineers (USACE), a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), and a Section 1602 Streambed Alteration Agreement from the CDFW.

Based on surveys conducted for the project, no suitable habitat for day-roosting bats is present at the Morrill Canyon Creek Bridge or the Strawberry Creek Bridge. A lack of extensive bat signs of guano and lack of staining indicated that neither of these bridge structures serves as significant night roost. Day roosting habitat is present in the foliage, crevices, and cavities of mature trees and snags that will be removed during clearing associated with the installation of temporary bridges.

With implementation of avoidance and minimization measures BIO-1 through BIO-17, the proposed project would not cause any species of special concern or rare species to trend towards becoming listed.

d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The Morrill Canyon Bridge and Strawberry Creek Bridge are not within or located directly adjacent to Multiple Species Habitat Conservation Plan (MSHCP) Criteria Cells and, thus, will not contribute to Criteria Cell connectivity and conservation objectives. Based on the *Natural Environment Study* (NES) prepared for the project, the Morrill Canyon Bridge BSA consists of high terrestrial connectivity. Query results indicate that the Morrill Canyon Bridge BSA is not within an area identified as a Natural Landscape Block, Essential Habitat

Connectivity Area, or Potential Riparian Connection in the California Essential Habitat Connectivity Project. The majority of Strawberry Creek Bridge PIA consists of moderate connectivity. Query results indicate that Strawberry Creek Bridge BSA is within an area identified as an Essential Habitat Connectivity Area in the California Essential Habitat Connectivity Project. Furthermore, in reviewing data layers, neither the Morrill Canyon Bridge or Strawberry Creek Bridge are identified as wildlife movement barrier priorities. While the project poses no risk of permanently decreasing the existing habitat connectivity, work associated with the two bridge replacements may temporarily impact wildlife movement due to construction disturbance and noise.

e) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project would have no conflict with any local policies or local ordinance. As such, no impacts are anticipated in this regard.

f) Less Than Significant With Mitigation Incorporated.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Morrill Canyon Bridge and Strawberry Creek Bridge are located within the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP). Based on the presence of suitable habitat, surveys were conducted for the following:

- Morrill Canyon Bridge: arroyo toad, narrow endemic plants (NEPS) including many-stemmed dudleya, California Orcutt grass, spreading navarretia, San Miguel savory, Hammitt's clay-cress, and Wright's trichocoronis; and species associated with riparian/riverine/vernal pool resources, including riparian bird surveys.
- Strawberry Creek Bridge: mountain yellow-legged frog, NEPS including Johnston's rock cress, Munz's mariposa lily, and San Jacinto Mountains Bedstraw, and species associated with riparian/riverine/vernal pool resources, including riparian bird surveys.

Surveys were conducted for the MSHCP resources in the Morrill Canyon Bridge, and detected species include arroyo toad and Coast Range newts, which are anticipated to be impacted by the project. The project will impact mountain yellow-legged frog habitat in the Strawberry Creek Bridge PIA. In the Morrill Canyon Bridge PIA, there will be up to 0.021 acre of permanent impacts and 0.066 acre of temporary impacts on riverine resources that include Coast Range newt-occupied habitat and 0.183 acre of permanent impacts and 0.973 acre of temporary impacts on potential arroyo toad breeding and upland habitats with implementation of Morrill Canyon Bridge Alternative M1. Implementation of Strawberry Creek Bridge Alternative S1 (Preferred Alternative) would result in a total of 0.306 acre of riverine resources disturbance within the project footprint. Implementation of Strawberry Creek Bridge Alternative S3 would result in a total of 0.316 acre of riverine resources disturbance within the project footprint. The project will mitigate for temporary impacts on arroyo toad-occupied habitat and riverine habitat through restoration and enhancement of onsite 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. Permanent impacts on arroyo

toad-occupied habitat and riverine habitat are proposed to be mitigated through the purchase of credits or MSHCP permittee-responsible creation and preservation.

Plummer's mariposa-lily was detected outside the Strawberry Creek Bridge BSA and will not be impacted. No NEPS were detected in either BSAs. The project will be consistent for all MSHCP covered plant species by avoiding Plummer's mariposa lily through the implementation of avoidance and minimization measures. Wilson's warbler was detected only as a spring migrant as it only breeds at very high elevation in the MSHCP area and not at the project sites. Yellow warblers were detected and likely singing on territory at both bridge sites. Golden eagle was detected only as a flyover and it is unlikely to nest near project sites. Southern California rufous crowned sparrow was detected and may nest in upland habitats of the project site. The project will be consistent with MSHCP requirements for nesting birds through the implementation of avoidance and minimization measures. The project would also affect natural vegetation communities: Southern Coast Live Oak Riparian Forest and Southern Sycamore Alder Riparian Woodland. To minimize and avoid potential impacts on natural communities potentially occurring near the project site, the project will implement all applicable Caltrans BMPs and 2018 Caltrans Standard Specifications (or latest version).

The project would pose no risk of permanently decreasing the existing habitat connectivity; work associated with the Morrill Canyon Bridge and Strawberry Creek Bridge may temporarily impact wildlife movement due to construction disturbance including noise. Neither the Morrill Canyon Bridge BSA nor the Strawberry Creek Bridge BSA are within or located directly adjacent to any Criteria Cells and, thus, will not contribute to any connectivity to the Criteria Cells or conservation objectives.

The WRCMSHCP will be satisfied through the implementation of avoidance, minimization, and mitigation measures, and any additional measures required by the Wildlife Agencies including CDFW and USFWS, from MSHCP consistency approval. The project will also develop and implement an Arroyo Toad Relocation Plan, preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP) report, implementation of the construction guidelines provided in the WRCMSHCP Volume 1, Section 7.5.3, and Standard Best Management Practices outline in the WRCMSHCP Appendix C.

V. Cultural Resources

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

CEQA Significance for Cultural Resources

a) Less Than Significant with Mitigation Incorporated.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: A reconnaissance survey was conducted in November 2019 to field verify previously recorded resources and disturbances. The National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historic Landmarks, California Points of Historical Interest, historic topographic and aerial maps, and California Historical Resources Information System (CHRIS) were all consulted for the project. The study efforts resulted in the identification of five cultural resources within the Area of Potential Effect (APE) as follows:

- CA-RIV-8089H (P-33-015321), SR-74 Pines to Palms Highway: Eligible for NRHP.
- CA-RIV-10575H (P-33-006976), Strawberry Creek Bridge No. 56-0180: Category 2 bridge: Eligible for NRHP.
- CA-RIV-10574H (P-33-007236), Morrill Canyon Bridge No. 56-0169: Category 2 bridge: Eligible for NRHP.
- P-33-007234, Ortega Highway: Ineligible for NRHP.
- CA-RIV-8046H (P-33-15132), Keen Camp Road: Exempt Property Type: 1 Isolated segment of bypassed or abandoned road.

The proposed project has the potential to affect three of the five cultural resources identified within the APE: Strawberry Creek Bridge, Morrill Canyon Bridge, and the Pine to Palms Highway (CA-RIV-8089H). The Morrill Canyon Bridge, built in 1931, is noted in the most recent Caltrans Bridge Inventory as a Category 2 structure, meaning it is eligible for the NRHP. The Strawberry Creek Bridge was built in 1929 and also is noted in the most recent Caltrans Bridge Inventory as a Category 2 structure. Thus, both bridges are eligible for the NRHP, and in the case of Morrill Canyon Bridge, the structure was found to be individually eligible as a significant example of a rare bridge type, a closed spandrel masonry arch bridge. Strawberry Creek Bridge is located on the Pines-to-Palms Highway, which is a historic linear resource, and

the bridge is eligible as a contributor to the Pines-to-Palms Highway; however, the bridge has not been individually evaluated. The project involves the replacement of bridge rails through removal and replacement of the bridge railings, and/or full bridge replacement at Morrill Canyon Bridge and Strawberry Creek Bridge. The project would result in the significance of a historical resource being materially impaired and would affect its eligibility to the CRHR. Therefore, under CEQA, the proposed project would have a significant impact. To mitigate the significant impact, measures would be incorporated into the proposed project.

b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The project site is located at the Morrill Canyon Bridge and Strawberry Creek Bridge, which experience consistent high-velocity fluvial occurrences. Additionally, the APE is mostly cut into Cretaceous-granite bedrock along the side slopes of the mountains. Therefore, most of the study area is underlain by, and cut into, granitic bedrock, ultimately placing the APE and all proposed project activities well below any probable cultural layers. These factors create an unlikely potential for archaeological preservation. As such, the current study suggests that the probability of encountering in situ cultural deposits during ground-disturbing activities associated with the project is extremely low.

c) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Construction of the proposed project would result in vertical disturbance 3.6 feet (1.1 meter) above the pavement to a maximum depth of 26.2 feet (8 meters) below the pavement for construction of detours, bridge railing, and/or bridge replacement. As mentioned above, most of the study area is underlain by, and cut into, granitic bedrock, placing the APE and all proposed project activities well below any probable cultural layers with unlikely potential for archaeological preservation. If human remains are discovered, California Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop within 60 feet of any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to California Public Resources Code Section 5097.98, will then notify the Most Likely Descendant (MLD). At this time, the person who discovered the remains will contact Andrew Walters, District Environmental Branch Chief [(909) 383-2647] or Gary Jones, District Native American Coordinator [(909) 383-7505], so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of Public Resources Code 5097.98 are to be followed as applicable (refer to measure CR-2). Implementation of this standard measure would ensure that impacts do not occur due to project implementation.

Measures CR-1 and CR-2, which are standard measures for all Caltrans projects, are included to ensure that potential effects on cultural resources and human remains, should they be discovered during construction, would be avoided. Additional measures HIST-1 to HIST-7 have been included as a result of the MOA executed for the project between Caltrans and SHPO.

- CR-1** If buried cultural resources are encountered during project activities, it is Caltrans' policy that all work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.
- CR-2** In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who will then notify the Most Likely Descendant (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, District Environmental Branch Chief: (909) 383-2647 and Gary Jones, District Native American Coordinator: (909) 383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.
- HIST-1** Historic American Engineering Record (HAER). Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.
- Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).
- Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.
- Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in the paragraph above, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.
- HIST-2** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures (masonry, stone elements, or concrete and stone); or material that is similar

to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original materials will be considered as an option.

- HIST-3** Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway.
- HIST-4** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- HIST-5** Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in the MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to MOA Stipulation IV F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of the MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in MOA Stipulation II.A-II.D (also identified as HIST-1 through HIST-5) of this stipulation have been met.
- HIST-6** As legally mandated, human remains, and related items discovered during the implementation of the terms of the MOA and the undertaking will be treated in accordance with requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Section 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined the California Native American Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.

HIST-7 If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13 (c) assume any discovered property to be eligible for inclusion in the National Register.

VI. 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determination for Energy

a), b) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The project would use a minimal amount of energy during the proposed construction activities, such as excavation, road cut and fill, demolition, and other construction-related activities. Construction-related effects on energy would likely be greatest during the site preparation phase because of energy use associated with the excavation, handling, and transport of soil and construction debris to and from the site. However, these construction activities would be short term in duration and would not result in wasteful, inefficient, or unnecessary consumption of energy resources during project construction.

During operation, the project would accommodate existing traffic demand, but would not create new demand, directly or indirectly. The project would also not reduce congestion and/or improve the level of service of traffic as no additional lanes would be added. As such, operation of the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

VII. Geology and Soils

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

CEQA Significance Determination for Geology and Soils

a i), a ii), a iii), a iv) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Both bridges are located in hilly, mountainous terrain. The County of Riverside General Plan, Elsinore Area Plan, Slope Instability Map indicates that Morrill Canyon Bridge is not located within an area designated for slope instability. The County of Riverside General Plan, Riverside Extended Mountain Area Plan (REMAP), Slope Instability Map indicates that Strawberry Creek Bridge is partially located in an area designated as Low to Locally Moderate Susceptibility to Seismically Induced Landslides and Rockfalls. Based on the County of Riverside General Plan, Elsinore Area Plan, Seismic Hazards Map, the Morrill Canyon Bridge is not located in any liquefaction susceptible designated area and the Strawberry

Creek Bridge is located in an area designated as Deep Groundwater with Moderate levels of liquefaction susceptibility. Furthermore, the proposed project site is located in the seismically active Southern California region. However, construction and operation of the project have no potential to rupture a known earthquake fault, cause strong seismic ground shaking, or cause seismic-related ground failure, including liquefaction. Nevertheless, during the life of the project, seismic activity associated with active faults can be expected to generate moderate to strong ground shaking at the site during active earthquakes. Conformance with the California Building Code, as well as adherence to standard engineering practices and the Department's design criteria, would reduce the effects of seismic ground shaking to the project. The proposed project would implement the Department's current highway and structure seismic design standards.

b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Soils in the project area consist of Capistrano Sandy Loam, Cienega Rocky Sandy Loam, and Soboba-Hanford Family Association. Construction of the project would result in excavated soil that would be exposed, and there would be an increase in the potential for soil erosion compared to existing conditions. During a storm event, unprotected soils including slopes would be subject to erosion. Temporary impacts related to construction activities could occur along the project limits due to grading and construction of cut and fill slopes at Morrill Canyon Bridge and Strawberry Creek Bridge. Soil erosion potential would be addressed through the implementation of standardized measures as part of the project design. These include erosion control BMPs as part of the Stormwater Pollution Prevention Plan (SWPPP). With implementation of these standardized measures, no short-term or indirect adverse impacts related to soil compaction or erosion would occur during construction of the project at either Morrill Canyon Bridge or Strawberry Creek Bridge. Refer to measures WQ-1 through WQ-5.

c), d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The project is located in an area consisting of hilly, mountainous terrain. The County of Riverside General Plan, Elsinore Area Plan, Slope Instability Map indicates that Morrill Canyon Bridge is not located within an area designated for slope instability. The County of Riverside General Plan, Riverside Extended Mountain Area Plan (REMAP), Slope Instability Map indicates that Strawberry Creek Bridge is partially located in an area designated as Low to Locally Moderate Susceptibility to Seismically Induced Landslides and Rockfalls. Based on the County of Riverside General Plan, Elsinore Area Plan, Seismic Hazards Map, the Morrill Canyon Bridge is not located in any liquefaction susceptible designated area and the Strawberry Creek Bridge is located in an area designated as Deep Groundwater with Moderate levels of liquefaction susceptibility. No other geological hazards pertaining to the project area were identified in the County of Riverside General Plan, Elsinore Area Plan or REMAP. The project would follow the latest design requirements to minimize any potential effects related to liquefaction and seismically induced settlement. With incorporation of the avoidance and minimization measures listed in GEO-1 through GEO-3, no direct or indirect adverse, long-term impacts would occur as a result of the proposed project.

e) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project would not implement the use of septic tanks or alternative waste water disposal systems. No impacts are expected in this regard.

f) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Most of the project is underlain by, and cut into, granitic bedrock. As such, and based on the HPSR prepared for the project, it was concluded that the probability of encountering existing cultural deposits during ground-disturbing activities associated with the project is considered extremely low. As such, impacts on paleontological resources is considered less than significant.

VIII. Greenhouse Gas Emissions

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

CEQA Significance Determination for Greenhouse Gas Emissions**a), b) Less Than Significant Impact.**

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Construction activities would generate approximately 2,171 metric tons of carbon dioxide equivalent (CO₂e) over the approximately 11 month construction period, while project operations would not result in any increase in greenhouse gas (GHG) emissions. Because the project will replace two bridges without increasing roadway capacity, there would be no increase in long-term GHG emissions due to project operations. Environmental impacts resulting from project GHG emissions are considered to be less than significant.

Caltrans continues to be involved on the Governor's Climate Action Team as the California Air Resources Board (CARB) works to implement Executive Orders (EOs) S-3-05 and S-01-07 and help achieve the targets to set forth in Assembly Bill (AB) 32. EO B-30-15, issued in April 2015, and Senate Bill (SB) 32 (2016) set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. Caltrans remains committed to implementing measures to reduce the potential effects of the project. Caltrans is also involved in other major initiatives that are underway to help meet these targets, as discussed in detail in Section 3.3 Climate Change, of this document. Strategies that will be implemented in the project to reduce GHG emissions and potential climate change impacts from the project are summarized in measure GHG-1. As such,

the project would not be conflicting with any applicable plan, policy or regulation adopted for the purpose of reducing greenhouse gas emissions.

IX. 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA Significance Determinations for Hazards and Hazardous Materials

a), b), d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Implementation of the proposed project is not expected to create a significant hazard to the public or environment and is not located on a list of hazardous materials sites. The project involves replacing Morrill Canyon Bridge and Strawberry Creek Bridge on SR-74 in Riverside County because the bridges have nonstandard bridge rails that do not meet current federal crash standards and nonstandard lane and shoulder widths. No storage of chemicals or hazardous materials would occur. The proposed project would ensure the safety and mobility for the traveling public and provide continued connectivity along SR-74.

c), e), g) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: There are no schools located within a quarter-mile of the project site. The proposed project is not within two miles of a public airport or public use airport or within the vicinity of a private airstrip. The project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires.

f) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The existing bridges were identified in the Structure Replacement and Improvement Needs (STRAIN) Report in 2014 as having several longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arches. Furthermore, both structures have nonstandard lane and shoulder widths. Due to the significant deterioration and nonstandard features found in both bridges, there is a need to replace these structures to meet current design, crash, and safety standards and to provide continued connectivity along SR-74 for motorists. As such, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Emergency response times may be temporarily affected during the construction phase of the project. However, construction impacts would be addressed with implementation of a Traffic Management Plan, which would minimize temporary impacts and ensure coordination with emergency service providers during the construction period.

X. Hydrology and Water Quality

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

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA Significance Determination for Hydrology and Water Quality

a), b), c i), c ii), c iii), c iv), d), e) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: There would be no permanent water quality impacts with implementation of the project. The construction of the project would not have effects on flows. Implementation of the project would ensure the safety and mobility for the traveling public while providing continued connectivity along SR-74. The project would not place housing or structures within a 100-year flood hazard area and would not expose people or structures to a significant risk of loss, injury, or death as a result of flooding.

XI. Land Use and Planning

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

CEQA Significance Determinations for Land Use and Planning

a), b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Implementation of the project would ensure the safety and mobility for the traveling public by providing standard lane and shoulder width to meet current design, crash, and safety standards. The project would not divide an established community, as SR-74 already exists within the area. The project is consistent with statewide, regional, and local mobility goals and is being coordinated with impacted governmental, regulatory, and local agencies in the area to ensure consistency with specific local goals and objectives. The project is also consistent with regional planning goals. Furthermore, the configuration of the existing roadway facility would

not be affected or impacted by the proposed project. As such, the proposed project would not conflict with any applicable land use plan, policy, or regulation.

XII. Mineral Resources

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

CEQA Significance Determinations for Mineral Resources

a), b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: According to the County of Riverside General Plan Land Use Map, the project is not located in an area designated as Mineral Resources.

XIII. Noise

Would the project:	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 a local general plan or noise ordinance or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determinations for Noise

a), b), c) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3. The San Juan Trailhead and Bear Canyon Trailhead are located

approximately a quarter mile south in the vicinity of the Morrill Canyon Bridge. The South Fork Trail 2E17 is located approximately two miles south of the Strawberry Creek Bridge. The Ortega Oaks Candy Store and Goods (34950 Ortega Highway) and the Ortega Oaks RV Park and Campground (34040 Ortega Highway) are also located along SR-74, south of the Morrill Canyon Bridge. No noise impacts are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications 14.8-02. Construction-related noise would be short term and intermittent during the construction period. Therefore, noise impacts would last only during the duration of construction and would not affect potential noise-sensitive receptors in the vicinity including any campgrounds and recreational users. The project would also not expose people to or generate noise levels in excess of standards established in a general or noise ordinance, or applicable standards of other agencies. Due to the nature of the project, there would be no permanent increase in ambient noise levels in the project vicinity, which is not located within an airport land use plan's jurisdiction or in the vicinity of a private airstrip.

XIV. Population and Housing

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

CEQA Significance Determinations for Population and Housing

a), b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project is located on an existing interstate facility near existing roadways, providing access to existing development. The project would consist of replacing the Morrill Canyon Bridge and the Strawberry Creek Bridge on SR-74 providing for standard lane and shoulder widths. The project would not necessitate the relocation of any existing developments or people. The proposed project would not induce substantial unplanned population growth in an area, either directly or indirectly; therefore, no impacts are anticipated.

XV. Public Services

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

CEQA Significance Determinations for Public Services

a) Fire protection, police protection, schools, and parks. No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The Riverside County Fire Department in cooperation with CAL FIRE provides fire and emergency services in the area of Morrill Canyon Bridge. The nearest fire station to Morrill Canyon Bridge is the Riverside County Fire Department Station 51 located at 32353 Ortega Highway in Lake Elsinore. The Riverside County Sheriff's Department provides police services in the area of Morrill Canyon Bridge, and the nearest sheriff's station is the Lake Elsinore Station, located at 333 Limited Avenue in Lake Elsinore. Near the Strawberry Creek Bridge, the Cranston Station and the Keenwild Station of the San Bernardino National Forest are the nearest fire stations. The nearest sheriff's station to Strawberry Creek Bridge is the Riverside County Sheriff's Department's Hemet Station, located at 43950 Acacia Avenue in Hemet. The San Juan Loop Trailhead and Bear Canyon Trailhead are located approximately a quarter mile south in the vicinity of the Morrill Canyon Bridge. The South Fork Trail 2E17 is located approximately two miles south of the Strawberry Creek Bridge. No school sites are located near either bridge location.

The proposed project would not result in an increase in population, result in the need for additional facilities, or increase response times of emergency personnel. However, construction activities have the potential to result in temporary disruptions and delays during the construction period. Access to trails and trailheads may be temporarily affected during construction of the build alternatives. Construction activities could also lead to an increase in delay times for emergency response vehicles. However, with the implementation of a Traffic Management Plan, as previously mentioned, temporary access impacts on these public facilities would not occur. Once the project is completed, the project will ensure the safety and mobility for the traveling public and provide continued connectivity along SR-74 for motorists, including emergency service vehicles.

a) Other Public Facilities. No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: No impacts are anticipated to occur on other public facilities.

XVI. Recreation

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

CEQA Significance Determination for Recreation**a), b) No Impact.**

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project does not have the capacity to generate a substantial increase in the use of any existing neighborhood parks, regional parks, or other recreational facilities such that physical deterioration would occur, nor would it require the construction or expansion of existing recreational facilities.

XVII. Transportation

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determinations for Transportation

a), c), d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The project would consist of replacing Morrill Canyon Bridge and Strawberry Creek on SR-74 in Riverside County and providing standard 12-foot lane widths and minimum 4-foot shoulder widths, which may have a positive effect on the accident rate. The new bridge structures and rail will offer better protection to errant vehicles by providing a stronger and safe bridge rail configuration. At both bridge locations, SR-74 is not a bicycle route and there are no pedestrian paths available for the public. The project would not increase traffic because no new land uses are proposed, and it would not create new demand. Overall, the project would ensure the safety and mobility for the traveling public and provide continued connectivity along SR-74. The proposed improvements for the proposed project are consistent with statewide, regional, and local mobility goals, and the project is being coordinated with impacted governmental, regulatory, and local agencies in the area to ensure consistency with specific local goals and objectives.

Construction activities have the potential to result in temporary, localized, site-specific disruptions during the construction period. This could lead to an increase in delay times for emergency response vehicles during construction. However, the proposed project would include the preparation and implementation of a Traffic Management Plan. Impacts would be less than significant during the construction period.

b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The project itself would not generate new vehicle trips and therefore would not have a significant impact on air quality in the air basin. The project is listed in Table 1, Carbon Monoxide (CO) Protocol, as such, it is exempt from all air emissions analysis.

XVIII. Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Would the project cause a substantial adverse change in the significance of a tribal cultural resources, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CEQA Significance Determinations for Tribal Cultural Resources

a), b) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: No Tribal Cultural Resources were identified as a result of consultations conducted with pertinent Native American tribal representatives. No prehistoric cultural resources have been identified over multiple cultural studies, including current cultural studies completed for the proposed project. Additionally, the potential to encounter prehistoric cultural materials during project-related activities is considered to be low. If prehistoric cultural materials are identified during project-related activities, interested Native American Tribes will be notified. As such, impacts on Tribal Cultural Resources are not anticipated to occur.

XIX. Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determinations for Utilities and Service Systems

a), b), c), d), e) Less than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Construction of the proposed project is not expected to generate the need for additional wastewater treatment facilities or exceed wastewater treatment requirements of the Regional Water Quality Control Board. No new or expanded entitlements would be needed for the project. The replacement of the two bridges would not have any effects on the existing flows. The project would require the use of a local landfill to dispose of any demolition materials during construction. Excavated material for this project will be reused to build the embankments. The existing asphalt pavement that is removed as a result of the project is expected to be recycled and reused in the construction to the extent possible. The proposed project would be in compliance with all federal, state, and local solid waste statutes and regulations.

XX. Wildfire

If located in or near state responsibility areas or lands classified as very high fire 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Significance Determinations for Wildfire

a) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: Construction activities have the potential to result in temporary, localized, site-specific disruptions during the construction period. This could lead to an increase in delay times for emergency response vehicles. Construction impacts would be short-term, lasting only the length of construction, and would cease upon completion of construction. The project includes the preparation of a Traffic Management Plan that would ensure that emergency access impacts would not occur. The proposed project would not substantially impair an adopted emergency response plan or emergency evacuation; therefore, less than significant impacts are anticipated.

b), d) Less Than Significant Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: According to the County of Riverside General Plan, Elsinore Area Plan, Wildfire Susceptibility Map, the Morrill Canyon Bridge area is located in an area designated as Very High/High/Moderate Fire Hazard Severity Zones (FHSZ) by the California Department of Forestry and Fire Protection. According to the County of Riverside, REMAP, Wildfire Susceptibility Map, the Strawberry Creek Bridge area is located in an area designated as Very High/High/Moderate FHSZ.

As the proposed project would result in the replacement of the Morrill Canyon Bridge and Strawberry Creek Bridge, it would not expose motorists to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The project is not anticipated to 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.

c) No Impact.

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3: The proposed project would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment. No impacts are anticipated in this regard.

XXI. Mandatory Findings of Significance

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

CEQA Significance Determinations for Mandatory Findings of Significance**a) Less Than Significant With Mitigation Incorporated.**

The 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. In the Morrill Canyon Bridge PIA, up to 0.021 acre of permanent impacts and 0.066 acre of temporary impacts on riverine resources that include arroyo toad and Coast Range newt occupied habitat are anticipated. Impacts on three California sycamores, 57 coast live oaks, and one Goodding's black willow are also anticipated. For the Strawberry Creek Bridge PIA, there will be up to 0.1 acre of permanent impacts and 0.2 acre of temporary impacts on riverine resources that include potential mountain yellow-legged frog habitat, and impacts on five White alders, eight California sycamores, five interior live oaks, and one Goodding's black willow. With implementation of avoidance, minimization, and mitigation measures BIO-1 through BIO-20, the proposed project would not cause any species of special concern or rare species to trend towards becoming listed.

b), c) No Impact.

The proposed project would not result in cumulatively considerable impacts when combined with past, present, and reasonably foreseeable future projects and therefore would have no cumulative impacts. The proposed project would not have environmental effects that would cause substantial effects on human beings, either directly or indirectly, as the purpose of the

project is to ensure the safety and mobility for the traveling public and provide continued connectivity along SR-74.

3.3 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to 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 (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂.

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 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 FHWA recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability." (FHWA n.d.) Program and project elements that foster sustainability and resilience also support economic vitality and global

efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program 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 in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

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 (MMTCO₂e).¹ 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.

¹ GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO₂ is the most important GHG, so amounts of other gases are expressed relative to CO₂, using a metric called "carbon dioxide equivalent" (CO₂e). The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂.

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.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

Environmental Setting

SR-74 is a two-lane undivided conventional highway with narrow right shoulders and steep embankments; a significant portion of the highway traverses mountainous terrain. It begins at I-5 near San Juan Capistrano in Orange County and proceeds easterly to I-10 north of Palm Desert in Riverside County. Within Riverside County, SR-74 is 101.5 miles in length beginning at the Riverside-Orange County Line and ending at Palm Desert city limits, with 5.5-miles of SR-74 unconstructed between SR-111 and I-10. The project is located on two separate rural portions of SR-74, the first between PM 2.5 and 3.5 and the second between PM 53.0 and 54.0 in Riverside County. The two bridge locations are located in mountainous terrain with dense vegetation, narrow lanes, and shoulders within side slope-road-cuts and located on or near blind curves. At both project locations SR-74 is not a bicycle route, and there are no pedestrian paths available for the public. Additionally, SR-74 is not an Extralegal Load Network (ELLN) route. It is a Federal-Aid primary route and is included in the Freeway and Expressway System.

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 CO₂, CH₄, N₂O, HFCs, perfluorocarbons, SF₆, and nitrogen trifluoride. It also accounts for emissions of CO₂ that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO₂ (carbon sequestration). The 1990–2016 inventory found that of 6,511 million metric tons (MMT) CO₂e GHG emissions in 2016, 81 percent consist of CO₂, 10 percent are CH₄, and 6 percent are N₂O; the balance

consists of fluorinated gases (U.S. EPA 2018). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5 percent of U.S. GHG emissions. Figure 3-1 below provides an overview of U.S. 2016 GHG emissions by pollutant and a breakdown of the total U.S. 2016 GHG emissions by sector.

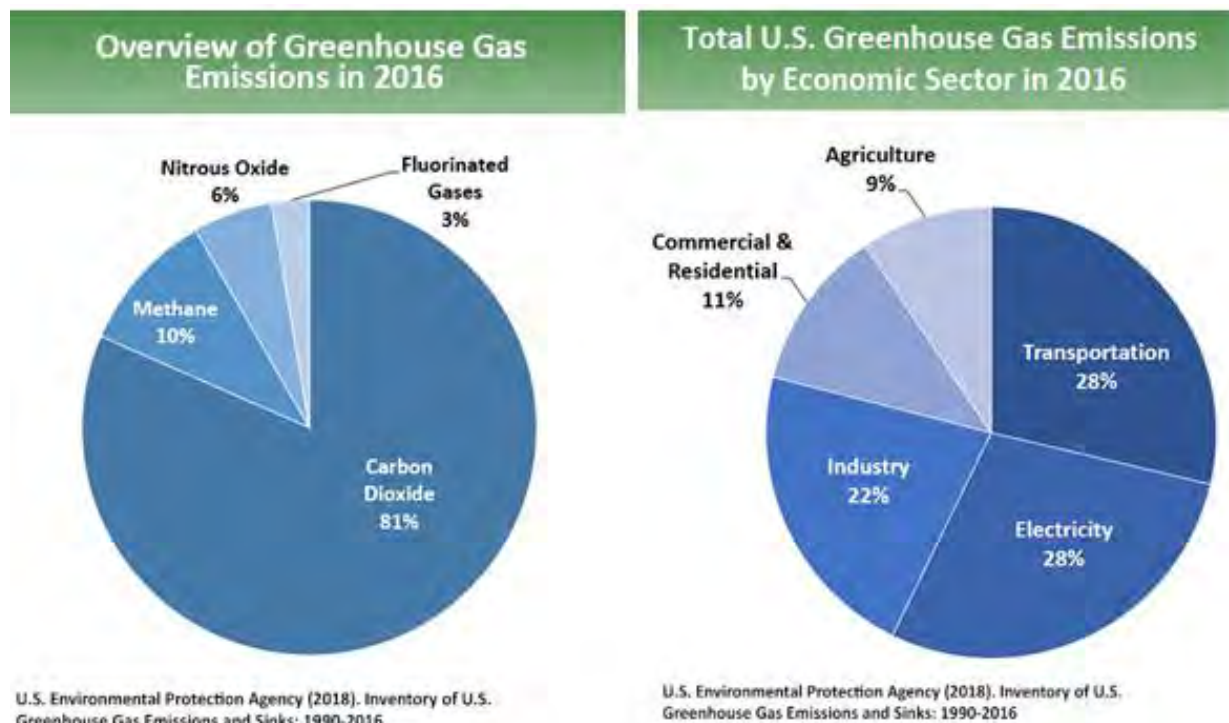


Figure 3-1. U.S. 2016 Greenhouse Gas Emissions

State GHG Inventory

CARB 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 MMTCO₂e for 2017, with the transportation sector responsible for 41 percent of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (CARB 2019a).

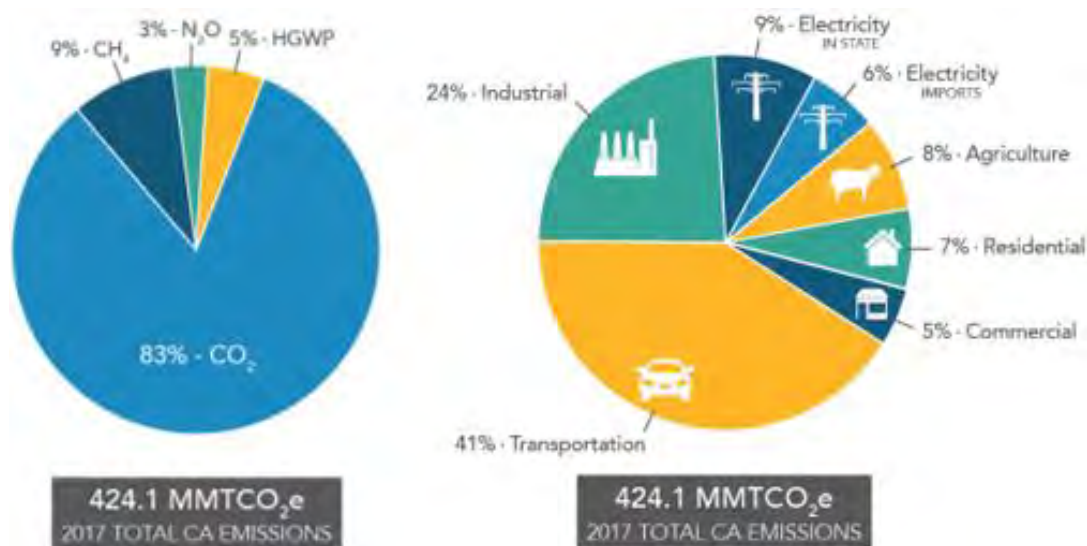


Figure 3-2. California 2017 Greenhouse Gas Emissions

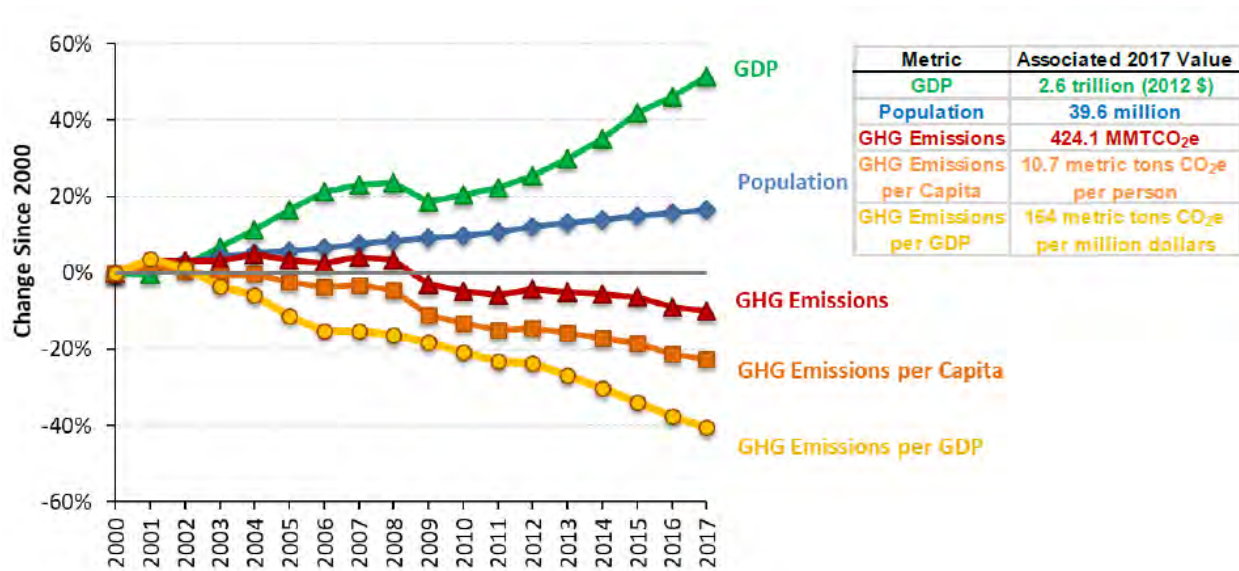


Figure 3-3. Change in California Gross Domestic Product, Population, and GHG Emissions Since 2000

AB 32 required CARB 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 five years. CARB 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

The regional plans and policies within the project area are summarized in Table 3-1 below. CARB 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 proposed project is included in the 2016 RTP/SCS (SCAG 2016) of the Southern California Association of Governments (SCAG) (Amendment #3) as RTP ID RIV071254. CARB's regional reduction target for SCAG as of October 2018 is 8 percent by 2020 and 19 percent by 2035, compared to 2005 levels (CARB 2019b). (The 2016 RTP/SCS used earlier targets of a 9 percent per capita reduction by 2020 and a 16 percent per capita reduction by 2035. It should be noted that the SCAG planning region comprises Imperial, Orange, San Bernardino, and Ventura Counties in addition to Riverside County, and that targets apply in the region as a whole and to all GHG emission sources, not individual counties or transportation alone.) The RTP/SCS concluded that implementing the plan would result in an 8 percent per capita GHG reduction by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040.

The Riverside County Climate Action Plan (Riverside County Planning Department 2018) serves as a tool to implement the goals and policies of the various elements of the Riverside County General Plan related to GHG emissions. It provides a list of specific actions that will reduce countywide GHG emissions consistent with the reduction targets of AB 32 (Riverside County Planning Department 2018:1-3).

Table 3-1. Regional Greenhouse Gas Reduction Policies

Title	GHG Reduction Policies or Strategies
Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (adopted April 7, 2016)	<ul style="list-style-type: none"> • Preserve Our Existing System • Manage Congestion • Transportation Systems Management
Riverside County General Plan	<p>Land Use Element</p> <ul style="list-style-type: none"> • Policy LU 2.1k(f): f. Site development to capitalize upon multi-modal transportation opportunities and promote compatible land use arrangements that reduce reliance on the automobile. • Policy LU 11.4: Provide options to the automobile in communities, such as transit, bicycle and pedestrian trails, to help improve air quality. • Policy LU 13.4: Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate. <p>Circulation Element,</p> <ul style="list-style-type: none"> • Policy C 1.2: Support development of a variety of transportation options for major employment and activity centers including direct access to transit routes, primary arterial highways, bikeways, park-n-ride facilities and pedestrian facilities. • Policy C 1.7: Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers. • Policy C 5.2: Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping. • Policy C 20.14 (Previously C 20.12): Encourage the use of alternative non-motorized transportation and the use of non-polluting vehicles.

Title	GHG Reduction Policies or Strategies
Riverside County General Plan Amendments (Adopted July 17, 2018)	Air Quality Element <ul style="list-style-type: none"> • Policy AQ 20.1: Reduce VMT by requiring expanded multi-modal facilities and services that provide transportation alternatives, such as transit, bicycle and pedestrian modes. Improve connectivity of the multi-modal facilities by providing linkages between various uses in the developments. • Policy AQ 20.3: Reduce VMT and GHG emissions by improving circulation network efficiency. Circulation Element (Amendment No. 960 – Public Review Draft, February 2015) <ul style="list-style-type: none"> • Policy C 1.8: Ensure that all development applications comply with the California Complete Streets Act of 2008 as set forth in California Government Code Sections 65040.2 and 65302.
Riverside County Climate Action Plan (2018)	Transportation Measures <ul style="list-style-type: none"> • R2-T5: Roadway Improvements including Signal Synchronization and Transportation Flow Management • R2-T6: Provide a Comprehensive System of Facilities for Non-motorized Transportation • R2-T8: Anti-Idling Enforcement

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH₄ and N₂O 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 (Public Resources Code Section 21083(b)(2)). As the California Supreme Court explained, “because of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself” (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project’s incremental effect is “cumulatively considerable” (CEQA Guidelines Sections 15064(h)(1) and 15130).

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

Operational Emissions

The purpose of the proposed project is to replace two existing bridge structures, and it would not increase the vehicle capacity of the roadway. This type of project generally causes minimal or no increase in operational GHG emissions. Because the project would not increase the number of travel lanes on SR-74, no increase in vehicle miles traveled (VMT) would occur as result of

project implementation. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing, onsite construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

The *Road Construction Emissions Model* (Sacramento Metropolitan Air Quality Management District 2016) was used to estimate GHG emissions from project construction. Project construction would generate an estimated 2,171 metric tons over the approximately 11-month construction period, which would be approximately 0.02 percent of Riverside County's estimated 2020 GHG Business as Usual inventory.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes, including those of the South Coast Air Quality Management District (SCAQMD). Certain common regulations that reduce construction vehicle emissions, such as equipment idling restrictions and proper maintenance of construction equipment, also help reduce GHG emissions.

CEQA Conclusion

While the proposed project will result in GHG emissions during construction, it is anticipated that the project will 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 greenhouse gases. With implementation of construction GHG reduction measures, the impact would be less than significant.

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

Greenhouse Gas Reduction Strategies

Statewide Efforts

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, as shown on Figure 3-4, 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*.

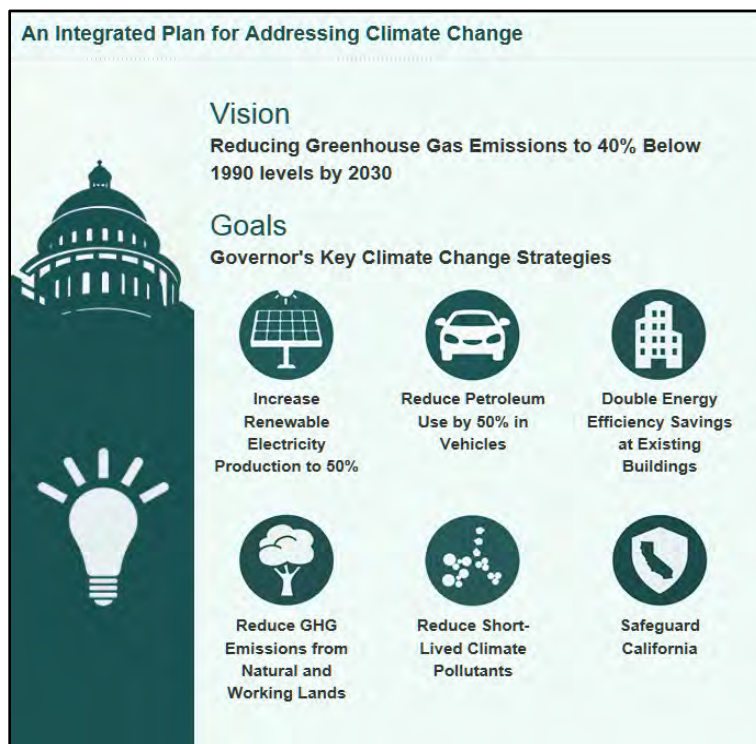


Figure 3-4. California Climate Strategy

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 VMT. A key state goal for reducing greenhouse gas 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 CARB 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 the state's 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 CO₂ reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the state's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

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

- GHG-1:** Idling time for lane closure during construction is restricted to 10 minutes in each direction; in addition, the contractor must comply with SCAQMD's rules, ordinances, and regulations regarding air quality restrictions.
- GHG-2:** The project will incorporate the use of energy efficient lighting.
- GHG-3:** Bids will be solicited that include use of energy and fuel-efficient fleets in accordance to current practices.
- GHG-4:** The project will maintain equipment in proper tune and working condition.

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 variability 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 USC Chapter 56A, Section 2921 et seq.). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental

elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways.” Chapter 12, Transportation, presents a key discussion of vulnerability assessments. It notes that “asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime” (USGCRP 2018).

The June 2011 U.S. Department of Transportation (DOT) Policy Statement on Climate Adaptation committed the U.S. DOT 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* (State of California 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.² Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate “sea-level rise (SLR) projections into planning and decision making for projects in California” in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017, and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California’s infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017 to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Project Adaptation Analysis

Sea-Level Rise

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

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation, as well as the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings and interagency coordination meetings. In addition to consultation with participating agencies, the environmental document process included public coordination by providing the public an opportunity to comment on the document during the public review period, which took place from January 8, 2021 to February 8, 2021. A virtual Public Hearing webinar also occurred on January 21, 2021 from 5pm to 6:30pm. The format of the Public Hearing was via webinar and phone call-in method due to State mandates and restrictions on in-person gatherings due to the COVID-19 pandemic. Viewers were able to participate and submit comments via the webinar and/or phone call. This chapter summarizes the results of efforts to identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Consultation and Coordination

4.1.1 Project Development Team Meetings

Caltrans Project Development Team (PDT) meetings have been held monthly since August 2020 with Caltrans technical disciplines attending, as appropriate, to discuss the project. Caltrans focused meetings were also held as the project progressed and were related to technical specialty, as needed. During the PDT meeting held on February 22, 2021, the PDT discussed construction staging and the comment letter received from the California Highway Patrol (CHP) during the public review period of the environmental document. Caltrans staff had previously contacted the CHP office that provided the letter on February 16, 2021 to further discuss the project and concerns of the CHP. The CHP concerns included construction-related delays upon CHP operations and the public, and suggested that there be at least one lane of traffic open at all times throughout the construction period of the project. The PDT did not have any objections to the single lane traffic control and further determined that having a single lane traffic control at Strawberry Creek Bridge would be beneficial for the project, as it would improve the geometry and result in a smaller area of impact compared with other alternatives. Based on this discussion and all available information to date, the PDT agreed to move forward with Strawberry Creek Bridge Alternative S1 as the preferred alternative for the Strawberry Creek Bridge location. Caltrans-Consultant Environmental Status Update conference calls also occurred on September 2, 2020; November 4, 2020; December 2, 2020; January 6, 2021; February 3, 2021; and March 10, 2021 to discuss the status, schedule, and general updates of the environmental document with attendees from Caltrans project management and consultant environmental staff.

4.1.2 Public Hearing

A Public Hearing was held on January 21, 2021 from 5pm to 6:30pm via webinar and phone format due to the State's COVID-19 public gathering restrictions. Caltrans staff, including the

Caltrans Senior Environmental Planner, Associate Environmental Planner, Project Engineer, and Project Management attended the hearing. Also in attendance was Caltrans' Environmental Consultant team including Public Outreach staff. The webinar began promptly at 5pm with introductions and a live PowerPoint slide presentation in which the project, environmental process, next steps, detailed design information, and ways for the public to submit comments were discussed. At the end of the presentation, the public was encouraged to virtually "raise their hand" and ask questions and/or make comments regarding the project. No comments or questions were received from the public. With time remaining, the PowerPoint presentation was presented again in its entirety, for a second time. After the second presentation, the public again had the opportunity to virtually submit comments or questions. No comments or questions were received from the public.

4.1.3 U.S. Fish and Wildlife Service

A U.S. Fish and Wildlife Service (USFWS) species list was generated from the Information for Planning and Consultation database on November 9, 2020. A copy of the USFWS species list is included in Section 4.2, Agency Coordination Documentation.

On November 13, 2020, a request for Western Riverside County Multiple Species Habitat Conservation Plan (WR-MSHCP) Consistency Determination, Determination of Biologically Equivalent or Superior Preservation (DBESP) Report Finding, and Streamlined Biological Opinion for arroyo toad was submitted to the USFWS and CDFW. Upon request, Caltrans provided the USFWS and CDFW a letter of assurance, dated February 22, 2021, indicating that funds have been programmed to address acquisition of occupied arroyo toad habitat. The WR-MSHCP Consistency Determination was issued on March 8, 2021. On March 15, 2021, the USFWS issued a Streamlined Biological Opinion for arroyo toad. The WR-MSHCP Consistency Determination and Streamlined Biological Opinion are included below.

4.1.4 Native American Coordination

4.1.4.1 Native American Heritage Commission

On September 17, 2019 the Native American Heritage Commission (NAHC) was contacted and asked to provide information regarding sacred lands and a list of Native American organizations/individuals for contact. The NAHC responded on October 7, 2019, stating that the commission was unaware of any sacred lands in the project area. The NAHC provided a list of local tribal contacts for further consultation.

4.1.4.2 Native American Tribes

Request-for-information letters were sent to several Native American groups, as identified through coordination with the NAHC, in support of the cultural resources studies for the proposed project. More specifically, these letters were mailed to the Native American entities listed below. A detailed record of the correspondence efforts with Native American groups is included in the Historic Property Survey Report (HPSR) and summarized below.

In accordance with Section 106 of the National Historic Preservation Act, the Department sent initial consultation letters through the U.S. Postal Service to the following individuals:

- Dr. Shasta Gaughen, Tribal Historic Preservation Officer for Pala Band of Mission Indians on October 10, 2019. Caltrans received a response on October 30, 2019, declaring the project is not within the boundaries of the Pala Reservation or their Traditional Use Area and deferred consultation to tribes in closer proximity.
- Destiny Colucho, Tribal Historic Preservation Officer for Rincon Band of Mission Indians on October 10, 2019. Caltrans received a response indicating that there are no place names proximal to the project area, but that Strawberry Creek Bridge is located in a culturally sensitive area associated with Luiseno divinity. The Rincon Tribe recommended appropriate measures be taken to address impacts on cultural resources, such as archaeological and tribal monitoring, a treatment plan for potential discoveries, and a reburial location for encountered cultural resources. Caltrans noted the Tribe's recommendation; however, no prehistoric cultural resources have been identified over multiple studies including the current studies performed for the project. Additionally, the potential to encounter prehistoric cultural material during project-related activities is low. Should prehistoric cultural materials be encountered during project-related activities Caltrans will notify the Rincon Tribe and other interested Tribes. No further response has been received.
- Paul Marcarro, Cultural Resources Coordinator, and Ebru Ozdil, Cultural Resources Manager for Pechanga Band of Luiseno Indians on October 10, 2019. Caltrans received a response on November 4, 2019, stating that the project lies within the Tribe's aboriginal territory as evidenced by the existence of cultural resources. The Tribe requested consultation, as well as notification and involvement with the environmental review process including review of all documents. Caltrans sent the Draft Archaeological Study Report (ASR) with maps that detailed the Areas of Potential Effects (APEs) were negative for prehistoric resources. The Pechanga Tribe was also added to the environmental document distribution list. An initial consultation response was also received on March 20, 2020. Caltrans responded by inquiring about comments on the documents that were previously sent. A follow-up email was also sent by Caltrans on March 23, 2020; however, no comments have been received to date.
- Joseph Ontiveros, Cultural Resource Department, Soboba Band of Luiseño Indians on October 10, 2019. A request to initiate government-to-government consultation and tribal monitoring was received on November 18, 2019. Caltrans sent the ASR with maps as well as a denial letter on March 3, 2020. No further comments have been received.

4.1.5 Local Historical Society/Historic Preservation Group

The following historical societies and historic preservation group were contacted for information regarding the project site:

- Historical Society of Palm Desert, request for information letter sent October 28, 2019. Caltrans followed up with an email requesting participation and input regarding the drafting of the Memorandum of Agreement (MOA) on September 2, 2020. No response has been received to date.

- Coachella Valley Archaeological Society, request for information letter sent October 28, 2019. Caltrans followed up with an email requesting participation and input regarding the drafting of the MOA on September 2, 2020. A response was received the same day declaring they would respond if they have any concerns. No further response was received to date.
- Idyllwild Area Historical Society, request for information letter sent October 28, 2019. Caltrans followed up with an email requesting participation and input regarding the drafting of the MOA on September 2, 2020. No response has been received to date.
- Lake Elsinore Historical Society, request for information letter sent October 28, 2019. Caltrans received a phone call from the president of the Society (Ruth Atkins) indicating the project was west of their area of interest, and they had no concerns regarding Morrill Canyon Bridge, which is the closest of the two bridge structures to, but not in, what they consider their jurisdiction. Caltrans followed up with an email requesting participation and input regarding the drafting of the MOA on September 2, 2020. A response was received the same day explaining that there is no historic connotation to the subject bridges as far as the City of Lake Elsinore is concerned. No further response has been received to date.
- San Juan Capistrano Historical Society, request for information letter sent October 28, 2019. Caltrans followed up with an email requesting participation and input regarding the drafting of the MOA on September 2, 2020. No response has been received to date.

4.1.6 United States Forest Service

The United States Forest Service (USFS) was provided information regarding the project description and previous study findings that determined no cultural resources lie within the project area overlapping the project limits and Bureau of Land Management (BLM) administered land. Caltrans provided information to the USFS San Bernardino and Cleveland Field Offices regarding the project and the lack of cultural resources within the APE on October 22, 2019. Caltrans also transmitted the cultural compliance documentation including the HPSR and the MOA to both field offices on August 26, 2020. Caltrans has received no response regarding the project information or MOA to date.

4.1.7 Department of Parks and Recreation, Office of Historic Preservation

Caltrans requested consultation with the State Historic Preservation Officer (SHPO) regarding the project in a letter dated April 17, 2020. The letter included a copy of the HPSR and Finding of Effect (FOE) Report prepared for the project. The FOE proposed that a Finding of Adverse Effect is appropriate for the undertaking and determined that the undertaking as a whole will have an Adverse Effect. In a reply letter dated June 8, 2020, the SHPO, based on reviews of the submitted documentation, concurred with the Finding of Adverse Effect for the project. Caltrans has initiated further consultation with SHPO in December 2020 regarding the resolution of adverse effects through execution of a Memorandum of Agreement (MOA). For the purposes of Section 4(f), the SHPO's concurrence on the Finding of Adverse Effect and the MOA also serve as concurrence on the Section 4(f) approval. The MOA was executed on February 26, 2021 and included below.

4.2 Agency Coordination Documentation

Agency correspondence letters are provided on the pages that follow.

- Biological Resources:
 - USFWS iPaC, Official Species List.
 - WR-MSHCP Consistency Determination and Streamlined Biological Opinion
- Cultural Resources:
 - State Historic Preservation Officer (SHPO) has concurred with a **Finding of Adverse Effect** for the undertaking. A MOA was executed on February 26, 2021.

4.3 Public Participation

The Draft Environmental Document prepared for the project was circulated for public review and comment between January 8, 2021 and February 8, 2021. A Public Hearing was also held online via webinar and phone on January 21, 2021 from 5pm to 6:30pm.

A Notice of Intent to Adopt a Mitigated Negative Declaration was published in the Press Enterprise in English on January 8, 2021 and La Prensa Newspaper in Spanish on January 8, 2021. The notice informed the public of where the Draft Environmental Document was available online for public review, the start and end dates of the public review period, length of the public review period, date and time of the Public Hearing and instructions on how to virtually attend the Public Hearing including via website or phone, and how the public could submit comments on the Draft Environmental Document. The published newspaper notices in both English and Spanish are included below.

The published notice was also mailed to those on the distribution list included in Chapter 6. The distribution list included public agencies, utilities, and occupants/owners of all addresses within a 0.5-mile radius of the project limits.

Additionally, a Notice of Completion was transmitted to the State Clearinghouse on January 8, 2021. The State Clearinghouse distributed the Draft Environmental Document to selected state agencies for review between January 8, 2021 and February 8, 2021. The State Clearinghouse CEQAnet database filing is included below.

State Clearinghouse CEQAnet Listing.

SR-74 Bridge Replacement Project (EA-08-1G470)

Page 1 of 2

SR-74 Bridge Replacement Project (EA-08-1G470)

Summary

SCH Number	2021010067
Lead Agency	Caltrans, District 8 - San Bernardino/Riverside (California Department of Transportation, District 8)
Document Title	SR-74 Bridge Replacement Project (EA-08-1G470)
Document Type	MND - Mitigated Negative Declaration
Received	1/8/2021
Project Applicant	California Department of Transportation
Present Land Use	Two-lane undivided conventional highway.

Document Description The California Department of Transportation (Caltrans) proposes to replace Morrill Canyon Bridge (Bridge No. 56-0169, Post Mile [PM] 3.08) near Lake Elsinore, and Strawberry Creek Bridge (Bridge No. 56-0180, PM 53.5) near Hemet, on State Route 74 (SR-74) in Riverside County. Both bridge structures have non-standard lane and shoulder widths. Due to significant deterioration and non-standard features, there is a need to replace these structures to meet current design, crash, and safety standards.

Contact Information Renetta Cloud, Senior Environmental Planner
Caltrans District 8
464 West 4th Street, 6th Floor (MS 823)
San Bernardino, CA 92401
Phone: (909) 383-6323
renetta.cloud@dot.ca.gov

Location

Cities Hemet Lake Elsinore
Counties Riverside
Regions Countywide Southern California
Cross Streets SR-74/Morrill Canyon Bridge (near Lake Elsinore) and SR-74/Strawberry Creek Bridge (near Hemet)
State Highways SR-74
Waterways Morrill Canyon and Strawberry Creek

Notice of Completion

Review Period Start 1/8/2021
Review Period End 2/8/2021

<https://ceqanet.opr.ca.gov/2021010067/2>

1/8/2021

Development Type	Transportation (Bridge replacements on SR-74.)
Local Action	Other Action
Project Issues	Aesthetic/Visual Agricultural Land Air Quality Archaeologic-Historic Biological Resources Flood Plain/Flooding Forest Land/Fire Hazard Geologic/Seismic Greenhouse Gas Emissions Minerals Noise Public Services Recreation/Parks Soil Erosion/Compaction/Grading Solid Waste Toxic/Hazardous Traffic/Circulation Tribal Cultural Resources Vegetation Water Quality Wetland/Riparian Wildlife Land Use Cumulative Effects
Reviewing Agencies	California Air Resources Board California Department of Fish and Wildlife, Inland Deserts Region 6 California Department of Forestry and Fire Protection California Department of Parks and Recreation California Department of Transportation, District 8 California Department of Water Resources California Highway Patrol California Native American Heritage Commission California Natural Resources Agency California Regional Water Quality Control Board, Santa Ana Region 8 California Transportation Commission Department of Toxic Substances Control Office of Historic Preservation State Water Resources Control Board, Division of Drinking Water

Attachments

Environmental Document	1G470 Notice of Intent PDF 239 K 1G470 SCH Summary_Form PDF 583 K 1G470_SR74Bridge Replacement PDF 897.1 K
NOC	1G470 Notice of Completion PDF 256 K

Disclaimer: The Governor's Office of Planning and Research (OPR) accepts no responsibility for the content or accessibility of these documents. To obtain an attachment in a different format, please contact the lead agency at the contact information listed above. You may also contact the OPR via email at state.clearinghouse@opr.ca.gov or via phone at (916) 445-0613. For more information, please visit OPR's Accessibility Site.

FIGURE 1 JANUARY 11, 2012

Cool fact: On Jan. 6, 1910, Mississippi was the first state to ratify the 18th Amendment, which established Prohibition.

Fans of H.G. Wells flip over commemorative coin

The idea was to create a commemorative coin to celebrate the work of H.G. Wells, the British writer, historian and sociologist best known for the novels *'The War of the Worlds'* and *'The Invisible Man'*.

But the 2-pound coin that the Royal Mint in Britain unveiled this week has a different message.

It has some features that they described as flaws and botched imagery in the coin's design, which was inspired by the author's books.



For instance, the Martian invasion in *Well's* book is described in *The War of the Worlds* as "a monstrous troop, higher than many houses," appears to have four legs instead of three. And the image of the invisible man on the coin has the character wearing a top hat and not the "wide-brimmed hat" that Wells described in his book.

The errors, and the response from Wells and *o-rados*, were reported by *The Guardian*.

Wells, who was considered an outstanding literary figure of his time, is best known for his science-fiction novels, some of which have been adapted into movies. He died in 1946 at the age of 79.

'All Creatures' reboot aims to be a timely tonic
'All Creatures Great and Small,' a beloved TV series of yore, is back as a reboot because producer Co in Challenge saw the sitcom

Holiday treat: Plastic baby Jesus figurines sit in a bowl as Nicole Lars makes sweet bread called rosca at her home in Pátzún on Wednesday. The rosca is in honor of Día de los Reyes, or Three Kings Day, which commemorates the three kings' arrival to visit the baby Jesus at Christmastime and fell on Wednesday in 2021.

adventures of veterinarians in a close-knit rural community as told for a politically divisive era. I then the pandemic arrived, and a series linked together with vivid characters, engaging stories and the beautifully filmed British countryside — and, of course, lots of animals, farm and otherwise — provided more reason to relive the work depicted by author James Herriot. "It's just the joy about revisiting the

books after the Brexit vote in 2016 in England and the Trump election soon thereafter back to back." Callender said, even to highlighting what has been termed a "schism" between city and country dwellers in both the U.K. and the United States.

Viewers might embrace a show that reinforced values of cooperation and collaboration — reflects one's political persuasion, Callender said — and provided an escape from the "very complicated and messy and disturbing world that we're living in."

The original series, aired from the

lets 1970s to 1990.

The seven-part series debuts Sunday (check local listings for times). Set in the late 1930s, the show includes newswoman Hildy (Tolpelt), a slick and sassy over-the-top actress including Samuel West ("darkest hour," "Nothing Hill"), who plays Hildy's mentor, and Anna Madeley ("Don't wake hell") as a wisekeeper Mrs. Hall.

Dani's gigs made one of her final screen appearances in the show. A decision about how to handle the last of 1989, who died in September at age 62, has yet to be announced.

Actor/comedian Larry Storch is 93.
Former CBS newscaster Charles Osgood is 88.
Singer Shirley Bassey is 84.
Game show host Bob Eubanks is 83.
Actor Yvette Mimieux is 79.
Musician Robbie Kremer (the Goats) is 75.

Movie director John McTiernan is 76.
 Educator/ken Secretary Betty Newton is 82.
 Singer R. Kelly is 34.
 Actor Ami Dolenz is 52.
 Country singer Tim Meritt is 45.
 Actor Amber Benson is 44.

Astor Scott Whyte is 43.
Singer/songwriter Eric McCarty is 42.
Musicians (Classical) Luanplao-Katsuno (Wynn
Class Heroes) is 38.
Astor Cynthia Enos is 34.
Astor Freddie Stroria is 34.

WHAT'S BEING PLANNED? The California Department of Transportation (Caltrans) expects to replace Nori Canyon Bridge (Bridge No. 56 0149, Post Mile 48.0) and Strawberry Creek Bridge (Bridge No. 56 0152, Pk 58.5) on State Route 78 (SR-78) in Riverside County.

WHY THIS NOTICE? Citizens study the effects this project may have on the environment. Our studies show the proposed project will not significantly affect the quality of the environment. The report will explain the effect of the project. It is called a *Final Study of Environmental Assessment* (FSE). This notice is to advise you of the preparation of the *Final Study of Environmental Assessment* (FSE) and the *Final Study of Environmental Assessment* report. It is available to you to read. A hearing will be held to give you an opportunity to discuss certain design features of the project with Citizens staff before the final design is decided.

WHAT'S AVAILABLE? The *BS-2000* *Access/ROAD/FS4*, including associated maps, are available for review electronically at the project website: SB748BridgeReplacement.com

WHERE YOU COME IN: Do you have any comments about processing the project with or without Proposed AND/EA? Do you disagree with the findings of our study as set forth in the IS with Proposed AND/EA? We'd like you to make any other comments on the project? We'd like to hear what you think. Please submit your comments in writing no later than **Monday, February 8, 2021** to:

California Department of Transportation
ATTN: Brenda Cloud
Senior Environmental Planner
464 West 4th Street, MS 823
San Francisco, CA 94107-7400
e-mail: CDOT-FieldDevelopment@dot.ca.gov

The date we will begin accepting comments is **Friday, January 8, 2021**. If there are no major comments, Caltrans will proceed with the project's design.

WHEN AND WHERE? The public hearing will be held online on **January 21, 2021 from 5:00 p.m. to 6:30 p.m.** The online hearing can be accessed at the following link: tinyurl.com/SR74W Webinar. Please register ahead of time if possible. You can also participate via phone by dialing (262) 500-9128. Webinar ID: 912-7034-1388.

CONTACT: For more information about this study or this project, please contact the Colorado District 8 Office of Public Affairs at 2908 28th Ave., For individuals with sensory disabilities, this document can be made print or Braille, in large print, audio, or text, on computer disk, to assist in compliance with Title II of the Americans with Disabilities Act, or written to the Department of Transportation, ATTN: Brenda Clark, Denver Environmental Center, 6640 W. 11th, MS 828, San Francisco, CA 94107-1439, using the California Relay Service 1-800-775-2929 (Toll-Free Voice), 1-800-775-2922 (Toll-Free TDD), 1-800-855-3300 (Spanish), TDD/voice and Video TTY, 1-800-464-8776.

Notice is hereby given that a community meeting/public hearing will be held on Thursday, January 21, 2021 at 6:00 p.m. via teleconference, to solicit public comment from interested citizens, non-profit public service organizations and other public agencies as to the needs of the community. The information received will be used by the City in the development of the City's One-Year Annual Action Plan for Fiscal Year 2021-22 for the City's CDBG, HOME, and ESG Programs. In addition, the City will provide instruction on how to access applications for Community Development Block Grant (CDBG) public service activities and Emergency Solutions Grant (ESG) activities at this meeting.

All interested persons are invited to attend via teleconference.

Join or Watch on ZOCM
Call in (800) 900-0128
Webinar ID: 856 5419 6282
Teleconference link available on OntarioCA.gov/Housing

If you have any questions regarding this community meeting, please contact
Hannah K. MacKenzie, Project Manager, with the City of Ontario Housing
and Neighbourhood Preservation Agency at (905) 360-2783.

THE ORIGINAL REPIPE SPECIALISTS

Repipe Your Home

Often in just one day and for half the price of what a regular plumber might charge.

COPPER **FREE IN-HOME ESTIMATE** **PEX**

Professional repiping at an affordable price. **Master plumber** to let what's right stay right worldwide. **Over 30 years** of experience and service time in the business and over 30,000 repipes completed. **Increased** the standards in your area with repiping a home. **Worked** directly with the manufacturer.

Without One-Stop Repipe® process you can also patch and restore your walls and get back to work.

Home of the One-Stop Repipe®

REPIPE specialists

Call today for a free estimate. **1-800-855-3333** or **1-800-855-3333**

Call now for your **FREE IN-HOME estimate**

(951)

816-6126

\$500 OFF

Master plumber to let what's right stay right worldwide.

La Prensa Newspaper Notice in Spanish.

Así

VA LA VIDA

Semana del 6 de enero de 2021

EXCELSIOR CALIFORNIA.COM

TELEVISIÓN

El negocio de las telenovelas mezcla turcos, colombianos y chilenos

"Imperio de mentiras" es una adaptación de la telenovela turca "Kara Para Ask", otras no se quedan atrás

hacia febrero, hasta febrero, "Imperio de mentiras", una adaptación de la telenovela turca "Kara Para Ask", es protagonizada por Angelique Boyer y Andrés Palacios.

Los tucos al ataque

Además, dicen la novedad de haber sido grabadas durante la pandemia, con medidas para prevenir los contagios de covid.

"Tenemos creado nuevos sistemas, que sorprendentemente han sido más eficientes, para proteger a todos los que trabajamos en las producciones", dijo a Efe la productora Gabriela González, quien tuvo a cargo "Imperio de mentiras", la primera adaptación de una telenovela turca hecha por televisión.

La telenovela de González ya está al aire y domina los rankings de audiencia. Univision tiene capitulos

adaptación protagonizada por Gabriel Soto y Balthaz Molina. Esta banca en "Imperio de mentiras", que digitará en español "Reina de la noche" y que fue una adaptación originalmente en 2016.

Además, se transmitirá en Estados Unidos "La mexicana y el gineco", una versión de Televisa de la producción chilena "Com

ploteo". Es a telenovela, dentro del formato de las comedias románticas, ya está al aire en México.

Televisa también ha anunciado para 2021 versiones de dos telenovelas colombianas. Una de ellas es "El novio", una adaptación de "Sofía Isabel", que ya había sido hecha en México como "Mujer de mi vida".

Con 12 años de retraso

Asimismo, está prevista una nueva versión de "La Cosmética", que originalmente se transmitió en Colombia en 2009 con el nombre de "La dama de Trojes".

Televisa también se suma a la televisión colombiana. Una nueva versión de "Café con aroma de mujer", está siendo grabada allí, con William Levy, Laura Londono y Carmen Villalobos a la cabeza.

Una adaptación particularmente ambiciosa es "Buscando a Frida", de Televisa, la tercera versión de la telenovela chilena "Dónde está Elisa", que ya había refrito la empresa en 2011.

Esta nueva encarnación de la historia de una adolescente que desaparece de repente cuenta con Eduardo Santamarina, Angélica Aragón y Ximena Herrera en los papeles estelares.

La cadena de televisión hispana, propiedad de NBC Universal, también graba en

su sede principal en Miami la versión larga de la telenovela argentina "La muerte de un hombre", protagonizada por Silvia Navarro y Osvaldo Sanabria.

Ambas producciones tienen como fecha de estreno el 26 de enero en Telemundo.

En cuanto a las series, o nuevas temporadas, están la segunda parte de "El Doctor", la serie mexicana protagonizada por el argentino Sebastián Rulli, la tercera temporada de "La Reina del Sur" y "Qué pasa a mi familia", la nueva producción en el universo creado por el productor Juan Osorio y que comenzó con "Mi marido tiene familia".

Entre estas últimas se destacan "Malverde: El Santo Pastor", que está en etapa de preproducción en Telemundo Studios y será protagonizada por el actor y productor mexicano Fernando Colunga.

Otra producción original para 2021, que ya se ha anunciado a grabar en México y que será transmitida por la cadena Univision, es "Pingu Archivos", escrita por Martha Carrillo y Cristina García, con la Mariana Torres, Carlos Ferro, Claudia Martín, José María de Tacón, Claudia Ramírez y Kino Becker.

El ejecutivo Wade Davis, antiguo jefe financiero del conglomerado de medios Viacom y fundador de Fur

UNIVISION CAMERA DE MANOS

Univision, la cadena de televisión hispana de mayor audiencia en Estados Unidos, anunció que se ha comprometido a producir y transmitir una serie de telenovelas y series de televisión en español, en un esfuerzo por atraer a una audiencia más amplia.

La cadena de televisión hispana anunció que se ha comprometido a producir y transmitir una serie de telenovelas y series de televisión en español, en un esfuerzo por atraer a una audiencia más amplia.

La cadena de televisión hispana anunció que se ha comprometido a producir y transmitir una serie de telenovelas y series de televisión en español, en un esfuerzo por atraer a una audiencia más amplia.

AVISO PÚBLICO

Aviso de la intención de adoptar una Declaración Negativa Mitigada
Resultados del estudio disponibles / Anuncio de audiencia pública

Proyecto de reemplazo de puentes en la Ruta Estatal SR-74
EA 08-1G670 (PN 0816000001)

¿QUÉ SE ESTÁ PLANEANDO? El Departamento de Transporte de California (Caltrans) propone reemplazar el Puente de Morill Canyon (Shoreline SR-74), con la intención de la milla (mi) 3.06 (SR-74) y el puente de Strawberry Creek (Shoreline SR-74), con la intención de la milla (mi) 3.06 (SR-74) y el puente de Strawberry Creek (Shoreline SR-74), con la intención de la milla (mi) 3.06 (SR-74).

¿POR QUÉ ESTE AVISO? Caltrans notó que los puentes que se planean reemplazar en este proyecto de la Ruta Estatal SR-74, con la intención de la milla (mi) 3.06 (SR-74) y el puente de Strawberry Creek (Shoreline SR-74), con la intención de la milla (mi) 3.06 (SR-74).

¿QUÉ HAY DISPONIBLE? El proyecto de reemplazo de puentes en la Ruta Estatal SR-74, con la intención de la milla (mi) 3.06 (SR-74) y el puente de Strawberry Creek (Shoreline SR-74), con la intención de la milla (mi) 3.06 (SR-74).

CÓMO PUEDE PARTICIPAR: El público interesado puede participar en el proceso de toma de decisiones sobre el proyecto de reemplazo de puentes en la Ruta Estatal SR-74, con la intención de la milla (mi) 3.06 (SR-74) y el puente de Strawberry Creek (Shoreline SR-74), con la intención de la milla (mi) 3.06 (SR-74).

¿CUÁNDO Y ADÓNDE? La audiencia pública se llevará a cabo el **Jueves 21 de enero del 2021 de 5:00 p.m. a 6:30 p.m.** y se puede acceder a la audiencia virtual a través del sitio web [tinyurl.com/SR74Webinar](https://www.tinyurl.com/SR74Webinar). El acceso a la audiencia virtual es gratuito y no requiere de pago.

CONTACTO: Para obtener más información sobre este estudio o sobre el proceso, por favor contacte con el Oficio de Registro Público del Condado de California al número (916) 399-4411. Para las personas con discapacidades, si desea una copia de este documento, puede contactar al Oficio de Registro Público del Condado de California al número (916) 399-4411. Para las personas con discapacidades, si desea una copia de este documento, puede contactar al Oficio de Registro Público del Condado de California al número (916) 399-4411.

USFWS Species List.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>



In Reply Refer To:

November 09, 2020

Consultation Code: 08ECAR00-2020-SL1-1045

Event Code: 08ECAR00-2021-E-00400

Project Name: 1G470 - Morrill Canyon Bridge Replacement

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

11/09/2020

Event Code: 08ECAR00-2021-E-00400

2

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

11/09/2020

Event Code: DSECAR00-2021-E-00400

1

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

11/09/2020

Event Code: 08ECAR00-2021-E-00400

2

Project Summary

Consultation Code: 08ECAR00-2020-SLI-1045

Event Code: 08ECAR00-2021-E-00400

Project Name: 1G470 - Morrill Canyon Bridge Replacement

Project Type: TRANSPORTATION

Project Description: Caltrans proposes to replace Morrill Canyon Bridge (Br. No 560169, SR-74, PM 3.08) in Riverside County.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.61614969831005N117.42599461443456W>



Counties: Riverside, CA

11/09/2020

Event Code: DBECAR00-2021-E-00400

3

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Poliophtila californica californica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered

11/09/2020

Event Code: 08ECAR00-2021-E-00400

4

Insects

NAME	STATUS
Quino Checkerspot Butterfly <i>Euphydryas editha quino</i> (= <i>E. e. wrighti</i>) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5900	Endangered

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp <i>Streptocephalus woottoni</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/498	Threatened

Flowering Plants

NAME	STATUS
Encinitas Baccharis <i>Baccharis vanessae</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3343	Threatened
San Diego Button-celery <i>Eryngium aristulatum</i> var. <i>parishii</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/5937	Endangered
Spreading Navarretia <i>Navarretia fossalis</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/1334	Threatened
Thread-leaved Brodiaea <i>Brodiaea filifolia</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>



In Reply Refer To:
Consultation Code: 08ECAR00-2020-SLI-1046
Event Code: 08ECAR00-2021-E-00401
Project Name: 1G470 - Strawberry Creek Bridge

November 09, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

11/09/2020

Event Code: 08ECAR00-2021-E-00401

2

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

11/09/2020

Event Code: 08ECAR00-2021-E-00401

1

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

11/09/2020

Event Code: 08ECAR00-2021-E-00401

2

Project Summary

Consultation Code: 08ECAR00-2020-SLI-1046

Event Code: 08ECAR00-2021-E-00401

Project Name: 1G470 - Strawberry Creek Bridge

Project Type: TRANSPORTATION

Project Description: Caltrans proposes to replace Strawberry Bridge (Br. No 560180, SR-74, PM 53.5) in Riverside County.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/33.711030930791594N116.76946744996033W>



Counties: Riverside, CA

11/09/2020

Event Code: 08ECAR00-2021-E-00401

3

Endangered Species Act Species

There is a total of 8 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat <i>Dipodomys merriami parvus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat <i>Dipodomys stephensi</i> (incl. <i>D. cactus</i>) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Poliophtila californica californica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

11/09/2020

Event Code: 08ECAR00-2021-E-00401

4

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered

Insects

NAME	STATUS
Quino Checkerspot Butterfly <i>Euphydryas editha quino</i> (=E. e. wrighti) There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5900	Endangered

Flowering Plants

NAME	STATUS
Slender-horned Spineflower <i>Dodecahema leptoceras</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

From: [NMFSWCRCA Specieslist - NOAA Service Account](#)
To: [Frost, Nancy@DOT](#)
Subject: Re: FHWA/Caltrans Project 1G470 / 0816000001 Replacement of Morrill Canyon Bridge and Strawberry Creek Bridge
Date: Tuesday, May 5, 2020 2:45:00 PM

EXTERNAL EMAIL. Links/attachments may not be safe.

Receipt of this message confirms that NMFS has received your email to nmfswcrca.specieslist@noaa.gov. If you are a federal agency (or representative) and have followed the steps outlined on the California Species List Tools web page (http://www.westcoast.fisheries.noaa.gov/maps_data/california_species_list_tools.html), you have generated an official Endangered Species Act species list.

Messages sent to this email address are not responded to directly. For project specific questions, please contact your local NMFS office.

Northern California/Klamath (Arcata) 707-822-7201

North-Central Coast (Santa Rosa) 707-387-0737

Southern California (Long Beach) 562-980-4000

California Central Valley (Sacramento) 916-930-3600

From: [Frost, Nancy@DOT](mailto:Frost.Nancy@DOT)
To: nmfsnwca.specieslist@noaa.gov
Subject: FHWA/Caltrans Project 1G470 / 0816000001 Replacement of Morrill Canyon Bridge and Strawberry Creek Bridge
Date: Tuesday, May 5, 2020 2:44:00 PM

Caltrans on Behalf of Federal Highway Administration

Nancy Frost, Associate Environmental Planner (Natural Sciences)

Office: California Department of Transportation

464 W 4th Street, San Bernardino, CA 92401 MS 822

909-383-6332

Caltrans proposes to replace Morrill Canyon Bridge (Br. No 560169, SR-74, PM 3.08) and Strawberry Creek Bridge (Br. No 560180, SR-74, PM 53.5) in Riverside County.

1G470 Species List Inquiry:

Quad Name **Blackburn Canyon**

Quad Number **33116-F7**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) -

X

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Sitton Peak**

Quad Number **33117-E4**

ESA Anadromous Fish

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

X

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -

Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds

See list at left and consult the NMFS Long Beach office

562-980-4000

MMPA Cetaceans -

MMPA Pinnipeds -

WR-MSHCP Consistency Determination and Streamlined Biological Opinion.

From: [Graves, Kourtney@DOT](mailto:Graves_Kourtney@DOT)
To: [Yasui, Youji; Calvert, Brian](mailto:Yasui_Youji@Calvert_Brian)
Cc: [Cloud, Renetta I@DOT](mailto:Cloud_Renetta_I@DOT); [Frost, Nancy@DOT](mailto:Frost_Nancy@DOT)
Subject: SR-74 Morrill Canyon & Strawberry Creek Bridge Replacement (1G470) MSCHP Consistency Determination
Date: Tuesday, March 9, 2021 2:52:39 PM

Youji,

Please see emails below in reference to the MSHCP.

Thank you,

Kourtney Graves Sr.
Associate Environmental Planner
CA. Dept. of Transportation, District 8
Division of Environmental Planning
464 W. 4th St., 6th Flr, MS-823
San Bernardino, CA. 92401-1400
CT Office: (909) 383-6324
CT Cell: (909) 472-1362

Telework Schedule:
7:00am-4:45pm, 9/80 Friday Off B

From: Frost, Nancy@DOT <Nancy.Frost@dot.ca.gov>
Sent: Tuesday, March 9, 2021 2:04 PM
To: Taylor, John <john_m_taylor@fws.gov>; Beck, Carly@Wildlife <Carly.Beck@wildlife.ca.gov>
Cc: Wentworth, Craig S@DOT <Craig.Wentworth@dot.ca.gov>; Graves, Kourtney@DOT <kourtney.graves@dot.ca.gov>
Subject: RE: SR-74 Morrill Canyon & Strawberry Creek Bridge Replacement (1G470) MSCHP Consistency Determination

Good Afternoon John and Carly,

Thank you for determining that the 1G470 bridge replacement project is consistent with the MSHCP contingent upon the three conditions outlined in your email below.

Sincerely,

Nancy Frost
Senior Environmental Planner / Biologist
Biological Studies and Surveys Branch
Caltrans District 8
Cell: (909) 472-2393

From: Taylor, John <john_m_taylor@fws.gov>

Sent: Monday, March 8, 2021 5:51 PM

To: Frost, Nancy@DOT <Nancy.Frost@dot.ca.gov>

Cc: Beck, Carly@Wildlife <Carly.Beck@wildlife.ca.gov>

Subject: SR-74 Morrill Canyon & Strawberry Creek Bridge Replacement (1G470) MSHCP Consistency Determination

EXTERNAL EMAIL. Links/attachments may not be safe.

In reply, refer to: FWS/CDFW-WRIV-21B0068-21CPA0044

Nancy,

The U.S. Fish and Wildlife Service (Service) and the California Department of Fish and Wildlife (Department), hereinafter collectively referred to as the Wildlife Agencies, have reviewed the State Route 74 Morrill Canyon Bridge and Strawberry Creek Bridge Replacement Project's (Project) Determination of Biologically Equivalent or Superior Preservation (DBESP) for consistency with the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). The Wildlife Agencies received your initial MSHCP consistency request November 13, 2020. To address DBESP comments from the Wildlife Agencies, multiple revisions were provided by your office, with the penultimate DBESP received February 18, 2021. Updates to the DBESP included, but were not limited to, clarification of impacts to occupied arroyo toad habitat at the Arroyo Seco Creek Bridge, updates regarding the use of exclusionary fencing, and clarification of MSHCP riparian and riverine offsets.

Based upon submittal of the revised DBESP, and a letter of assurance from Caltrans, dated February 22, 2021, indicating programming of funds to address acquisition of occupied arroyo toad habitat, the Wildlife Agencies have agreed to provide a conditional MSHCP consistency determination for the proposed Project with the following stipulations:

1. To address impacts to occupied arroyo toad habitat, and per requirements set forth within MSHCP species objectives, Caltrans will pursue full replacement mitigation for impacts to arroyo toad. To achieve this, Caltrans will continue to work with the Wildlife Agencies and the Western Riverside Conservation Authority to identify whether mitigation will be achieved through acquisition and conservation of occupied arroyo toad habitat, or via installation of a conservation easement within occupied arroyo toad habitat;
2. Once a MSHCP offset has been identified and acquired, Caltrans will provide the Wildlife Agencies with a revised DBESP to address arroyo toad impacts, thereby ensuring consistency with the MSHCP; and
3. The above two items will be addressed prior to the onset of ground disturbing activities.

Based upon the information provided in the penultimate DBESP to address impacts to MSHCP covered resources, and upon completion of the above conditions, the Wildlife Agencies find the Project consistent with the MSHCP. Thank you for your coordination to date and we look forward to ongoing Project related discussions. Should you have any further questions, please contact either myself or Carly Beck of the Department at any time.

Sincerely,

John M. Taylor
U.S. Fish and Wildlife Service - Palm Springs
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262
760-322-2070 x418
john_m_taylor@fws.gov
<https://www.fws.gov/carlsbad/>
[Carlsbad FWO 2020 Annual Report](#)

And

Carly Beck
Senior Environmental Scientist (Specialist)
Inland Deserts Region
California Department of Fish and Wildlife
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
951-218-2940



United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE

Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262



In Reply Refer to:
FWS-WRIV-21B0068-21F0740

March 15, 2021
Sent Electronically

Nancy Frost
Senior Environmental Planner
Department of Transportation – District 8
464 West Fourth Street, 6th Floor, MS 760
San Bernardino, California 92401-1400

Subject: Streamlined Formal Section 7 Consultation for the State Route 74 Morrill Canyon Bridge
and Strawberry Creek Bridge Replacement Project, Riverside County, California

Dear Nancy Frost:

This document transmits the U.S. Fish and Wildlife Service's (Service) biological opinion on the proposed State Route (SR) 79 Shoulder Widening Project (Project) and its potential effects on the federally endangered arroyo toad *Anaxyrus californicus* (*Bufo microscaphus* c.); arroyo toad in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*). The Project is receiving Federal funding through the Federal Highway Administration (FHWA). The California Department of Transportation (Caltrans) has assumed FHWA's National Environmental Policy Act (NEPA) responsibilities for section 7 consultation in accordance with 23 U.S.C. 327, and under authorities identified in the signed NEPA assignment Memorandum of Understanding between FHWA and Caltrans (effective October 1, 2012).

On June 22, 2004, the Service issued a section 10(a)(1)(B) permit for the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP established a multiple species conservation program to minimize and mitigate habitat loss and the incidental take of covered species, including arroyo toad, in association with activities covered under the permit. The proposed Project is located within the MSHCP plan area boundary and Caltrans is an MSHCP permittee. In order for Caltrans to receive incidental take authorization, the proposed action (Project) must be consistent with the MSHCP and its associated implementation agreement and permit.

PROJECT DESCRIPTION

Caltrans proposes to replace two bridges along SR-74, one at Morrill Canyon within the Cleveland National Forest boundary [Bridge #560169, Post Mile (PM) 3.08] and the other structure at Strawberry Creek within the San Bernardino National Forest boundary (Bridge

Nancy Frost (FWS-WRIV-21B0068-21F0740)

2

#560180, PM 53.5) in Riverside County. Both bridges are rubble masonry arch structures with non-standard lane and shoulder widths. Replacement of the existing structures and bridge railings will upgrade the facility to current operational requirements.

Morrill Canyon Bridge

The existing facility at Morrill Canyon consists of a 30-foot-long by 24-foot-wide structure. To accommodate standard lane and shoulder widths, the existing structure will be removed and replaced with a 35-foot-long by 42-foot-wide structure. To accommodate vehicle traffic during Project related activities, a temporary bridge will be erected adjacent to the eastbound lane. A paved U.S. Forest Service parking lot, located at PM 2.9, will serve as the staging area for construction equipment and materials. Construction related activities will result in 0.021 acre of permanent impacts and 0.066 acre of temporary impacts to riparian resources, and 0.183 acre of permanent impacts and 0.973 acre of temporary impacts to potential arroyo toad breeding and upland habitats.

Strawberry Creek Bridge

During preliminary planning, Caltrans identified three replacement alternatives for the Strawberry Creek Bridge. After review Caltrans determined Alternative 2 was not a viable build option, while Alternative 1 and 3 are still under consideration. Implementation of Alternative 1 would result in 0.115 acre of permanent and 0.192 acre of temporary impacts to MSHCP riparian/riverine resources (MSHCP Section 6.1.2), while Alternative 3 would result in 0.100 acre of permanent and 0.216 acre of temporary impacts to riparian/riverine resources at the Strawberry Creek Bridge site. Under both Alternatives, the existing 38-foot-long by 27.4-foot-wide structure will be replaced with a 50-foot-long by 40-foot-wide bridge.

This biological opinion is based on information provided in the following documents:

(1) *Intra-Service Formal Section 7 Consultation/Conference for Issuance of Endangered Species Act Section 10(a)(1)(B) Permit TE-088609-0 for the Western Riverside County Multiple Species Habitat Conservation Plan*, dated June 22, 2004 (FWS-WRIV-870.19); (2) *State Route 74 Bridge Replacement Project Natural Environment Study, Riverside County; 08-Riv-74-PM 2.5/3.5, 08-Riv-74-PM 53.0/54.0: IG470, Project Number: 0816000001* dated November 12, 2020 (NES); (3) *State Route 74 Morrill Canyon Bridge and Strawberry Creek Bridge Replacement Project Determination of Biologically Equivalent or Superior Preservation, Riverside County, California (DBESP)*, dated February 18, 2021; (4) *Intra-Service Reinitiation of Consultation and Amendment to the Biological Opinion Regarding Issuance of an Endangered Species Act Section 10(a)(1)(B) Permit (TE088609-1) for the Western Riverside County Multiple Species Conservation Plan, Riverside County, California*, dated September 22, 2011 (FWS-WRIV-11B0266-11F0413); (5) an email, dated March 8, 2021, from the Service and the California Department of Fish and Wildlife (CDFW) documenting the consistency of the proposed Project with the MSHCP (FWS/CDFW-WRIV-21B0068-21CPA0044); (6) correspondence from your agency providing a letter of assurance to ensure availability of funding necessary to address

Nancy Frost (FWS-WRIV-21B0068-21F0740)

3

mitigation requirements, received via email February 22, 2021; and (7) electronic and verbal communication with your office.

Impacts to Federally Listed Species

Effects to federally listed species are expected from Project activities within the Morrill Canyon Bridge footprint and include: (1) vegetation removal; (2) noise, vibrations, and soil disturbance associated with bridge demolition and construction, retaining wall installations, and cut/fill activities to increase roadway width to accommodate 8-foot shoulders; and (3) permanent impacts to occupied arroyo toad habitat as a result of widening the Morrill Canyon Bridge. Effects to federally listed species are discussed more fully below in the context of the MSHCP, with avoidance and minimization measures identified in Appendix E of the NES.

MSHCP CONSISTENCY

As an MSHCP Covered Activity, Project implementation needs to ensure consistency with Sections 6.1.2, 6.1.3, 6.1.4, 7.5.1, and 7.5.3 of the MSHCP.

Section 6.1.2 Riparian/Riverine and Arroyo Toad

In accordance with the MSHCP Riparian/Riverine and Vernal Pools Policy, Section 6.1.2, a DBESP was prepared to address the impacts to Riparian/Riverine habitat. Permanent impacts to Riparian/Riverine resources will be offset at a 3:1 ratio and temporary impacts will be offset at a 1:1 ratio.

Arroyo toad

The Morrill Canyon Bridge falls within the MSHCP survey area for arroyo toad. In accordance with the Service's 1999 arroyo toad survey protocol, the area surrounding the Morrill Canyon Bridge was surveyed a total of six times between 22 April and 16 June 2020. Two adult arroyo toads were observed within 300 feet of the Morrill Canyon Bridge footprint.

There are 1.156 acres of arroyo toad breeding and upland habitat within the Project footprint at Morrill Canyon Bridge. Of this acreage, Project related activities will result in 0.183 acre of permanent impacts and 0.973 acre of temporary impacts. Project related activities include vegetation removal, construction of access roads for equipment to reach the stream bed, widening of the existing roadway, and creation of a temporary bridge adjacent to the eastbound travel lane. Permanent impacts to arroyo toad-occupied habitat and riverine habitat are proposed to be mitigated through the purchase of occupied arroyo toad habitat at a 3:1 ratio. To minimize impacts to arroyo toad during construction activities, Caltrans will install an opaque exclusion barrier at the limits of the Project impact area to prevent entry by arroyo toad. The condition of the barrier will be inspected daily by a qualified biologist. If a breach appears in the fencing, Project related activities will cease until repaired and the biologist inspects and clears the site.

Nancy Frost (FWS-WRIV-21B0068-21F0740)

4

MSHCP MITIGATION

To address impacts to riparian and riverine resources, and occupied arroyo toad habitat, Caltrans will offset permanent impacts at a 3:1 ratio and temporary impacts at a 1:1 ratio. In coordination with the Service and CDFW (together, the Wildlife Agencies), riparian/riverine offsets will be addressed under permittee-responsible mitigation. Permanent impacts to occupied arroyo toad habitat will be offset through acquisition of property, or establishment of a conservation easement within an area also occupied by arroyo toad. For either option, the mitigation will be accomplished prior to ground disturbing activities and Caltrans will coordinate with the Wildlife Agencies on which mitigation option is optimal/available based on the Project's timeline. To ensure availability of funds, Caltrans provided the Wildlife Agencies a letter of assurance on February 22, 2021, to ensure availability of mitigation funds to fulfill MSHCP consistency requirements.

Temporary impacts to riparian/riverine areas at both the Morrell Canyon and Strawberry Creek locations will be restored at a 1:1 ratio through restoration and enhancement of onsite riparian/riverine areas. A Habitat Mitigation and Monitoring Plan (HMMP) will be developed to address onsite mitigation and address restoration actions and controlling or removing known threats from waterways affected by Project related actions, such as removal of exotic vegetation and bullfrogs. Prior to adoption, a draft of the HMMP will be provided to the Wildlife Agencies for review and approval.

To address impacts to arroyo toad habitat, Caltrans, in coordination with the Wildlife Agencies, will evaluate completed replacement of occupied arroyo toad habitat. Prior to ground disturbance, Caltrans will provide an arroyo toad exclusionary fencing and relocation plan, detailing monitoring and maintenance activities, to the Wildlife Agencies for review and approval. To address MSHCP species objectives, Caltrans will provide for the either the acquisition of occupied arroyo toad habitat, or establishment of a conservation easement within an area occupied by arroyo toad, acceptable to the RCA and the Wildlife Agencies prior to the onset of ground disturbing activities.

Section 6.1.3 (Narrow Endemic Plant Species Survey Areas)

This Project site is within MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA) 6 at Strawberry Creek Bridge and NEPSSA 9 at Morrill Canyon Bridge. Species within NEPSSA 6 include: Johnston's Rockcress [*Boechera johnstonii* (*Arabis* f.)], Munz's mariposa lily (*Calochortus palmeri* var. *munzii*), San Jacinto Mountains bedstraw (*Galium angustifolium* ssp. *jacinticum*); while NEPSSA 9 includes: California Orcutt Grass (*Orcuttia californica*), Hammitt's clay-cress (*Sibaropsis hammittii*), many-stemmed dudleya (*Dudleya multicaulis*), San Miguel savory (*Clinopodium chandleri* [*Satureja* c.]), spreading navarretia (*Navarretia fossalis*), Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*). Pursuant to MSHCP requirements, focused botanical surveys were conducted April 21, May 3, and June 8, 2020 at both the Strawberry Creek and Morrel Canyon bridges. None of the target species were detected at either location (Caltrans 2020).

Nancy Frost (FWS-WRIV-21B0068-21F0740)

5

Section 6.1.4 (Guidelines pertaining to Urban/Wildlands Interface)

Per MSHCP Section 6.1.4, with the presence of current and future conservation areas within or near the Project area, Caltrans has incorporated avoidance and minimization measures to control adverse effects related to Project implementation. These measures include: (1) controlling the quantity and quality of surface runoff from the facility; (2) precluding the use of any chemicals toxic to wildlife, habitat, or water sources; (3) shielding and limiting Project lighting by directing light downward, and only into the active Project footprint; and (4) avoiding the use of non-native species, as presented in Table 6-2 of the MSHCP, for erosion control. Please see the Caltrans DBESP (Caltrans 2020) for additional details.

Section 7.5.1 (Guidelines for the Siting and Design of Planned Roads Within the Criteria Area and Public/Quasi-Public Lands)

As designed, the Project demonstrates consistency with the biological goals and objectives as set forth in Section 7.5.1 of the MSHCP. Section 7.5 of the MSHCP addresses the Guidelines for Facilities within the Criteria Area and Public/Quasi Public (PQP) Lands. The proposed Project has or will implement the conditions set forth in Section 7.5.1 through the design process, or will through the implementation process.

Section 7.5.3 (Construction Guidelines)

Caltrans will ensure best management practices as identified in Section 7.5.3 of the MSHCP will be implemented for the duration of Project related activities.

CONCLUSION BASED ON CONSISTENCY WITH THE MSHCP

Based on our review of the information provided to us, we have determined the proposed Project is consistent with relevant MSHCP policies and procedures. The status of the arroyo toad and the effects of implementing the MSHCP were addressed in our biological opinion dated June 22, 2004, where we concluded that the level of anticipated take in the MSHCP Plan Area was not likely to result in jeopardy to arroyo toad. We do not anticipate any adverse effects to arroyo toad, or the habitat upon which it depends that were not previously evaluated in the biological opinion for the MSHCP. Therefore, it is our conclusion that implementation of the proposed Project will not result in jeopardy to arroyo toad.

This concludes formal consultation on the proposed action. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the proposed action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat is designated that may be affected by the proposed action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease

Nancy Frost (FWS-WRIV-21B0068-21F0740)

6

pending reinitiation. Should you have any questions regarding the species listed or your responsibilities under the Act, please contact John M. Taylor¹ of this office at 760-322-2070, extension 418.

Sincerely,

KARIN CLEARY-
ROSE

Digitally signed by KARIN
CLEARY-ROSE
Date: 2021.03.15 15:23:17 -07'00'

for Rollie White
Assistant Field Supervisor

LITERATURE CITED

[Caltrans] California Department of Transportation. 2020. State Route 79 Shoulder Widening Project Determination of Biologically Equivalent or Superior Preservation, Riverside County, California Post Miles 5.4 to PM 11.4. September 2019.

¹ John M. Taylor, U.S. Fish and Wildlife Service, john_m_taylor@fws.gov

Caltrans Correspondence with SHPO.

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENVIRONMENTAL ANALYSIS

P.O. BOX 942874, MS 27

SACRAMENTO, CA 94273-0001

PHONE (916) 654-3567

FAX (916) 653-7757

TTY (916) 653-4086

www.dot.ca.gov



*Making Conservation
a California Way of Life*

April 17, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

RE: Finding of Adverse Effect for Route 74 Bridge Upgrade Project in Riverside County

Dear Ms. Polanco:

The California Department of Transportation is initiating consultation with the SHPO regarding the proposed Route 74 Bridge Upgrade Project (EA: 1G470) in Riverside County. This consultation is undertaken in accordance with procedures outlined in the January 1, 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Section 106 PA). Caltrans is currently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resource Code 5024 and Governor's Executive Order W-26-92* (PRC 5024 MOU).

The proposed project involves the replacement of bridge rails (through removal and replacement of bridge railings, extensive bridge modification, and/or full bridge replacement) on two structures located on Route 74; one on the Ortega Highway portion of the road (PM 3.08), and a second on the Pines-to-Palms Highway section of the road (PM 53.45) in Riverside County. Both structures are masonry arch bridges with solid masonry parapet railings.

Enclosed please find a Historic Properties Survey Report (HPSR) and a Finding of Effect (FOE) Report for the project. Caltrans has identified three Historic Properties in the APE; the Morrill Canyon Bridge at PM 3.08 (Category 2), the Strawberry Creek Bridge at PM 53.45 (Category 2), and the Pines-to-Palms Highway, all of which have been previously determined eligible for the NRHP. The FOE proposes that a Finding of Adverse Effect is appropriate for the Undertaking. We are consulting with you at this time in accordance with Section 106 PA Stipulation X.C(1), which requires consultation with the SHPO regarding findings of adverse effect.

Pursuant to Stipulation X.A of the PA, Caltrans has applied the Criteria of Adverse Effect set forth at 36 CFR 800.5(a)(1) and finds that the undertaking would have an adverse effect on historic properties, as detailed in Sections V and VI of the FOE. Therefore, Caltrans has

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

Ms. Julianne Polanco
April 17, 2020
Page 2

determined that **the undertaking as a whole will have an Adverse Effect** and is seeking SHPO concurrence with these findings pursuant to Section 106 PA Stipulation XI.C and 36 CFR 800.5. Caltrans will continue consultation regarding resolution of adverse effect. We look forward to receiving your written response within 30 days of your receipt of this transmittal in accordance with Stipulation X.B.(1) of the Section 106 PA.

If you have any questions, please contact me or Caltrans District 8 PQS Historian Andrew Walters (phone: 909-388-2647; email: Andrew_walters@dot.ca.gov). Thank you for your assistance with this undertaking.

Sincerely,

David Price
Section 106 Coordination Branch Chief
Cultural Studies Office

Enclosure: Finding of Adverse Effect with attachments for the Route 74 Bridge Upgrade Project in Riverside County.

- c. Andrew Walters, Branch Chief Environmental Support/Cultural Studies, Caltrans District 8
Jill Hupp, 5024 Coordinator, Caltrans Cultural Studies Office

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



State of California • Natural Resources Agency

Gavin Newsom, Governor

**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

Lisa Ann L. Mangat, Director

June 8, 2020

VIA EMAIL

In reply refer to: FHWA_2020_0417_002
CATRA_2020_0417_001

Mr. David Price, Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Finding of Adverse Effect for the Proposed Route 74 Bridge Upgrade Project,
Riverside County, CA

Dear Mr. Price:

Caltrans is initiating consultation about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*. Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92 (5024 MOU)*. As part of your documentation, Caltrans submitted a Historic Properties Survey Report (HPSR), an Archaeological Survey Report, and a Finding of Effect (FOE) for the proposed project.

Caltrans proposes to replace bridge rails (through removal and replacement of bridge railings, extensive bridge modification, and/or full bridge replacement) on two structures located on Route 74; one on the Ortega Highway portion of the road (PM 3.08), and a second on the Pines-to-Palms Highway section of the road (PM 53.45) in Riverside County. Both structures are masonry arch bridges with solid masonry parapet railings.

Mr. Price
June 8, 2020
Page 2 of 2

FHWA_2020_0417_002
CATRA_2020_0417_001

Caltrans has identified three Historic Properties in the APE; the Morrill Canyon Bridge at PM 3.08 (Category 2), the Strawberry Creek Bridge at PM 53.45 (Category 2), and the Pines-to-Palms Highway, all of which have been previously determined eligible for the NRHP.

Caltrans has applied the Criteria of Adverse Effect and found pursuant to Stipulation XI.C. of the PA, the project will have an adverse effect to the above historic properties.

Based on review of the submitted documentation, I have no objection to Caltrans' finding of adverse effect for this project.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov Jeanette Schulz at (916) 445-7031 with e-mail at jeanette.schulz@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

STATE OF CALIFORNIA—TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

Cultural Studies Office
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-0516
FAX (916) 653-7757
TTY (916) 653-4086



Making Conservation
a California Way of Life.

December 7, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: Draft Memorandum of Agreement for the Route 74 Bridge Upgrade Project in Riverside County (FHWA_2020_0417_002; CATRA_2020_0417_001)

Dear Ms. Polanco:

The California Department of Transportation is continuing consultation with the SHPO regarding the proposed Route 74 Bridge Upgrade Project in Riverside County (Undertaking). This consultation is undertaken in accordance with procedures outlined in the January 1, 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Section 106 PA). Caltrans is currently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resource Code 5024 and Governor's Executive Order W-26-92* (PRC 5024 MOU).

The Undertaking proposes to upgrade the bridge rails of two bridges on Route 74 in Riverside County: the Morrill Canyon Bridge (Ortega Highway, PM 3.08) and the Strawberry Creek Bridge (Pines to Palms Highway, PM 53.45). Both structures are masonry arch bridges with solid masonry parapet railings that were previously determined eligible for listing in the National Register. Project activities would include the removal and replacement of the bridge railings, extensive bridge modification, and/or full bridge replacement. Your office concurred with a finding of adverse effect for the Undertaking on June 8, 2020.

Enclosed, please find a Memorandum of Agreement (MOA) that includes treatment measures to resolve adverse effects to the two bridges. Caltrans has thoroughly considered alternatives to this Undertaking and has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the

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

Julianne Polanco
December 7, 2020
Page 2 of 2

treatments set forth in the enclosed MOA will satisfactorily take into account the Undertaking's adverse effects on the historic property. Caltrans District 8 has a responsibility to fulfill the terms of the MOA and is participating as an invited signatory.

The Undertaking also constitutes uses of a 4(f) property under Section 4(f) of the Department of Transportation Act (23 CFR 774). Caltrans intends to treat this project under the *Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges*, pursuant to Section 6009(a) of SAFETEA-LU. For the purposes of Section 4(f), the SHPO's concurrence on the Finding of Adverse Effect and the Memorandum of Agreement will serve as concurrence on the 4(f) approval.

If you have any questions, please do not hesitate to contact me. We look forward to your response and participation as a signatory on this Memorandum of Agreement.

Sincerely,



DAVID PRICE
Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis

Enc: Draft Memorandum of Agreement for the Route 74 Bridge Upgrade
Project in Riverside County

Cc: Andrew Walters, Environmental Branch Chief, Caltrans District 8
Jill Hupp, PRC 5024 Coordinator, Caltrans Division of Environmental
Analysis

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

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT, RIVERSIDE COUNTY, CALIFORNIA**

WHEREAS, pursuant to §23 U.S.C. the Federal Highway Administration (FHWA), has assigned and California Department of Transportation (Caltrans, including all subordinate divisions defined below) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327*, which became effective on December 23, 2016, and applies to this undertaking; and,

WHEREAS, pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA), Caltrans is deemed to be a federal agency for all highway-aid projects it has assumed, and in that capacity Caltrans has assigned the role of "agency official" to the Caltrans Division of Environmental Analysis (DEA) Chief for the purpose of compliance with 36 CFR § 800. The responsibility for oversight, day-to-day responsibilities, and coordination of the Section 106 process are further delegated to the DEA Cultural Studies Office (CSO) Chief; and,

WHEREAS, Caltrans is proposing the Morrill Canyon Bridge and Strawberry Creek Bridge Replacement Project (Undertaking) to replace the Morrill Canyon Bridge (Bridge 56-0169) and the Strawberry Creek Bridge (Bridge 56-0180) on State Route (SR) 74 in Riverside County, as described in **Attachment A** to this memorandum of agreement (MOA); and

WHEREAS, the Area of Potential Effects (APE) for the Undertaking, included as **Attachment B** to this MOA, has been established as the area in and around the Morrill Canyon Bridge and Strawberry Creek Bridge, as well as the SR-74 roadway on either side of the bridges to accommodate all project activities, including project detours, signage, staging and traffic control. The APE is largely within Caltrans right-of-way, but includes minor private property acquisition; and

WHEREAS, Caltrans has determined that the Undertaking will have an adverse effect on Morrill Canyon Bridge (individually eligible, Criterion C), The Pines to Palms Highway (individually eligible, Criterion A), and the Strawberry Creek Bridge (contributor to the Pines to Palms Highway, Criterion A), properties determined to be eligible for inclusion in the National Register of Historic Places (National Register) and are therefore historic properties as defined at 36 CFR §800.16(I)(1); and

WHEREAS, Caltrans has consulted with the State Historic Preservation Officer (SHPO) pursuant to the Section 106 PA, and, where the Federal-Aid Highway PA so directs, in accordance with 36 CFR Part 800, the regulations implementing Section 106 of the National

Historic Preservation Act of 1966 (54 U.S.C. 4700, as amended (NHPA), regarding the Undertaking's effect on historic properties. Caltrans shall file a copy of this MOA with the Advisory Council on Historic Preservation (ACHP) pursuant to Stipulation X.C.4 of the Federal-Aid Highway PA; and

WHEREAS, Caltrans, in consultation with the SHPO, has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the treatments set forth in **Stipulation II** of this MOA will satisfactorily take into account the Undertaking's adverse effects on historic properties; and

WHEREAS, Caltrans District 8 has participated in the consultation and has been invited to participate in this MOA as an invited signatory; and

WHEREAS, Caltrans has consulted with the United States Forest Service (USFS) regarding the Undertaking and its effects on historic properties and has invited them to participate in the MOA as a concurring party; and

WHEREAS, Caltrans has consulted with the Lake Elsinore Historical Society and the Idyllwild Historical Society regarding the Undertaking and its effect on historic properties and has invited them to participate in the MOA as concurring parties; and

WHEREAS, Caltrans initiated consultation with Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians regarding the Undertaking and its possible effects and received no responses indicating concern for cultural resources or interest in further participation in the Section 106 process; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties, and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

Caltrans shall ensure that the following measures are implemented:

STIPULATIONS

I. AREA OF POTENTIAL EFFECTS

- A. The Area of Potential Effects (APE) for the Undertaking is depicted in Attachment B to this MOA. The APE for the Undertaking is discontinuous, and was established to account for all direct/indirect impacts within the project's horizontal and vertical construction footprint at each bridge location. The APE is located predominantly within the Caltrans ROW and encompasses Morrill Canyon Bridge and Strawberry Creek Bridge, the highway leading onto and off of each structure, and any adjacent area that is needed for construction detours, potential realignment, and construction access roads, and four Temporary Construction Easements (TCEs). The width of the APE fluctuates between 30 meters and 49 meters with

the vertical component proposed to extend a maximum of 1.1 meter above the pavement to a maximum depth of 8 meters below pavement for construction of detours.

- B. If modifications to the Undertaking subsequent to the execution of this MOA necessitate the revision of the APE, District 8 will consult with Caltrans and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, District 8, and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with **Stipulation IV.B** below. If Caltrans, District 8, and the SHPO reach mutual agreement on the proposed revisions, then District 8 will submit a final map of the revisions, consistent with the requirements of Stipulation VIII.A and Attachment 3 of the Federal-Aid Highway PA no later than 30 days following such agreement. Any additional required identification and evaluation efforts necessitated due to changes to the APE will be undertaken consistent with the requirements of Stipulation VIII.B and VIII.C of the Federal-Aid Highway PA.

II. TREATMENT OF HISTORIC PROPERTIES

A. Historic American Engineering Record (HAER)

1. Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.
2. Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).
3. Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.
4. Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in 3, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.

- B. Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures

(masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original material will be considered as an option.

- C. Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway..
- D. Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- E. Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in this MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to Stipulation IV.F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of this MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in **Stipulation II.A – II.D** of this stipulation have been met.

III. TREATMENT OF HUMAN REMAINS AND UNANTICIPATED EFFECTS

- A. As legally mandated, human remains, and related items discovered during the implementation of the terms of this Agreement and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to of Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Sections 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined by the California Native American

Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.

- B.** If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13(c) assume any discovered property to be eligible for inclusion in the National Register.

IV. ADMINISTRATIVE PROVISION

A. STANDARDS

1. **Definitions.** The definitions provided at 36 CFR Part 800.16 are applicable throughout this MOA.
2. Parties to this agreement are defined as follows:
 - a. **Signatory parties** have the sole authority to execute, amend, or terminate the MOA.
 - b. **Invited signatories** have the authority to amend or terminate the MOA.
 - c. **Concurring parties** signing the MOA do so to acknowledge their agreement or concurrence with the MOA but have no legal authority under the MOA to terminate or amend the MOA. Concurring with the terms of the MOA does not constitute their agreement with the Undertaking.
3. **Professional Qualifications.** Caltrans will ensure that only individuals meeting the *Secretary of the Interior's Professionally Qualified Standards for Archaeology and Historic Preservation* (48 Federal Register [FR] 44738-39) in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulation II in this MOA.
4. **Documentation Standards.** Written documentation of activities prescribed by **Stipulations I, II, and III** of this MOA shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

B. RESOLVING OBJECTIONS

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection.

Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the 30-day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection. The ACHP shall provide Caltrans with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Caltrans shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring parties, and provide them with a copy of this written response. Caltrans will then proceed according to its final decision.
4. If the ACHP does not provide its advice regarding the dispute within the 30-day time period, Caltrans may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Caltrans shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them to the ACHP with a copy of such written response.
5. Caltrans responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.
6. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

C. AMENDMENTS

1. Any Signatory or Invited Signatory to this MOA may propose that the MOA be amended, whereupon the parties shall consult for no more than 30 days, or as mutually agreed upon by the parties to consider such amendment. The amendment will be effective on the date a copy signed by all of the original Signatories and Invited Signatories is filed with the ACHP. If the parties cannot agree to appropriate terms to amend the MOA, any Signatory or Invited Signatory may terminate the agreement in accordance with **Stipulation IV.D**, below.
2. Attachments to this MOA may be amended through consultation as prescribed in the **Stipulation I**, and **II.E** as appropriate, without amending the MOA proper.

D. TERMINATION

1. If this MOA is not amended as provided for in **Section IV.C.**, or if a Signatory or Invited Signatory proposes termination of this MOA for other reasons, the party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR §800.16(y).
2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall comply with the requirements of 36 CFR 800.3-800.6, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

E. DURATION OF THE MOA

The duration of this MOA shall be no more than five (5) years following the date of execution by the SHPO and Caltrans, or upon completion of the Undertaking, whichever comes first. If the terms are not satisfactorily fulfilled at that time, Caltrans shall consult with the Signatories, Invited Signatories, and Concurring Parties to extend it or to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with Stipulations III through XI of the Section 106 PA if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

F. REPORTING REQUIREMENTS

1. Caltrans shall prepare an Annual Report documenting actions carried out pursuant to this PA. The reporting period shall commence one year from the date of execution. The Annual Report shall be distributed to all consulting parties to this MOA.
2. The Annual Report shall address the following: any scheduling changes proposed, historic property surveys and results, status of treatment and mitigation activities, ongoing and completed public education activities, any uses that are affecting or may affect the ability of the federal agency to continue to meet the terms of this MOA, any disputes and objections received, and how they were resolved, and any additional parties who have become Signatories, Invited Signatories, or Concurring Parties to this MOA in the past year.
3. Caltrans shall coordinate a meeting of the MOA parties to be scheduled within ninety (90) business days of distribution of the Annual Report, or another mutually agreed upon date, to discuss activities carried out pursuant to this MOA during the preceding year and activities scheduled for the upcoming year. This meeting, should it be deemed unnecessary, may be cancelled by mutual consent of the Signatory Parties.

G. EFFECTIVE DATE

This MOA will take effect on the date that it has been executed by the Signatory Parties.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR §800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR §800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(1) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

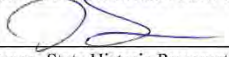
SIGNATORY PARTY:

California Department of Transportation

By Philip J. Stolarski Date 2/26/21
Philip J. Stolarski, Chief
Division of Environmental Analysis

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

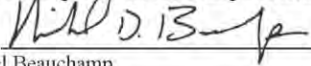
SIGNATORY PARTY:
California State Historic Preservation Officer

By  Date 2/26/21
Julianne Polanco, State Historic Preservation Officer

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

INVITED SIGNATORY:

California Department of Transportation, District 8

By  Date 02/26/2021
Michael Beauchamp
Title: District Director

4.4 Comments and Responses to Comments

The public circulation period began on January 8, 2021 and ended on February 8, 2021. The Public Hearing webinar occurred on January 21, 2021 from 5pm to 6:30pm. No comments were received during the Public Hearing webinar. Comment letters received during the public circulation period are included below.

Comment #1.

State of California—Transportation Agency
DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
San Geronimo Pass Area
195 Highland Springs Avenue
Beaumont, CA 92223
(951) 769-2000
(800) 735-2929 (TDD)
(800) 735-2929 (Voice)

February 3, 2021

File No.: 655.13886.17798

Caltrans District 8
464 West 4th Street, 6th Floor (MS #823)
San Bernardino, CA 92401

RE: SCH# 2021010067

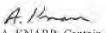
The San Geronimo Pass Area of the California Highway Patrol (CHP) received the "Notice of Completion" of the environmental document for the proposed SR-74 Bridge Replacement Project for State Clearinghouse (SCI) #2021010067. After a thorough review, we have concerns with the potential impact this project could have on traffic congestion and safety.

Our concern relates to the proposed replacement of the Strawberry Creek Bridge (Bridge No. 56-0180) near Hanes, on SR-74, in Riverside County. At this location, SR-74 is a two-lane undivided highway with no shoulder access for vehicular travel. This is a major arterial route that connects Riverside County residents in the mountain communities near Idyllwild with larger cities, such as Hemet and Beaumont.


This project advises to create traffic delays which could last the length of the project (up to 12 months). This increase in congestion would have a negative impact on our operations. The increase in congestion would necessitate the need for additional traffic control measures to mitigate the potential increase in traffic collisions in the area. Additionally, this would increase response times to calls for service and emergency service operations, thereby providing a threat to public and officer safety. The Area recommends exploring the proposed project alternatives, which would seemingly impact concerns to a lesser degree.

If you have any questions regarding these concerns, please contact Lieutenant M. Vargas at (951) 769-2000.

Sincerely,


A. KNARR, Captain
Commander

cc: Border Division
Special Projects Section

Safety, Service, and Security  An Internationally Accredited Agency

Response to Comment #1.

Caltrans initiated a phone meeting to discuss this comment letter with the San Geronimo Pass Area of the California Highway Patrol (CHP) on February 16, 2021. The CHP's concerns included accessibility of the Strawberry Creek Bridge roadway during construction activities of the project. The Caltrans team briefly explained to Lieutenant Michael Vargas the traffic handling at Strawberry Creek and below is the formal response to the letter.

After further consideration, Caltrans has selected Strawberry Creek Bridge Alternative S1 as the preferred viable alternative over Strawberry Creek Bridge Alternative S3. Implementation of Strawberry Creek Bridge Alternative S1 would utilize reverse traffic control for all stages of construction. As such, no temporary detour bridge would be constructed. No long-term road closures at Strawberry Creek Bridge would occur and one lane will be open to traffic most of the time during construction which is expected to last 8 months in duration. The reasoning for selecting Alternative S1 was that the traffic forecasting data information, specifically the 2-way Peak Hour Volumes for 2022 (year of construction) at 430 vehicles per hour and 450 vehicles per hour for year 2024 (completion year, fully open to traffic) would accommodate the use of reverse traffic control. The project will also implement a Traffic Management Plan (TMP). The TMP could include, but not limited to, the use of public information communications such as mailers, handouts, brochures, and press releases; information for motorists using changeable message signs or temporary signage; construction strategies such as traffic plans; and information regarding construction staging and lane modifications. Additional traffic control measures such as Traffic Control System, Temporary Railing (Type K), Temporary Signal Systems, Construction Area Signs, Portable Radar Feedback Sign, Temporary Radar Speed Feedback will be included in the bid package. The San Geronimo Pass Area of the CHP will be notified in advance of construction timing for the project.

Chapter 5 List of Preparers

The following persons were principally responsible for review and preparation of this IS/EA.

California Department of Transportation

Renetta Cloud	Senior Environmental Planner
Kourtney Graves Sr.	Associate Environmental Planner
Andrew Walters	Senior Environmental Planner/Cultural Studies
Craig Wentworth	Supervising Environmental Planner/Office Chief, Biology
Sarah Gallimore	Associate Environmental Planner (Natural Sciences)
Nancy Frost	Associate Environmental Planner (Natural Sciences)
Bacson Quach	Programmed Project Management
Thomas Ngo	Project Engineer
Paul Phan	Office Chief, Environmental Engineering
Bahram Karimi	Associate Environmental Planner/Paleontological Studies
Illeen Prentiss	Associate Environmental Planner
Liana Griebisch	Environmental Planner
Shurooq Abu-Hajar	Environmental Planner

ICF

Brian Calvert	Senior Managing Director, Environmental Planning
Court Morgan	Managing Director, Environmental Planning
Elizabeth Irvin	Senior Technical Editor
Johnnie Garcia	GIS Manager
Keith Cooper	Air Quality, Climate Change Specialist
Youji Yasui	Senior Environmental Planner

Chapter 6 Distribution List

The Initial Study/Environmental Assessment (IS/EA) and/or a Notice of Availability was made available electronically to the following federal, state, regional, and local agencies, elected officials, interested groups, organizations and individuals, and utilities and service providers in the project area. In addition, all property owners and resident/occupants located within 500 feet of the proposed project were also provided with the notice.

6.1 Agencies

U.S. Forest Service, Cleveland National Forest
Natural Resources Specialist Amy L. Reid
10845 Rancho Bernardo Road, Suite 200
San Diego, CA 92127

U.S. Department of Agriculture – Natural
Resources Conservation Service
430 G Street, Suite 4164
Davis, CA 95616

CAL FIRE Southern Region HQ Operations
2524 Mulberry St
Riverside, CA 92501

California Highway Patrol
8118 Lincoln Avenue
Riverside, CA 92504

California Department of Water Resources
1416 9th Street
Sacramento, CA 95814

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

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

Southern California Association of Governments
3403 10th Street, Suite 805
Riverside, CA 92501

Riverside County Board of Supervisors, District 1
Honorable Kevin Jeffries
4080 Lemon Street
Riverside, CA 9250

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

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

U.S. Army Corps of Engineers
915 Wilshire Blvd. Suite 1101
Los Angeles, CA 90017

California Department of Fish and Wildlife
South Coast Region
4949 Viewridge Avenue
San Diego, CA 92123

Department of Toxic Substances Control
P.O. Box 806
Sacramento, CA 95812-0806

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

California Public Utilities Commission
320 West 4th Street, Suite 500
Los Angeles, CA 90013

Western Riverside Council of Governments
3390 University Avenue, Suite 450
Riverside, CA 92501

Riverside County Board of Supervisors, District 3
Supervisor Chuck Washington
749 N. State Street
Hemet, CA 92543

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

City of Lake Elsinore
Fire Department
130 South Main Street
Lake Elsinore, CA 92530

City of Lake Elsinore
City Engineer
130 South Main Street
Lake Elsinore, CA 92530

City of Lake Elsinore
Police Department (Captain)
333 Limited Avenue
Lake Elsinore, CA 92530

Lake Elsinore Unified School District
545 Chaney Street
Lake Elsinore, CA 92530

City of Lake Elsinore
Mayor Brian Tisdale
130 South Main Street
Lake Elsinore, CA 92530

City of Hemet
Public Works Director
445 E Florida Avenue
Hemet, CA 92543

City of Hemet
Police Department (Captain)
445 E Florida Avenue
Hemet, CA 92543

Office of California State Senate District 28
Senator Melissa Melendrez
28156 Hancock Avenue, Suite 320
Murrieta, CA 92562

City of Hemet
Fire Department
445 E Florida Avenue
Hemet, CA 92543

Office of United States Senator
Senator Diane Feinstein
750 B Street, Suite 1030
San Diego, CA 92101

Office of United States Senator
Senator Kamala D. Harris
600 B Street Suite 2240
San Diego, CA 92101

California State Assembly, District 73
Honorable Laurie Davies
29122 Ranch Viejo Road, Suite #111
San Juan Capistrano, CA 92675
info@daviesforca.com

Office of U.S. Congressional District 36
Congressman Raul Ruiz
445 E. Florida Avenue
Hemet, CA 92543

Office of California Assembly District 67
Honorable Kelly Seyarto
41391 Kalmia Street, Suite 220
Murrieta, CA 92562
campaign@kellyforassembly2020.com

Office of California Assembly District 42
Assemblyman Chad Mayes
41608 Indian Trail, Suite 1
Rancho Mirage, CA 92270

Office of California State Senate District 23
Rosilicie Ochoa Bogh
10350 Commerce Center Drive, Suite A-220
Rancho Cucamonga, CA 91730

Office of U.S. Congressional District 42
Ken Calvert
4160 Temescal Canyon Road, Ste. 214
Corona, CA 92883

6.2 Interested Groups, Organizations, and Individuals

USA 557 Or Current Occupant
144 N Mountain View Ave
San Bernardino, Ca 92408

Kenneth Morris Or Current Occupant
34744 Ortega Hwy
Lake Elsinore, Ca 92530

James M Webb Or Current Occupant
P O Box 2596
Mission Viejo, Ca 92690

Kathleen Harder Or Current Occupant
34720 Ortega Highway
Lake Elsinore, Ca 92530

Harry Wileman Or Current Occupant
1521 Calle Valle
San Clemente, Ca 92672

Mesa Plaza Or Current Occupant
23361 El Toro #202
Lake Forest, Ca 92630

Lazy E Ranch Or Current Occupant
20142 Riverside Dr
Newport Beach, Ca 92660

Alvaro Guillen Or Current Occupant
28471 La Pradera
Laguna Niguel, Ca 92677

Virgil J McIntyre Or Current Occupant
34704 Ortega Hwy
Lake Elsinore, Ca 92530

Harry Wileman Or Current Occupant
24700 Potrero Rd
Lake Elsinore, Ca 92530

Steven R Bayne Or Current Occupant
34730 Ortega Hwy
Lake Elsinore, Ca 92530

Virgil J McIntyre Or Current Occupant
34021 Malaga Dr
Dana Point, Ca 92629

Kathleen M Harder Or Current Occupant
34706 Ortega Hwy
Lake Elsinore, Ca 92530

Carl Lawrence Or Current Occupant
24953 Whisler Dr
El Toro, Ca 92630

Kathleen M Harder Or Current Occupant
34710 Ortega Hwy
Lake Elsinore, Ca 92530

Von Grempp Debra Or Current Occupant
2854 Calle Guadalajara
San Clemente, Ca 92673

Operations Cbo Or Current Occupant
1170 Marine Dr
Laguna Beach, Ca 92651

Jason McMahan Or Current Occupant
416 N Marie Ave
Fullerton, Ca 92833

Brian Edward Becker Or Current Occupant
3478 Ortega Hwy
Lake Elsinore, Ca 92530

Holdings Unity Or Current Occupant
3 Windy Ridge
Trabuco Canyon, Ca 92679

Von Grempp Debra Or Current Occupant
34724 Ortega Hwy
Lake Elsinore, Ca 92530

Operations Cbo Or Current Occupant
34421 Ortega Hwy
Lake Elsinore, Ca 92530

Von Grempp Debra Or Current Occupant
34722 Ortega Hwy
Lake Elsinore, Ca 92530

Operations Cbo Or Current Occupant
34650 Ortega Hwy
Lake Elsinore, Ca 92530

Steven R Bayne Or Current Occupant
34730 Highway 74
Lake Elsinore, Ca 92530

Ana Shapiro Churchill Or Current Occupant
26662 Sierra Vista
Mission Viejo, Ca 92692

Current Occupant
34640 Ortega Hwy
Lake Elsinore, Ca 92530

Robert M Caron Or Current Occupant
34542 Via Espinoza
Capistrano Beach, Ca 92624

Rey Sierra Or Current Occupant
23361 El Toro Rd #202
Lake Forest, Ca 92630

James M Webb Or Current Occupant
34700 Ortega Hwy
Lake Elsinore, Ca 92530

***Appendix A: Individual Section 4(f) Evaluation
and
Programmatic Section 4(f) Evaluation***

This page intentionally left blank.

Individual Section 4(f) Evaluation

Submitted Pursuant to:

49 U.S.C. 303

SR-74 Bridge Replacement Project

Bridge No. 56-0169 and 56-0180

Riverside County, California

08-RIV-74 PM 2.9/3.2 & 53.3/53.5

California Department of Transportation, District 8



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

March 2021

SR-74 Bridge Replacement Project

RIVERSIDE COUNTY, CALIFORNIA
08-RIV-74-PM 2.9/3.2 & 53.3/53.5

EA 1G470/ 0816000001

INDIVIDUAL SECTION 4(F) EVALUATION

Submitted Pursuant to:

49 USC 303

THE STATE OF CALIFORNIA

Department of Transportation as assigned

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

Contents

Chapter 1	Introduction	1-1
Chapter 2	Description of Proposed Project and Alternatives	2-1
2.1	Project Purpose and Need	2-1
2.1.1	Project Purpose	2-1
2.1.2	Project Need	2-1
2.2	Project Description/Alternatives	2-2
2.2.1	Alternatives	2-2
2.3	Description of Section 4(f) Property	2-9
2.4	Pines-to-Palms Highway	2-10
2.4.1	Impacts on Section 4(f) Properties	2-10
2.4.2	Avoidance Alternatives	2-11
2.4.3	Measures to Minimize Harm to the Section 4(f) Property	2-17
2.4.4	Least Harm Analysis and Concluding Statement	2-19
2.4.5	Coordination	2-20
Chapter 3	Letters and Other Correspondence	3-1
Chapter 4	Other Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)	4-1
4.1	Parks	4-1
Chapter 5	Additional References	5-1

List of Figures

Figure	On Page
Figure 1 - Regional Vicinity	2-5
Figure 2 - Project Location	2-7
Figure 3 - Strawberry Creek Avoidance Alternative	2-15

List of Tables

Table 2-1, Resources Listed or Eligible for Listing in the National Register of Historic Places	2-9
--	-----

Acronyms and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BMPs	Best management practices
CRHR	California Register of Historical Resources
DIB	Design Information Bulletin
DPR	Department of Parks and Recreation
EBL	Eligible Bridge List
FHWA	Federal Highway Administration
FOE	Finding of Effect
FTIP	Federal Transportation Improvement Program
HAER	Historic American Engineering Record
HBP	Highway Bridge Program
MLD	Most Likely Descendent
MOA	Memorandum of Agreement
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NPS	National Parks Service
NRHP	National Register of Historic Places
SD	Structurally Deficient
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
USFS	U.S. Forest Service
USGS	U.S. Geological Survey

Chapter 1 Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303, declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary of Transportation may approve a transportation program or project ... “requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.”

Section 4(f) further requires coordination with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer is also needed.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

This page intentionally left blank.

Chapter 2 Description of Proposed Project and Alternatives

2.1 Project Purpose and Need

2.1.1 Project Purpose

The purpose of the project is to ensure the safety and mobility for the traveling public by replacing the aging structures and upgrading the bridge rails at Morrill Canyon Bridge and Strawberry Creek Bridge, in order to provide continued connectivity along SR-74.

2.1.2 Project Need

The Morrill Canyon Bridge and Strawberry Creek Bridge were initially identified for bridge rail upgrade or replacement in 1984. Due to the number of rail upgrade/replacement needs statewide, the bridge structures have been prioritized based on traffic volume and geometrics. The Structure Replacement and Improvement Needs (STRAIN) Report, dated October 2014, also identifies several longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arches. In addition, both structures have nonstandard lane and shoulder width. Due to the significant deterioration and nonstandard features, there is a need to replace these structures to meet current design, crash, and safety standards.

The condition of the bridge structures are described in the Bridge Inspection Reports based on routine inspection on each of the bridges performed in August 2013. The following findings were noted:

Morrill Canyon Bridge (Bridge No. 56-0169):

- Bridge rails do not meet current federal crash standards.
- There are longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arch.
- The existing shoulder and lane width do not comply with current design standards.
- This bridge structure was built in 1931 and has exceeded its useful design life.
- Cross sectional area of the bridge is not capable of accommodating 50-and 100-year storm events.

Strawberry Creek Bridge (Bridge No. 56-0180):

- Bridge rails do not meet current federal crash standards.
- There are moderate transverse and map AC cracks throughout the deck.
- Minor to moderate longitudinal and transverse soffit cracks (less than 0.05 inches wide and 5 foot spacing) with efflorescence.
- The existing shoulder and lane width do not comply with current design standards.
- This bridge structure was built in 1929 and has exceeded its useful design life.
- Cross sectional area of the bridge is not capable of accommodating 100-year storm events.

For additional information, refer to the Purpose and Need section in Chapter 1 of the ISEA.

2.2 Project Description/Alternatives

2.2.1 Alternatives

2.2.1.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, no new or modified bridge or other physical improvements would be constructed on SR-74 at Morrill Canyon Bridge or Strawberry Creek Bridge. The Morrill Canyon Bridge was built in 1931 and has exceeded its useful design life. The Strawberry Creek Bridge was built in 1929 and has also exceeded its useful design life. The existing bridges would be left in its current condition, and no structural or functional deficiencies would be corrected. Ongoing maintenance would continue.

The No-Build Alternative has been determined to be imprudent and infeasible and would not meet the project purpose and need as previously described.

2.2.1.2 PROPOSED BUILD ALTERNATIVES

The project proposes to replace Morrill Canyon Bridge and Strawberry Creek Bridge in Riverside County. The project has a no-build alternative, Morrill Canyon Bridge has one alternative and Strawberry Creek Bridge has two alternatives. In order to replace each structure, the project would construct a temporary bridge at each location, detour traffic from the existing bridge to the temporary bridge, or depending on the alternative, use part of the existing bridge for reverse traffic control, remove the existing structure, and construct the proposed bridge.

Morrill Canyon Bridge Alternative M1

- Alternative M1 (12-foot lane in each direction, 2-foot median, and 8-foot shoulders);

The Morrill Canyon Bridge alternative involves reconstructing the approach of the roadway to the bridge ends, a new bridge rail that will match the current aesthetics of the structure, reconstructing 1 overside drain system, new Midwest Guardrail System (MGS), 12-inch rumble strip, and temporary two-lane detour bridge to be built on the south side of the bridge for detour and to avoid the Cleveland National Forest. Regrading of the access driveway to Tenaja Truck Trail will also occur with a staging area at PM 2.9.

Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3

- Alternative S1 (Preferred Alternative) – The proposed alignment for this alternative will be approximately 13-feet south of the existing yellow stripe. Reverse traffic control will be utilized for all stages of construction. As such, no temporary detour bridge would be required. This alternative would result in 12-foot lanes in each direction and standard 8-foot shoulders, reconstructing the roadway approach to the bridge's approach slabs, new bridge rail that will match the current aesthetics of the structure, reconstructing 2 overside drain systems, and new MGS. A staging area would be located at PM 53.65.
- Alternative S3 – The proposed alignment would be designed to closely match the existing yellow stripe to minimize the permanent impacts. A two-way detour is proposed approximately 42.5-feet south of the existing yellow stripe to maintain traffic flow during construction. This alternative will result in a larger temporary environmental impact footprint compared to Strawberry Creek Bridge Alternative S1 (Preferred Alternative). This alternative involves 12-foot lanes in each direction and standard 8-foot shoulders, reconstructing the roadway approach to the bridge's approach slabs, new bridge rail that will match the current aesthetics of the structure, reconstructing 1 overside drain system, new MGS, and constructing two-way traffic detour bridge with temporary pavement approach to accommodate 11-foot lanes, 1-foot shoulder, and temporary railing. A staging area would also be located at PM 53.65.

Refer to Chapter 1, "Proposed Project" of the ISEA for more detailed information.

This page was intentionally left blank.

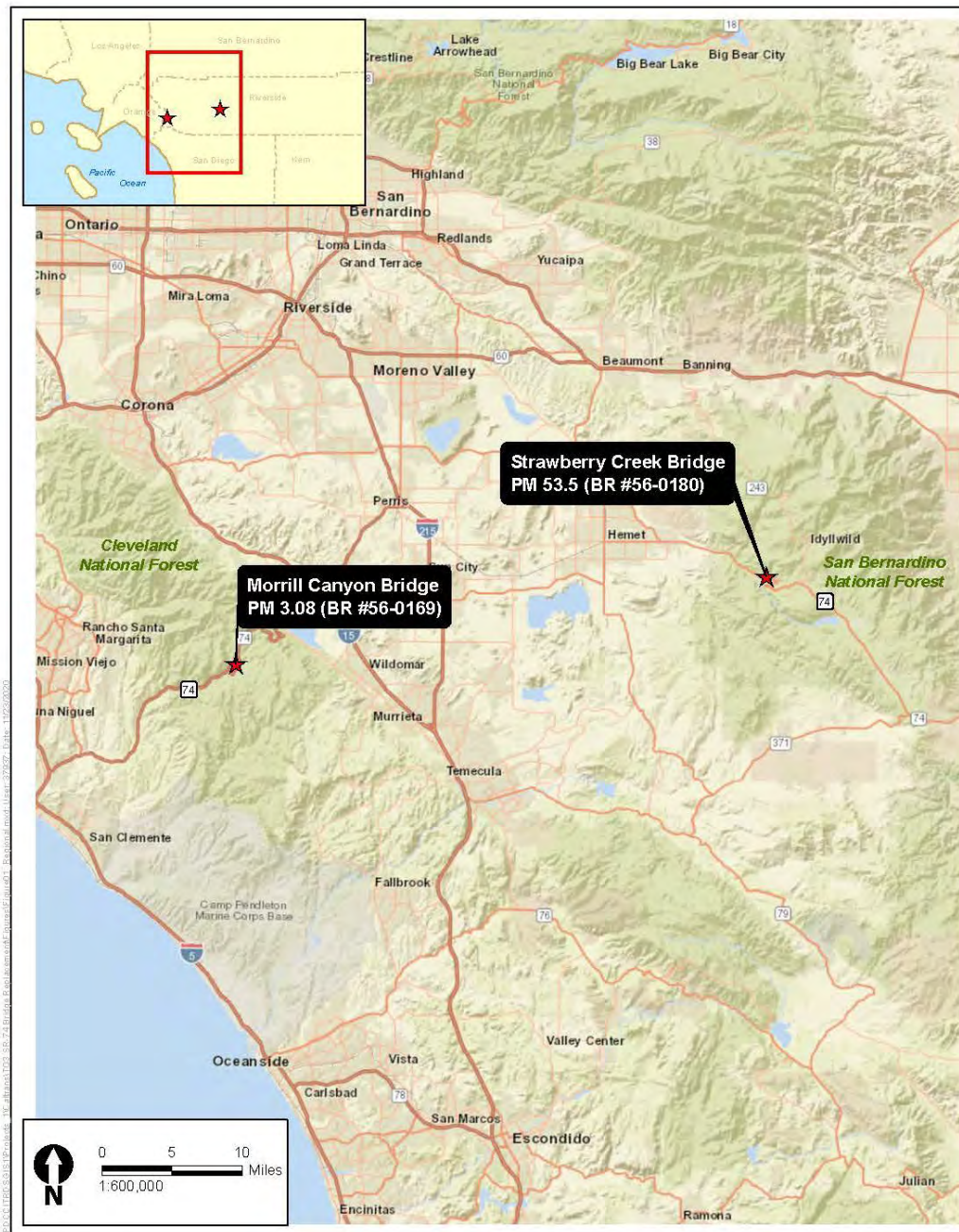


Figure 1
Regional Vicinity Map
SR-74 Bridge Replacement Project

This page intentionally left blank.

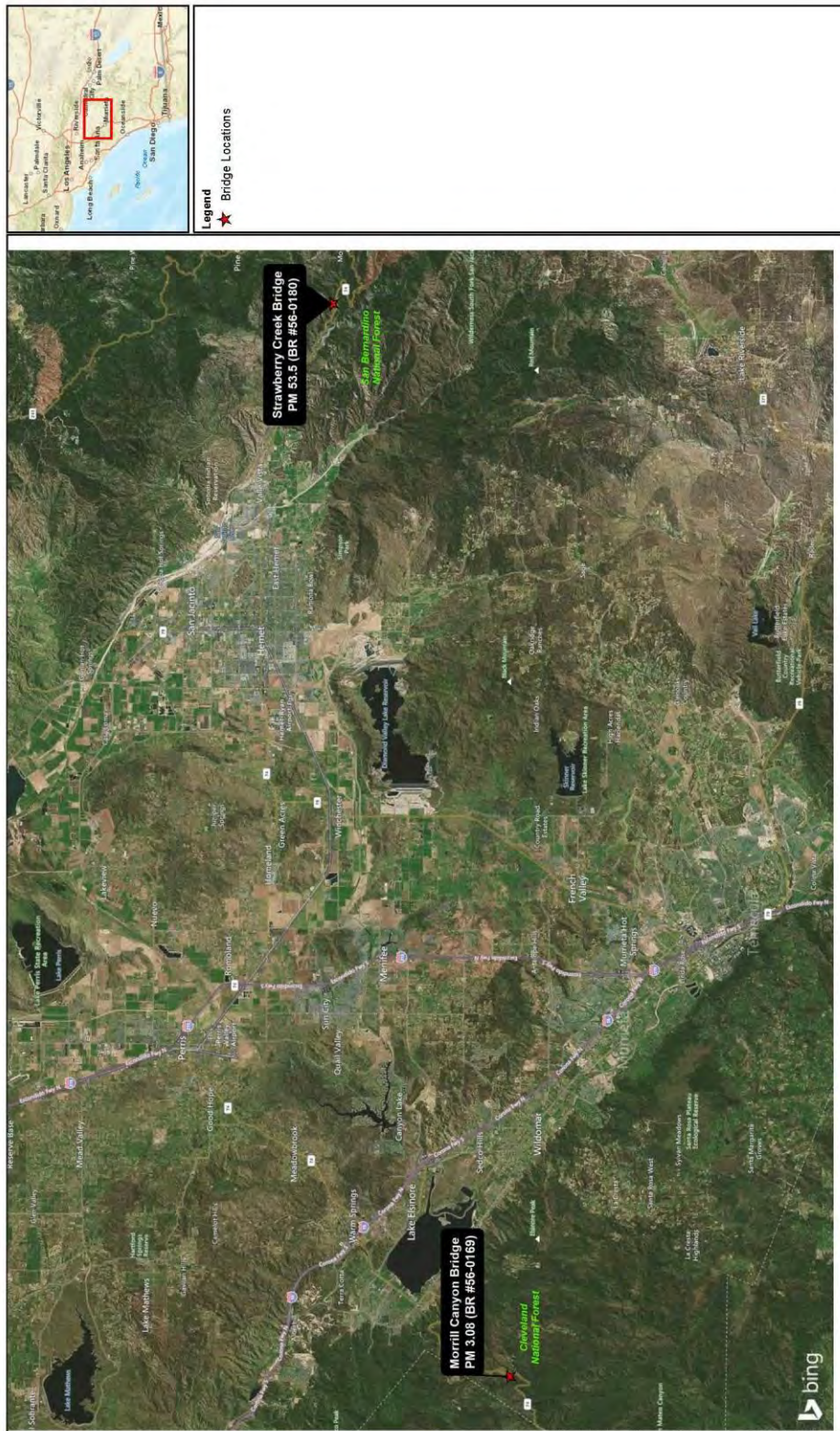


Figure 2
Project Location Map
SR-74 Bridge Replacement Project

This page intentionally left blank.

2.3 Description of Section 4(f) Property

Resources subject to Section 4(f) consideration include publicly owned lands consisting of a public park/recreational area; public wildlife and waterfowl refuges of national, state, or local significance; or historic sites of national, state, or local significance, whether publicly or privately owned. The San Juan Loop Trailhead and Bear Canyon Trailhead is a Section 4(f) resource within the project vicinity, however, no use of these resources would occur due to implementation of the proposed project. Strawberry Creek also offers recreational activities for fishing and would be considered a Section 4(f) resource. No use of Strawberry Creek would occur due to implementation of the proposed project. The two bridge sites are located within the U.S. Forest Service Cleveland National Forest and San Bernardino National Forest. A Special Use Permit would be required from the USFS at Strawberry Creek Bridge. These resources would not be affected by the proposed project, access would not be affected to these resources, and no changes to the use of these resources would occur as a result of the project.

There are significant historic sites in the project area that are considered to be Section 4(f) resources. Under Section 4(f), a significant historic site is defined as on, or eligible for listing in the NRHP. The resources that are on the list or eligible for listing are provided in Table 2-1. The Morrill Canyon Bridge and Strawberry Creek Bridge are discussed separately in the Programmatic Section 4(f) evaluation that has been prepared.

Table 2-1. Resources Listed or Eligible for Listing in the National Register of Historic Places

Identification, Name	Location, Description	Use	Significance
CA-RIV-8089H (P-33-15321) Pines to Palms Highway	Linear resource, perpendicular to Strawberry Creek	Yes	NRHP Eligible
CA-RIV-10575 (P-33-006976)*	Strawberry Creek Bridge No. 56-0180	Yes	NRHP Eligible as contributor to Pines-to-Palms Highway
CA-RIV-10574H (P-33-007236)*	Morrill Canyon Bridge No. 56-0169	Yes	NRHP Eligible
Source: Historic Property Survey Report, August 2020.			
Notes:			
* = The Morrill Canyon Bridge and Strawberry Creek Bridge are discussed separately in the Programmatic Section 4(f) Evaluation document prepared for the project.			

This section will discuss only the Section 4(f) resources in which a “use” occurs. Use occurs when 1) the property is acquired for a transportation project, 2) there is an occupancy of land that is adverse to the preservationist purpose of Section 4(f), or 3) there is a proximity impact that substantially impairs the purpose of the land.

As indicated by the table, a use of the Morrill Canyon Bridge and Strawberry Creek Bridge occurs as part of the project and both bridges were analyzed in the Programmatic Section 4(f) evaluation prepared for the project. A use of the San Juan Loop Trailhead, Bear Canyon Trailhead, and Strawberry Creek does not occur as part of the project, and a discussion of these resources is included under Section 4, “Other Parks, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)”.

2.4 Pines-to-Palms Highway

The Pines-to-Palms Highway (CA-RIV-8089H/P-33-15321H) is a largely east-west route located between the San Jacinto Valley community of Hemet and the Coachella Valley community of Palm Desert. The limits of the Pines-to-Palms Highway have been established as Post Mile (PM) 47.23 to PM 92.80, a total length of 45.57 miles. The Strawberry Creek Bridge is located on the Pines-to-Palms Highway at PM 53.45. The Pines-to-Palms Highway has many masonry elements and features that contribute to the resource, including the Strawberry Creek Bridge. The highway was previously determined eligible for listing on the National Register of Historic Places under Criterion A at the local level of significance for links to early 20th Century tourism and recreational infrastructure development. Contributing features include the general configuration of the roadway itself, as well as multiple bridges (at the San Jacinto River, North Fork of the San Jacinto River, and Strawberry Creek) and two large masonry arch culverts located at Dry Creek (PM 54.40) and Omstott Creek (PM 80.00) near Pinon Pines. Also contributing are a series of masonry culvert headwalls found near the west-center and east ends of the linear resource (roughly between PM 55 and PM 59, just west/northwest of Mountain Center, then resuming around PM 82 to PM 92), and a series of masonry curbs and gutters located at the northeast end of the highway near Palm Desert, approximately between PM 91 and 92. The Strawberry Creek Bridge at PM 53.45 on the Pines-to-Palms Highway is a recognized contributor to the historic resource. The SHPO concurred on June 25, 2014 regarding eligibility of the highway and status of contributing elements. The Pines-to-Palms Highway is a state-owned resource and is listed on the Master List of Historic Resources.

2.4.1 Impacts on Section 4(f) Properties

2.4.1.1 BUILD ALTERNATIVES

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3

None of the build alternatives under consideration for the project specifically involve work on the Pines-to-Palms Highway independent of work on the Strawberry Creek Bridge. The Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3 that involve work on the bridge, including full replacement of the bridge, would impact the highway on and around the Strawberry Creek Bridge. The project would involve potential impacts to the historic linear resource (the Pines-to-Palms Highway) between PM 53.0 and PM 54.0, but it is likely that, except for work on and around Strawberry Creek Bridge, which is a contributor to the resources, only a short section of the highway itself, approximately 500-feet of the pavement and shoulder, may or will be directly impacted by the modification and/or removal of the Strawberry Creek Bridge, with visual impacts extending slightly beyond that due to the location of the bridge being on a curve and in an area with heavy tree cover. None of the project alternatives involve work on the highway alone and/or entirely independent of bridge work.

As such, Strawberry Creek Bridge Alternatives S1 (Preferred Alternative) and S3 would involve physical destruction of or damage to all or part of the historic property. Besides the alteration or removal of an important contributor (the Strawberry Creek Bridge), the work will impact the existing pavement and shoulder areas on the bridge and at both approaches leading to the bridge.

While this constitutes removal of potentially original material from the highway linear resource, there have been minor modifications to the highway in this same area, including shoulder work, widening to the southwest only, and pavement work, making it unlikely that original material beyond the bridge itself, is still extant in this specific area.

2.4.1.2 NO-BUILD ALTERNATIVE

No replacement of Strawberry Creek Bridge would occur under the No-Build Alternative, and no physical damage of or to all or part of the existing Strawberry Creek Bridge would occur. As such, there would be no work on the existing pavement and shoulder areas on the bridge and at both approaches leading to the bridge.

2.4.2 Avoidance Alternatives

A Section 4(f) evaluation must contain sufficient supporting information to make the finding that there is no feasible and prudent avoidance alternative and that the project includes all possible planning to minimize harm. Section 4(f) requires the development of one or more “avoidance” alternatives that avoid each and every Section 4(f) property. This section identifies the avoidance alternatives that have been developed, including the no-build alternative, which avoids the use of the Section 4(f) property. The following alternatives avoid any use of the historic linear resource (Pines-to-Palms Highway):

1. No Build Alternative.
2. Build a new structure at a different location without affecting the historic integrity of the existing Strawberry Creek Bridge, as determined by procedures implementing the National Historic Preservation Act (NHPA). This alternative would re-route a portion of the project to a different alignment to specifically avoid the Strawberry Creek Bridge, which is a contributor to the resource.

Each of these alternatives have been evaluated to determine whether it is feasible and prudent to avoid the Section 4(f) property. Alternatives that do not avoid the use of each and every Section 4(f) property are not analyzed. Only the avoidance alternatives go through the feasible and prudent analysis. The regulations state that an avoidance alternative is not feasible if it cannot be built as a matter of sound engineering judgement (23 CFR 774.17). The prudence evaluation involves applying each of the following six factors to each avoidance alternative. Does the alternative:

- Compromise the project so that it is unreasonable given the purpose and need;
- Result in unacceptable safety or operational problems;
- After reasonable mitigation, still causes:
 - Severe social, economic, or environmental impacts;
 - Severe disruption to established communities;
 - Severe environmental justice impacts; or

- Severe impacts to other federally protected resources
- Result in additional construction, maintenance, or operational costs of an extraordinary magnitude;
- Cause other unique problems or unusual factors;
- Involve multiple factors listed above that, while individually minor, cumulatively cause unique problems or impacts of extraordinary magnitude.

No Build Alternative

Under the No Build Alternative, no new replacement bridge or other physical improvements would be constructed at Strawberry Creek Bridge. The existing bridge would be left in its current condition, and no structural or functional deficiencies would be corrected, however, periodic maintenance would continue to occur.

The No Build Alternative fails to address the project purpose and need and provides none of the project benefits cited with the project. This alternative would maintain the existing bridge structures with nonstandard bridge rails, lane widths and shoulder widths. The bridge structure for Strawberry Creek Bridge have exceeded their useful design life and will deteriorate further resulting in operational deficiencies and will necessitate future costly maintenance measures if left in its current state. With no improvements, there is no capital cost for this alternative. However, there would be continued costs associated with maintenance, periodic rehabilitation, and safety and operational improvements to the existing facility.

- Maintenance—The No Build Alternative does not correct the situation that causes the bridge to be considered deficient and not meet current federal crash standards and design standards or deteriorated. Normal maintenance is not considered adequate to cope with the situation.
- Safety—The No Build Alternative does not correct the situation that causes the bridge to be considered deficient. These deficiencies would not offer protection to errant vehicles and do not result in a safer bridge rail configuration. Due to the significant deterioration and nonstandard features, there is a need to replace the bridge structure to meet current design, crash, and safety standards.

As there would be no construction at Strawberry Creek Bridge under this alternative, there would be no construction at the pavement or shoulder that would affect the historic linear resource, the Pines-to-Palms Highway.

New Bridge with Permanent Alignment South while Preserving the Existing Strawberry Creek Bridge.

This alternative would preserve the existing masonry arch Strawberry Creek Bridge and realign the roadbed approximately 54-feet south of the existing bridge with a total realignment length of 1,800-feet. The new bridge would have two 12-foot lanes and 8-foot shoulders (refer to Figure 3.)

With this alignment, the new bridge would be located on the downstream side and approximately 20-feet from the existing masonry arch Strawberry Creek Bridge so as to avoid the overtopping flow of the existing bridge onto the new replacement bridge during a major storm event. This alternative would consist of the largest footprint compared with Strawberry Creek Bridge Alternative 1 and 3 and would require more than 100-feet in width of Special Use Permit from the USFS. The realignment would also result in an 85-foot bridge compared with a 50-foot bridge as proposed in Strawberry Creek Bridge Alternative 1 and 3. This would result in an increase in the structure cost and ultimately would result in increasing the total construction capital cost. Furthermore, portions of this alignment, east of the replacement structure on the westbound travel lanes would cut through the existing hillside resulting in significant excavation. This hillside, based on visual assessment, is susceptible to rock fall. As such, due to these issues, moving the roadway closer to the cut slope would require additional measures to protect against rock fall onto the roadway. With this alternative, the construction related to the roadway is anticipated to add significant cost increases to the total construction capital cost due to the total realignment length of 1,800-feet and would result in a substantially longer construction period.

By preserving the existing masonry arch Strawberry Creek Bridge, Caltrans would also assume the liability and future maintenance issues due to the potential for structure deterioration and/or damage caused by future major storm events.

This page intentionally left blank.

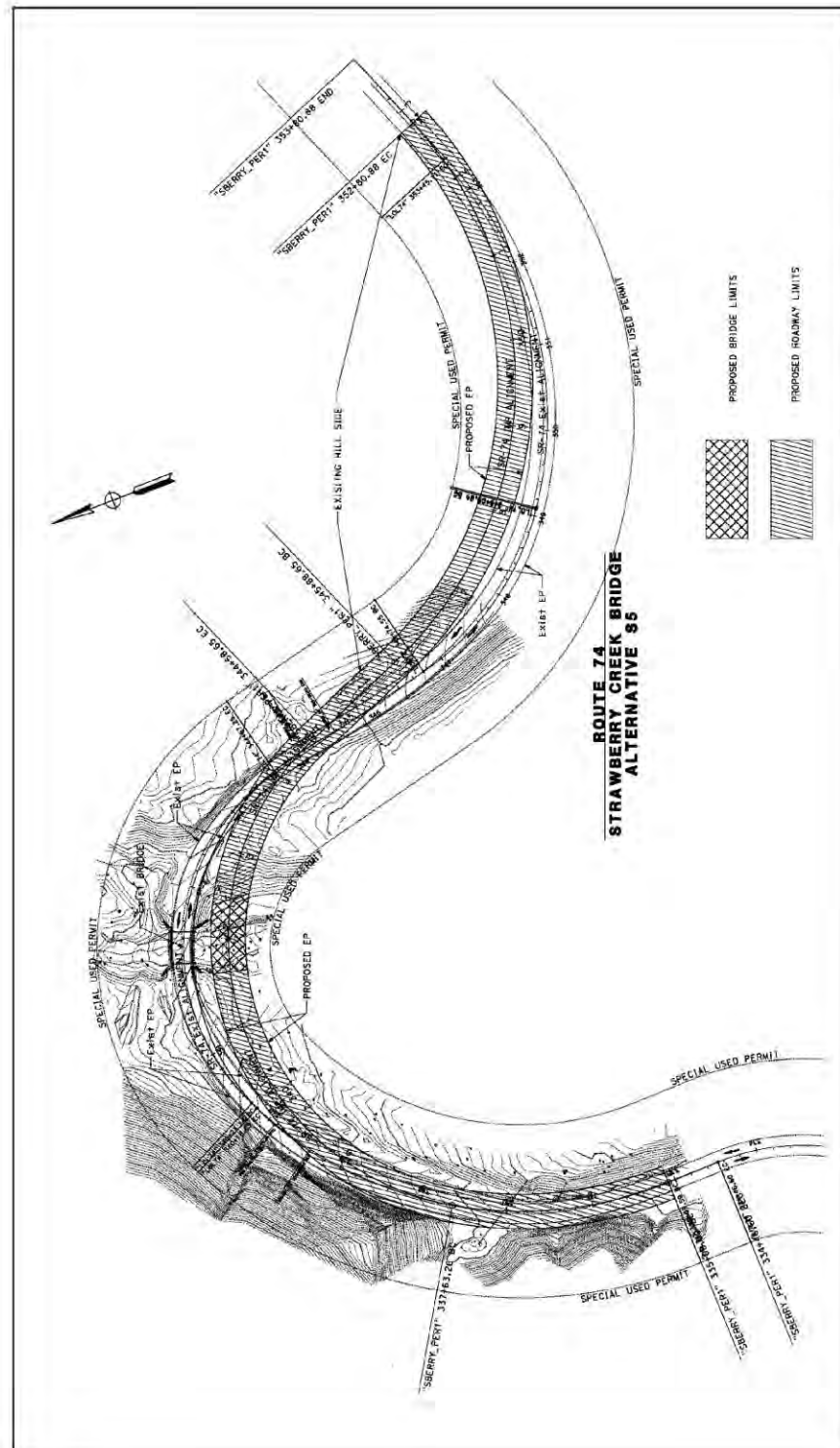


Figure 3
Strawberry Creek Bridge Avoidance Alternative
SR-74 Bridge Replacement Project

This page intentionally left blank.

2.4.3 Measures to Minimize Harm to the Section 4(f) Property

As part of the Section 106 process, a Memorandum of Agreement (MOA) was approved and executed, between the State Historic Preservation Officer (SHPO) and the Department to address the finding of Adverse Effect. The MOA provides stipulations that the replacement bridges be designed and developed in consultation with the SHPO to minimize the visual impact on the setting. The MOA was finalized and executed on February 26, 2021 between Caltrans and SHPO.

The mitigation measures identified in the Memorandum of Agreement are identified below (HIST-1 to HIST-7), pursuant to Section 106 PA Stipulation XI, 36 CFR 800.6(a) and 800.6(b)(1), which was submitted to SHPO during public review of the Environmental Assessment and Programmatic Section 4(f) Evaluation.

- **HIST-1:** Historic American Engineering Record (HAER). Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.

Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).

Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.

Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in the paragraph above, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.

- **HIST-2:** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures (masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original materials will be considered as an option.

- **HIST-3:** Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway
- **HIST-4:** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- **HIST-5:** Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in the MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to MOA Stipulation IV F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of the MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in MOA Stipulation II.A-II.D (also identified as HIST-1 through HIST-5) of this stipulation have been met.
- **HIST-6:** As legally mandated, human remains, and related items discovered during the implementation of the terms of the MOA and the undertaking will be treated in accordance with requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Section 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined the California Native American Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.
- **HIST-7:** If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for

the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13 (c) assume any discovered property to be eligible for inclusion in the National Register.

Additionally, the project proposes other measures to ensure that the Strawberry Creek Bridge is consistent in architecture, scale, and size to the existing bridge and surroundings, to the extent feasible.

The following designs (CR-1 and CR-2) are standard requirements which are required by Caltrans for all projects:

- **Standard CR-1:** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- **Standard CR-2:** In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.

2.4.4 Least Harm Analysis and Concluding Statement

The Morrill Canyon Bridge and Strawberry Creek Bridge structures are masonry arch bridges with solid masonry parapet railings that were previously determined eligible for listing in the National Register. The Build Alternative would involve the removal and replacement of the bridge railings, extensive bridge modification, and bridge replacement. The Build Alternative would involve potential impacts to the historic linear resource (the Pines-to-Palms Highway) between PM 53.0 and PM 54.0, but it is likely that, except for work on and around Strawberry Creek Bridge, which is a contributor to the resources, only a short section of the highway itself, approximately 500-feet of the pavement and shoulder, may or will be directly impacted by the modification and/or removal of the Strawberry Creek Bridge, with visual impacts extending slightly beyond that due to the location of the bridge being on a curve and in an area with heavy tree cover.

The No Build Alternative would result in no construction at both bridge locations. As such, both bridges will continue to deteriorate and the non-standard design features would remain. Furthermore, under this alternative, the Morrill Canyon Bridge and Strawberry Creek Bridge would not meet current federal crash standards and the existing shoulder and lane widths would not comply with current design standards. Morrill Canyon Bridge would not be capable of accommodating the 50-and 100-year storm events, and Strawberry Creek would not be capable of accommodating 100-year storm events. This alternative would not meet the purpose and need of the project.

Based on the above considerations, there is no feasible and prudent alternative to the use of the Pines-to-Palms Highway (CA-RIV-8089H/P-33-15321H). The proposed action includes all possible planning to minimize harm to the Pines-to-Palms Highway (CA-RIV-8089H/P-33-15321H) resulting from such use and causes the least overall harm in light of the statute's preservation purposes.

2.4.5 Coordination

Consultation with the SHPO and other cultural resources stakeholders has occurred. Caltrans, as assigned by FHWA, has obtained SHPO concurrence with the determination of eligibility and the finding of effect for this resource.

The following coordination has occurred to address cultural resources pursuant to Section 106 of the National Historic Preservation Act:

- January 6, 2020—The APE for Cultural Resources was established in consultation with Shannon Clarendon, Caltrans Principal Investigator-Prehistoric Archaeology and Prakash Gowda, Caltrans Project Manager.
- April 17, 2020—A HPSR and Finding of Effect (FOE) was prepared and submitted to SHPO.
- June 8, 2020—SHPO concurrence was received on the HPSR and FOE.
- December 2020 – Draft MOA developed and submitted to CSO/SHPO for review and comment.
- February 26, 2021 – Executed MOA signed between Caltrans and SHPO.

Chapter 3 Letters and Other Correspondence

Copies of letters and correspondence related to the coordination efforts done for the Individual Section 4(f) Evaluation are attached and included on the following pages.

This page was intentionally left blank.

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENVIRONMENTAL ANALYSIS

P.O. BOX 942874, MS 27

SACRAMENTO, CA 94273-0001

PHONE (916) 654-3567

FAX (916) 653-7757

TTY (916) 653-4086

www.dot.ca.gov



*Making Conservation
a California Way of Life*

April 17, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

RE: Finding of Adverse Effect for Route 74 Bridge Upgrade Project in Riverside County

Dear Ms. Polanco:

The California Department of Transportation is initiating consultation with the SHPO regarding the proposed Route 74 Bridge Upgrade Project (EA: 1G470) in Riverside County. This consultation is undertaken in accordance with procedures outlined in the January 1, 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Section 106 PA). Caltrans is currently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resource Code 5024 and Governor's Executive Order W-26-92* (PRC 5024 MOU).

The proposed project involves the replacement of bridge rails (through removal and replacement of bridge railings, extensive bridge modification, and/or full bridge replacement) on two structures located on Route 74; one on the Ortega Highway portion of the road (PM 3.08), and a second on the Pines-to-Palms Highway section of the road (PM 53.45) in Riverside County. Both structures are masonry arch bridges with solid masonry parapet railings.

Enclosed please find a Historic Properties Survey Report (HPSR) and a Finding of Effect (FOE) Report for the project. Caltrans has identified three Historic Properties in the APE; the Morrill Canyon Bridge at PM 3.08 (Category 2), the Strawberry Creek Bridge at PM 53.45 (Category 2), and the Pines-to-Palms Highway, all of which have been previously determined eligible for the NRHP. The FOE proposes that a Finding of Adverse Effect is appropriate for the Undertaking. We are consulting with you at this time in accordance with Section 106 PA Stipulation X.C(1), which requires consultation with the SHPO regarding findings of adverse effect.

Pursuant to Stipulation X.A of the PA, Caltrans has applied the Criteria of Adverse Effect set forth at 36 CFR 800.5(a)(1) and finds that the undertaking would have an adverse effect on historic properties, as detailed in Sections V and VI of the FOE. Therefore, Caltrans has

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

Ms. Julianne Polanco
April 17, 2020
Page 2

determined that **the undertaking as a whole will have an Adverse Effect** and is seeking SHPO concurrence with these findings pursuant to Section 106 PA Stipulation XI.C and 36 CFR 800.5. Caltrans will continue consultation regarding resolution of adverse effect. We look forward to receiving your written response within 30 days of your receipt of this transmittal in accordance with Stipulation X.B.(1) of the Section 106 PA.

If you have any questions, please contact me or Caltrans District 8 PQS Historian Andrew Walters (phone: 909-388-2647; email: Andrew_walters@dot.ca.gov). Thank you for your assistance with this undertaking.

Sincerely,

David Price
Section 106 Coordination Branch Chief
Cultural Studies Office

Enclosure: Finding of Adverse Effect with attachments for the Route 74 Bridge Upgrade Project in Riverside County.

- c. Andrew Walters, Branch Chief Environmental Support/Cultural Studies, Caltrans District 8
Jill Hupp, 5024 Coordinator, Caltrans Cultural Studies Office

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



State of California • Natural Resources Agency

Gavin Newsom, Governor

**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

June 8, 2020

VIA EMAIL

In reply refer to: FHWA_2020_0417_002
CATRA_2020_0417_001

Mr. David Price, Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Finding of Adverse Effect for the Proposed Route 74 Bridge Upgrade Project,
Riverside County, CA

Dear Mr. Price:

Caltrans is initiating consultation about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92 (5024 MOU)*. As part of your documentation, Caltrans submitted a Historic Properties Survey Report (HPSR), an Archaeological Survey Report, and a Finding of Effect (FOE) for the proposed project.

Caltrans proposes to replace bridge rails (through removal and replacement of bridge railings, extensive bridge modification, and/or full bridge replacement) on two structures located on Route 74; one on the Ortega Highway portion of the road (PM 3.08), and a second on the Pines-to-Palms Highway section of the road (PM 53.45) in Riverside County. Both structures are masonry arch bridges with solid masonry parapet railings.

Mr. Price
June 8, 2020
Page 2 of 2

FHWA_2020_0417_002
CATRA_2020_0417_001

Caltrans has identified three Historic Properties in the APE; the Morrill Canyon Bridge at PM 3.08 (Category 2), the Strawberry Creek Bridge at PM 53.45 (Category 2), and the Pines-to-Palms Highway, all of which have been previously determined eligible for the NRHP.

Caltrans has applied the Criteria of Adverse Effect and found pursuant to Stipulation XI.C. of the PA, the project will have an adverse effect to the above historic properties.

Based on review of the submitted documentation, I have no objection to Caltrans' finding of adverse effect for this project.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov Jeanette Schulz at (916) 445-7031 with e-mail at jeanette.schulz@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

STATE OF CALIFORNIA—TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

Cultural Studies Office
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-0516
FAX (916) 653-7757
TFY (916) 653-4086



*Making Conservation
a California Way of Life.*

December 7, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: Draft Memorandum of Agreement for the Route 74 Bridge Upgrade Project in
Riverside County (FHWA_2020_0417_002; CATRA_2020_0417_001)

Dear Ms. Polanco:

The California Department of Transportation is continuing consultation with the SHPO regarding the proposed Route 74 Bridge Upgrade Project in Riverside County (Undertaking). This consultation is undertaken in accordance with procedures outlined in the January 1, 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Section 106 PA). Caltrans is currently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resource Code 5024 and Governor's Executive Order W-26-92 (PRC 5024 MOU)*.

The Undertaking proposes to upgrade the bridge rails of two bridges on Route 74 in Riverside County: the Morrill Canyon Bridge (Ortega Highway, PM 3.08) and the Strawberry Creek Bridge (Pines to Palms Highway, PM 53.45). Both structures are masonry arch bridges with solid masonry parapet railings that were previously determined eligible for listing in the National Register. Project activities would include the removal and replacement of the bridge railings, extensive bridge modification, and/or full bridge replacement. Your office concurred with a finding of adverse effect for the Undertaking on June 8, 2020.

Enclosed, please find a Memorandum of Agreement (MOA) that includes treatment measures to resolve adverse effects to the two bridges. Caltrans has thoroughly considered alternatives to this Undertaking and has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the

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

Julianne Polanco
December 7, 2020
Page 2 of 2

treatments set forth in the enclosed MOA will satisfactorily take into account the Undertaking's adverse effects on the historic property. Caltrans District 8 has a responsibility to fulfill the terms of the MOA and is participating as an invited signatory.

The Undertaking also constitutes uses of a 4(f) property under Section 4(f) of the Department of Transportation Act (23 CFR 774). Caltrans intends to treat this project under the *Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges*, pursuant to Section 6009(a) of SAFETEA-LU. For the purposes of Section 4(f), the SHPO's concurrence on the Finding of Adverse Effect and the Memorandum of Agreement will serve as concurrence on the 4(f) approval.

If you have any questions, please do not hesitate to contact me. We look forward to your response and participation as a signatory on this Memorandum of Agreement.

Sincerely,



DAVID PRICE
Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis

Enc: Draft Memorandum of Agreement for the Route 74 Bridge Upgrade
Project in Riverside County

Cc: Andrew Walters, Environmental Branch Chief, Caltrans District 8
Jill Hupp, PRC 5024 Coordinator, Caltrans Division of Environmental
Analysis

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

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT, RIVERSIDE COUNTY, CALIFORNIA**

WHEREAS, pursuant to §23 U.S.C. the Federal Highway Administration (FHWA), has assigned and California Department of Transportation (Caltrans, including all subordinate divisions defined below) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327*, which became effective on December 23, 2016, and applies to this undertaking; and,

WHEREAS, pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA), Caltrans is deemed to be a federal agency for all highway-aid projects it has assumed, and in that capacity Caltrans has assigned the role of "agency official" to the Caltrans Division of Environmental Analysis (DEA) Chief for the purpose of compliance with 36 CFR § 800. The responsibility for oversight, day-to-day responsibilities, and coordination of the Section 106 process are further delegated to the DEA Cultural Studies Office (CSO) Chief; and,

WHEREAS, Caltrans is proposing the Morrill Canyon Bridge and Strawberry Creek Bridge Replacement Project (Undertaking) to replace the Morrill Canyon Bridge (Bridge 56-0169) and the Strawberry Creek Bridge (Bridge 56-0180) on State Route (SR) 74 in Riverside County, as described in **Attachment A** to this memorandum of agreement (MOA); and

WHEREAS, the Area of Potential Effects (APE) for the Undertaking, included as **Attachment B** to this MOA, has been established as the area in and around the Morrill Canyon Bridge and Strawberry Creek Bridge, as well as the SR-74 roadway on either side of the bridges to accommodate all project activities, including project detours, signage, staging and traffic control. The APE is largely within Caltrans right-of-way, but includes minor private property acquisition; and

WHEREAS, Caltrans has determined that the Undertaking will have an adverse effect on Morrill Canyon Bridge (individually eligible, Criterion C), The Pines to Palms Highway (individually eligible, Criterion A), and the Strawberry Creek Bridge (contributor to the Pines to Palms Highway, Criterion A), properties determined to be eligible for inclusion in the National Register of Historic Places (National Register) and are therefore historic properties as defined at 36 CFR §800.16(I)(1); and

WHEREAS, Caltrans has consulted with the State Historic Preservation Officer (SHPO) pursuant to the Section 106 PA, and, where the Federal-Aid Highway PA so directs, in accordance with 36 CFR Part 800, the regulations implementing Section 106 of the National

Historic Preservation Act of 1966 (54 U.S.C. 4700, as amended (NHPA), regarding the Undertaking's effect on historic properties. Caltrans shall file a copy of this MOA with the Advisory Council on Historic Preservation (ACHP) pursuant to Stipulation X.C.4 of the Federal-Aid Highway PA; and

WHEREAS, Caltrans, in consultation with the SHPO, has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the treatments set forth in **Stipulation II** of this MOA will satisfactorily take into account the Undertaking's adverse effects on historic properties; and

WHEREAS, Caltrans District 8 has participated in the consultation and has been invited to participate in this MOA as an invited signatory; and

WHEREAS, Caltrans has consulted with the United States Forest Service (USFS) regarding the Undertaking and its effects on historic properties and has invited them to participate in the MOA as a concurring party; and

WHEREAS, Caltrans has consulted with the Lake Elsinore Historical Society and the Idyllwild Historical Society regarding the Undertaking and its effect on historic properties and has invited them to participate in the MOA as concurring parties; and

WHEREAS, Caltrans initiated consultation with Pala Band of Mission Indians, Pechanga Band of Luiseno Indians, Rincon Band of Luiseno Indians, and Soboba Band of Luiseno Indians regarding the Undertaking and its possible effects and received no responses indicating concern for cultural resources or interest in further participation in the Section 106 process; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties, and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

Caltrans shall ensure that the following measures are implemented:

STIPULATIONS

I. AREA OF POTENTIAL EFFECTS

- A. The Area of Potential Effects (APE) for the Undertaking is depicted in Attachment B to this MOA. The APE for the Undertaking is discontinuous, and was established to account for all direct/indirect impacts within the project's horizontal and vertical construction footprint at each bridge location. The APE is located predominantly within the Caltrans ROW and encompasses Morrill Canyon Bridge and Strawberry Creek Bridge, the highway leading onto and off of each structure, and any adjacent area that is needed for construction detours, potential realignment, and construction access roads, and four Temporary Construction Easements (TCEs). The width of the APE fluctuates between 30 meters and 49 meters with

the vertical component proposed to extend a maximum of 1.1 meter above the pavement to a maximum depth of 8 meters below pavement for construction of detours.

- B. If modifications to the Undertaking subsequent to the execution of this MOA necessitate the revision of the APE, District 8 will consult with Caltrans and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, District 8, and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with **Stipulation IV.B** below. If Caltrans, District 8, and the SHPO reach mutual agreement on the proposed revisions, then District 8 will submit a final map of the revisions, consistent with the requirements of Stipulation VIII.A and Attachment 3 of the Federal-Aid Highway PA no later than 30 days following such agreement. Any additional required identification and evaluation efforts necessitated due to changes to the APE will be undertaken consistent with the requirements of Stipulation VIII.B and VIII.C of the Federal-Aid Highway PA.

II. TREATMENT OF HISTORIC PROPERTIES

A. Historic American Engineering Record (HAER)

1. Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.
2. Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).
3. Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.
4. Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in 3, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.

- B.** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures

(masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original material will be considered as an option.

- C. Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway..
- D. Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- E. Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in this MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to Stipulation IV.F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of this MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in **Stipulation II.A – II.D** of this stipulation have been met.

III. TREATMENT OF HUMAN REMAINS AND UNANTICIPATED EFFECTS

- A. As legally mandated, human remains, and related items discovered during the implementation of the terms of this Agreement and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to of Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Sections 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined by the California Native American

Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.

- B.** If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13(c) assume any discovered property to be eligible for inclusion in the National Register.

IV. ADMINISTRATIVE PROVISION

A. STANDARDS

1. **Definitions.** The definitions provided at 36 CFR Part 800.16 are applicable throughout this MOA.
2. Parties to this agreement are defined as follows:
 - a. **Signatory parties** have the sole authority to execute, amend, or terminate the MOA.
 - b. **Invited signatories** have the authority to amend or terminate the MOA.
 - c. **Concurring parties** signing the MOA do so to acknowledge their agreement or concurrence with the MOA but have no legal authority under the MOA to terminate or amend the MOA. Concurring with the terms of the MOA does not constitute their agreement with the Undertaking.
3. **Professional Qualifications.** Caltrans will ensure that only individuals meeting the *Secretary of the Interior's Professionally Qualified Standards for Archaeology and Historic Preservation* (48 Federal Register [FR] 44738-39) in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulation II in this MOA.
4. **Documentation Standards.** Written documentation of activities prescribed by **Stipulations I, II, and III** of this MOA shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

B. RESOLVING OBJECTIONS

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection.

Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the 30-day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection. The ACHP shall provide Caltrans with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Caltrans shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring parties, and provide them with a copy of this written response. Caltrans will then proceed according to its final decision.
4. If the ACHP does not provide its advice regarding the dispute within the 30-day time period, Caltrans may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Caltrans shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them to the ACHP with a copy of such written response.
5. Caltrans responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.
6. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

C. AMENDMENTS

1. Any Signatory or Invited Signatory to this MOA may propose that the MOA be amended, whereupon the parties shall consult for no more than 30 days, or as mutually agreed upon by the parties to consider such amendment. The amendment will be effective on the date a copy signed by all of the original Signatories and Invited Signatories is filed with the ACHP. If the parties cannot agree to appropriate terms to amend the MOA, any Signatory or Invited Signatory may terminate the agreement in accordance with **Stipulation IV.D**, below.
2. Attachments to this MOA may be amended through consultation as prescribed in the **Stipulation I**, and **II.E** as appropriate, without amending the MOA proper.

D. TERMINATION

1. If this MOA is not amended as provided for in **Section IV.C.**, or if a Signatory or Invited Signatory proposes termination of this MOA for other reasons, the party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR §800.16(y).
2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall comply with the requirements of 36 CFR 800.3-800.6, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

E. DURATION OF THE MOA

The duration of this MOA shall be no more than five (5) years following the date of execution by the SHPO and Caltrans, or upon completion of the Undertaking, whichever comes first. If the terms are not satisfactorily fulfilled at that time, Caltrans shall consult with the Signatories, Invited Signatories, and Concurring Parties to extend it or to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with Stipulations III through XI of the Section 106 PA if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

F. REPORTING REQUIREMENTS

1. Caltrans shall prepare an Annual Report documenting actions carried out pursuant to this PA. The reporting period shall commence one year from the date of execution. The Annual Report shall be distributed to all consulting parties to this MOA.
2. The Annual Report shall address the following: any scheduling changes proposed, historic property surveys and results, status of treatment and mitigation activities, ongoing and completed public education activities, any uses that are affecting or may affect the ability of the federal agency to continue to meet the terms of this MOA, any disputes and objections received, and how they were resolved, and any additional parties who have become Signatories, Invited Signatories, or Concurring Parties to this MOA in the past year.
3. Caltrans shall coordinate a meeting of the MOA parties to be scheduled within ninety (90) business days of distribution of the Annual Report, or another mutually agreed upon date, to discuss activities carried out pursuant to this MOA during the preceding year and activities scheduled for the upcoming year. This meeting, should it be deemed unnecessary, may be cancelled by mutual consent of the Signatory Parties.

G. EFFECTIVE DATE

This MOA will take effect on the date that it has been executed by the Signatory Parties.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR §800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR §800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(1) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

SIGNATORY PARTY:

California Department of Transportation

By Philip J. Stolarski Date 2/26/21
Philip J. Stolarski, Chief
Division of Environmental Analysis

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

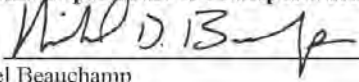
SIGNATORY PARTY:
California State Historic Preservation Officer

By  Date 2/26/21
Julianne Polanco, State Historic Preservation Officer

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

INVITED SIGNATORY:

California Department of Transportation, District 8

By  Date 02/26/2021
Michael Beauchamp
Title: District Director

Chapter 4 Other Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection either because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

Archaeological and historic sites within the Section 106 APE and all public and private parks, recreational facilities, and wildlife refuges within approximately 0.5 mile have been analyzed to determine whether they are protected Section 4(f) resources and whether the project would “use” the properties. There are no wildlife refuges with the 0.5 mile buffer.

4.1 Parks

The Strawberry Creek Bridge is located within the U.S. Forest Service (USFS) San Bernardino National Forest. Strawberry Creek provides recreational activities including fishing with rainbow trout planted twice per month during the spring and early summer months at Highway 243 and downstream near Camp Emerson, according to the USFS San Bernardino National Forest Interactive Visitor Map. A Special Use Permit from the USFS at Strawberry Creek Bridge will be required for the proposed project. The project will not require or result in temporary access impacts to the San Bernardino National Forest. The park will remain open during construction. The recreational activities at Strawberry Creek, including fishing, will not be impacted as these recreational activities occur northeast of the Strawberry Creek Bridge, along SR-243 near Idyllwild, and not at the bridge. A “use” of the parks would not occur as a result of the project and provisions of Section 4(f) are not triggered.

Chapter 5 Additional References

23 CFR 774: Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites
(Section 4(F))

23 CFR 771.135: FHWA Environmental Impact and Related Procedures; Section 4(f)
Technical Advisory T6640.8A, Guidance for Preparing and Processing

Initial Study/Environmental Assessment Annotated Outline, Caltrans. Located at:
<https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/forms-templates>

Section 4(f) Policy Paper, March 1, 2005

United States Department of Agriculture, Forest Service, San Bernardino National Forest.
Website located at: <https://www.fs.usda.gov/sbnf>

FHWA Guidance on Section 4(f) De Minimis

This page was intentionally left blank.

Programmatic Section 4(f) Evaluation

Submitted Pursuant to:

49 U.S.C. 303

SR-74 Bridge Replacement Project

Bridge No. 56-0169 and 56-0180

Riverside County, California

08-RIV-74 PM 2.9/3.2 & 53.3/53.5

California Department of Transportation, District 8



The environmental review, consultation, and any other action required in accordance with applicable federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 United States Code (U.S.C.) 327.

March 2021

SR-74 Bridge Replacement Project

RIVERSIDE COUNTY, CALIFORNIA
08-RIV-74-PM 2.9/3.2 & 53.3/53.5

EA 1G470/ 0816000001

PROGRAMMATIC SECTION 4(F) EVALUATION

Submitted Pursuant to:

49 USC 303

THE STATE OF CALIFORNIA

Department of Transportation as assigned

| The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

Contents

Chapter 1	Introduction	1-1
Chapter 2	Description of Proposed Project and Alternatives	2-1
2.1	Project Purpose and Need	2-1
2.1.1	Project Purpose	2-1
2.1.2	Project Need	2-1
2.2	Project Description/Alternatives	2-2
2.2.1	Alternatives	2-2
2.3	Description of Section 4(f) Property	2-9
2.4	Morrill Canyon Bridge	2-10
2.5	Strawberry Creek Bridge	2-10
2.5.1	Impacts on Section 4(f) Properties	2-17
2.5.2	Applicability of the Programmatic Section 4(f)	2-20
2.5.3	Avoidance Alternatives and Other Findings	2-22
2.5.4	Measures to Minimize Harm to the Section 4(f) Property	2-33
2.5.5	Coordination	2-36
Chapter 3	Letters and Other Correspondence	3-1
Chapter 4	Other Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)	4-1
4.1	Trails	4-1
4.2	Parks	4-1
Chapter 5	Additional References	5-1

List of Figures

Figure	On Page
Figure 1 Regional Vicinity	2-5
Figure 2 Project Location	2-7
Figure 3A Morrill Canyon Bridge APE	2-13
Figure 3B Strawberry Creek Bridge APE	2-15
Figure 4 Morrill Canyon Bridge Avoidance Alternative (Sheet 1 of 2)	2-27
Figure 4 Morrill Canyon Bridge Avoidance Alternative (Sheet 2 of 2)	2-29
Figure 5 Strawberry Creek Bridge Avoidance Alternative	2-31

List of Tables

Table 2-1, Resources Listed Eligible for Listing in the National Register of Historic Places	2-9
--	-----

Acronyms and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BMPs	Best management practices
CRHR	California Register of Historical Resources
DIB	Design Information Bulletin
DPR	Department of Parks and Recreation
EBL	Eligible Bridge List
FHWA	Federal Highway Administration
FOE	Finding of Effect
FTIP	Federal Transportation Improvement Program
HAER	Historic American Engineering Record
HBP	Highway Bridge Program
MLD	Most Likely Descendent
MOA	Memorandum of Agreement
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NPS	National Parks Service
NRHP	National Register of Historic Places
SANBAG	San Bernardino Associated Governments
SD	Structurally Deficient
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
USFS	U.S. Forest Service
USGS	U.S. Geological Survey

Chapter 1 Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303 (including 23 USC 138, and 23 CFR 774) declares that “it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.”

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

This page intentionally left blank.

Chapter 2 Description of Proposed Project and Alternatives

2.1 Project Purpose and Need

2.1.1 Project Purpose

The purpose of the project is to ensure the safety and mobility for the traveling public by replacing the aging structures and upgrading the bridge rails at Morrill Canyon Bridge and Strawberry Creek Bridge, in order to provide continued connectivity along SR-74.

2.1.2 Project Need

The Morrill Canyon Bridge and Strawberry Creek Bridge were initially identified for bridge rail upgrade or replacement in 1984. Due to the number of rail upgrade/replacement needs statewide, the bridge structures have been prioritized based on traffic volume and geometrics. The Structure Replacement and Improvement Needs (STRAIN) Report, dated October 2014, also identifies several longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arches. In addition, both structures have nonstandard lane and shoulder width. Due to the significant deterioration and nonstandard features, there is a need to replace these structures to meet current design, crash, and safety standards.

The condition of the bridge structures are described in the Bridge Inspection Reports based on routine inspection on each of the bridges performed in August 2013. The following findings were noted:

Morrill Canyon Bridge (Bridge No. 56-0169):

- Bridge rails do not meet current federal crash standards.
- There are longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arch.
- The existing shoulder and lane width do not comply with current design standards.
- This bridge structure was built in 1931 and has exceeded its useful design life.
- Cross sectional area of the bridge is not capable of accommodating 50-and 100-year storm events.

Strawberry Creek Bridge (Bridge No. 56-0180):

- Bridge rails do not meet current federal crash standards.
- There are moderate transverse and map AC cracks throughout the deck.
- Minor to moderate longitudinal and transverse soffit cracks (less than 0.05 inches wide and 5 foot spacing) with efflorescence.
- The existing shoulder and lane width do not comply with current design standards.
- This bridge structure was built in 1929 and has exceeded its useful design life.
- Cross sectional area of the bridge is not capable of accommodating 100-year storm events.

2.2 Project Description/Alternatives

2.2.1 Alternatives

2.2.1.1 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, no new or modified bridge or other physical improvements would be constructed on SR-74 at Morrill Canyon Bridge or Strawberry Creek Bridge. The Morrill Canyon Bridge was built in 1931 and has exceeded its useful design life. The Strawberry Creek Bridge was built in 1929 and has also exceeded its useful design life. The existing bridges would be left in its current condition, and no structural or functional deficiencies would be corrected. Ongoing maintenance would continue.

The No-Build Alternative would not meet the project purpose and need as previously described.

2.2.1.2 PROPOSED BUILD ALTERNATIVES

The project proposes to replace Morrill Canyon Bridge and Strawberry Creek Bridge in Riverside County. Both bridge locations are in unincorporated areas and not within the boundaries of a town, municipality, or city. The Morrill Canyon Bridge is in the Santa Ana mountain range and within the jurisdiction of the Cleveland National Forest, and the Strawberry Creek Bridge is located in the San Jacinto mountain range within the jurisdiction of the San Bernardino National Forest. The nearest town to Morrill Canyon Bridge is the town of El Cariso and the nearest town to Strawberry Creek Bridge is the town of Mountain Center. The project has a no-build alternative, Morrill Canyon Bridge has one alternative and Strawberry Creek Bridge has two alternatives. In order to replace each structure, the project would construct a

temporary bridge at each location, detour traffic from the existing bridge to the temporary bridge, or depending on the alternative, use part of the existing bridge for reverse traffic control, remove the existing structure, and construct the proposed bridge.

Morrill Canyon Bridge Alternative M1

- Alternative M1 (12-foot lane in each direction, 2-foot median, and 8-foot shoulders);

The Morrill Canyon Bridge alternative involves reconstructing the approach of the roadway to the bridge ends, a new bridge rail that will match the current aesthetics of the structure, reconstructing 1 overside drain system, new Midwest Guardrail System (MGS), 12-inch rumble strip, and temporary two-lane detour bridge to be built on the south side of the bridge for detour and to avoid the Cleveland National Forest. Regrading of the access driveway to Tenaja Truck Trail will also occur with a staging area at PM 2.9.

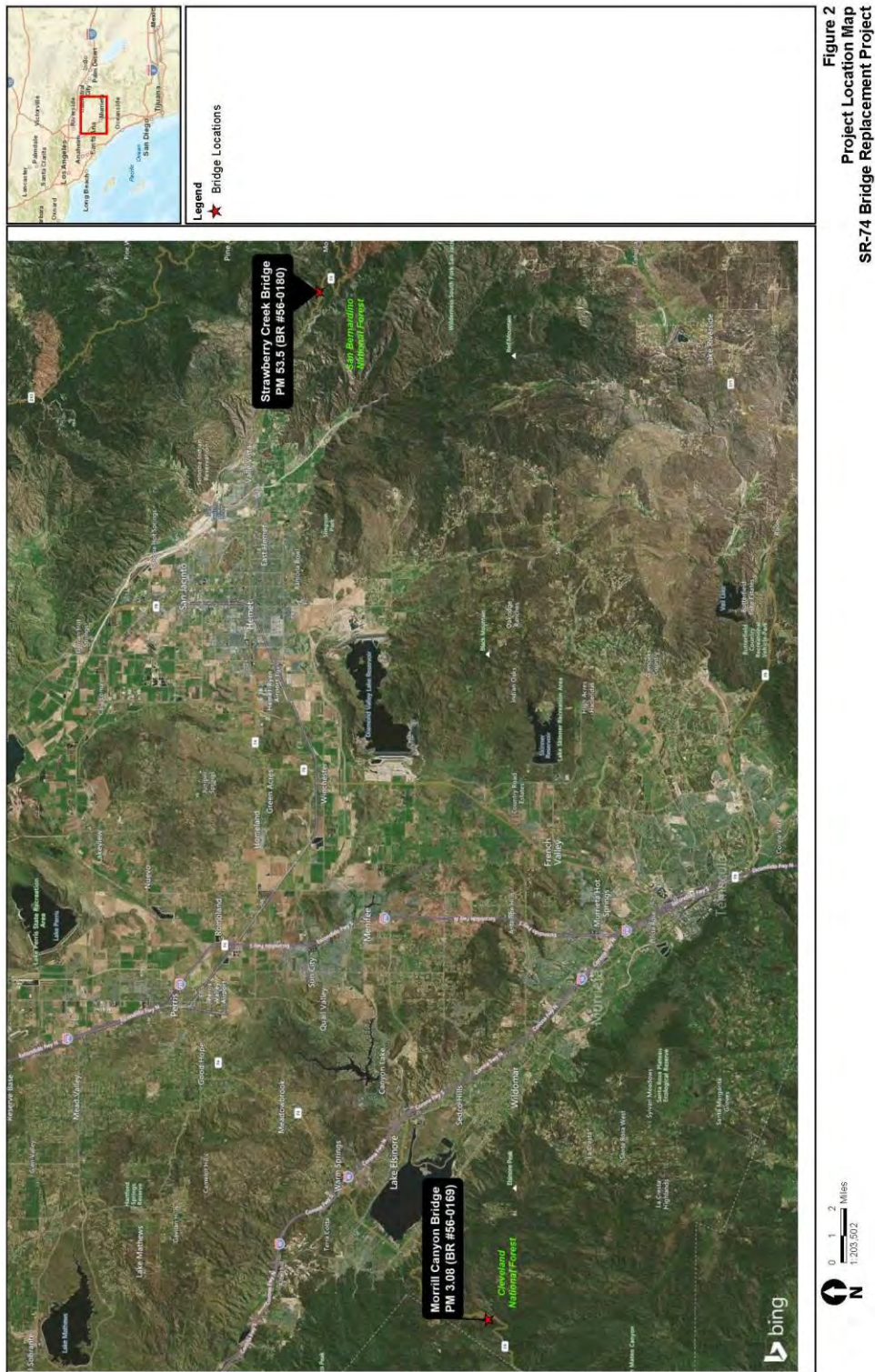
Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3

- Alternative S1 (Preferred Alternative) – The proposed alignment for this alternative will be approximately 13-feet south of the existing yellow stripe. Reverse traffic control will be utilized for all stages of construction. As such, no temporary detour bridge would be required. This alternative would result in 12-foot lanes in each direction and standard 8-foot shoulders, reconstructing the roadway approach to the bridge's approach slabs, new bridge rail that will match the current aesthetics of the structure, reconstructing 2 overside drain systems, and new MGS. A staging area would be located at PM 53.65.
- Alternative S3 – The proposed alignment would be designed to closely match the existing yellow stripe to minimize the permanent impacts. A two-way detour is proposed approximately 42.5-feet south of the existing yellow stripe to maintain traffic flow during construction. This alternative will result in a larger temporary environmental impact footprint compared to Strawberry Creek Bridge Alternative S1 (Preferred Alternative). This alternative involves 12-foot lanes in each direction and standard 8-foot shoulders, reconstructing the roadway approach to the bridge's approach slabs, new bridge rail that will match the current aesthetics of the structure, reconstructing 1 overside drain system, new MGS, and constructing two-way traffic detour bridge with temporary pavement approach to accommodate 11-foot lanes, 1-foot shoulder, and temporary railing. A staging area would also be located at PM 53.65.

This page was intentionally left blank.



This page intentionally left blank.



This page intentionally left blank.

2.3 Description of Section 4(f) Property

Resources subject to Section 4(f) consideration include publicly owned lands consisting of a public park/recreational areas; public wildlife and waterfowl refuges of national, state, or local significance; or historic sites of national, state, or local significance, whether publicly or privately owned. The San Juan Loop Trailhead and Bear Canyon Trailhead are Section 4(f) resources within the project vicinity, however, no use of these resources would occur due to implementation of the proposed project. Strawberry Creek also offers recreational activities for fishing and would be considered a Section 4(f) resource. No use of Strawberry Creek would occur due to implementation of the proposed project. These resources would not be affected by the proposed project, access would not be affected to these resources, and no changes to the use of these resources would occur as a result of the project. Refer to Section 2.1.1 of the ISEA for further details on parks and recreational facilities.

There are significant historic sites in the project area that are considered to be Section 4(f) resources. Under Section 4(f), a significant historic site is defined as on, or eligible for listing in the NRHP. The resources that are on the list or eligible for listing are provided in Table 2-1:

Table 2-1. Resources Listed or Eligible for Listing in the National Register of Historic Places

Identification, Name	Location, Description	Use	Significance
CA-RIV-10575H (P-33-006976)	Strawberry Creek Bridge No. 56-0180	Yes	Eligible for NRHP
CA-RIV-10574H (P-33-007236)	Morrill Canyon Bridge No. 56-0169	Yes	Eligible for NRHP
CA-RIV-8089H(P-33-015321)*	Pines-to-Palms Highway	Yes	Eligible for NRHP
Source: Historic Property Survey Report, August 2020.			
Notes:			
* = The Pines-to-Palms Highway is analyzed separately in the Individual Section 4(f) Evaluation.			

This section will discuss only the Section 4(f) resources in which a “use” occurs. Use occurs when 1) the property is acquired for a transportation project, 2) there is an occupancy of land that is adverse to the preservationist purpose of Section 4(f), or 3) there is a proximity impact that substantially impairs the purpose of the land.

As indicated by the table, a use of the Morrill Canyon Bridge and Strawberry Creek Bridge occurs as part of the project. A use of the San Juan Loop Trailhead, Bear Canyon Trailhead, and Strawberry Creek does not occur as part of the project, and a discussion of these resources is included under Section 4, “Other Parks, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)”.

2.4 Morrill Canyon Bridge

The most western portion of the project is located about four miles southwest of Lake Elsinore, near where the Santa Ana Mountains and Elsinore Mountains meet at San Juan Canyon, and the juncture of these two ranges facilitates precipitation within the project area. Both Decker Creek and Morrill Creek drain off the back southwest side of the Elsinore range, and are tributaries of San Juan Creek. The level of precipitation averages between 12 to 16 inches of rain per year. Summers are hot and dry, countering the cool and moist winters. Plant species in the area consists of but not limited to: Jeffrey pine (*Pinus jeffreyi*), ponderosa pine (*Pinus ponderosa*), manzanita (*Arctostaphylos*), California lilac (*Ceanothus spp.*), chinquapin (*Chrysolepis*), California sagebrush (*Artemisia californica*), white sage (*Salvia apiano*), and California buckwheat (*Eriogonum fasciculatum*).

Morrill Canyon Bridge is an earth-filled masonry closed-spandrel span with a concrete-lined arch. The bridge was built in 1931 on Ortega Highway, a named portion of SR-74 located between San Juan Capistrano in Orange County and Lake Elsinore in Riverside County. The bridge also has a solid masonry parapet railing that is integral with the spandrel and wing wall, as well as low masonry curbs or “wheel guards” along the inside of the railing that were not an unusual feature for bridges built during this time period. The bridge is located over a small tributary of San Juan Creek that flows through Morrill Canyon. The dimensions of the bridge are noted in the HPSR as being 36-feet in total length with a roadway width of 24-feet pavement with 6-inch stone curbs. The arch width is 30-feet 6-inches measured across the channel at foundation level, and a height of 9-feet measured from the center of the stream channel up to the center of the arch ring. The bridge was determined eligible as part of the 2003 Caltrans Survey and Evaluation of Masonry Arch Bridges as a significant example of a rare type; a closed-spandrel masonry arch bridge. The State Historic Preservation Officer (SHPO) concurred to the results of that evaluation in May 2004. This resource is state-owned and noted as a Category 2 (eligible) structure in the State Historic Bridge Inventory.

2.5 Strawberry Creek Bridge

The most eastern portion of the project is situated on the southwest side of the San Jacinto Mountains about four miles southwest of Idyllwild. Compared with Morrill Canyon, the Strawberry Creek drains the largest area, including both Strawberry and Fern Valleys, to its sources at the southwest facing base of Marion Mountain and Lilly Rock. The general environment of the APE and the surrounding region is dictated by the Mediterranean climate with hot, dry summers, and mild, wet winters, typical of southern California. Temperatures reach well over 100 degrees Fahrenheit in summer, and dip to near freezing in the winter. The average

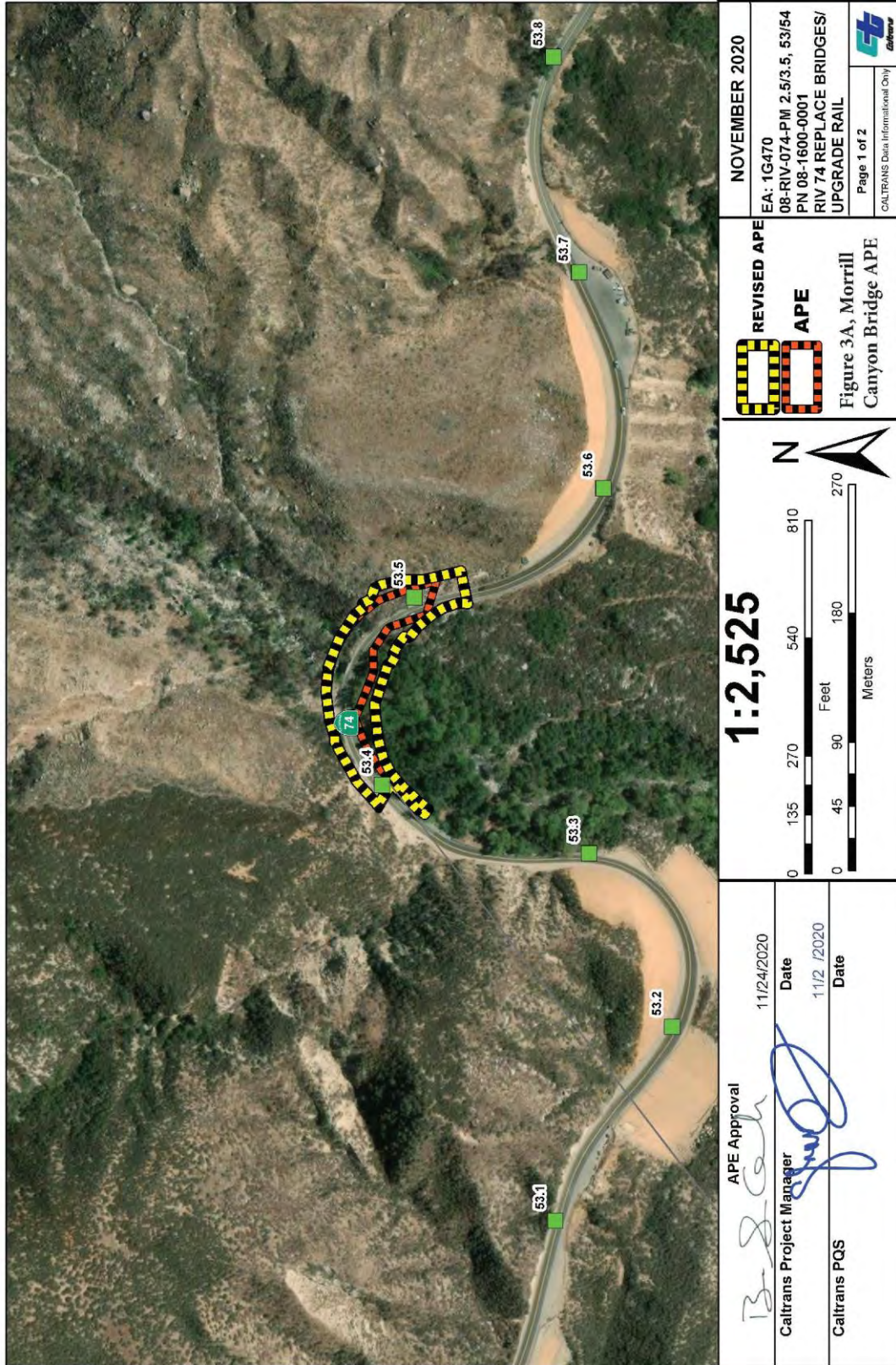
annual rainfall is approximately 16 inches. Plant species in this portion of the study area consists mainly of Russian thistle (*Salsola tragus*), sunflower (*Helianthus californicus*), mulefat (*Baccharis salicifolia*), willow (*Salix lasiolepis*), buckwheat (*Eriogonum fasciculatum*), tree tobacco (*Nicotiana glauca*), datura (*Datura wrightii*), foxtail (*S. Faberi*), arrow weed (*Pluchea sericea*), and cottonwood (*Populus fremonti*).

Strawberry Creek Bridge is a masonry (stone and concrete) arch bridge built in 1929. It is located over Strawberry Creek which flows perpendicular to SR-74 in the western-central portion of Riverside County in the San Jacinto Mountains. The total length of the bridge is 48-feet 6-inches with a roadway width of 23-feet. The arch width is 37-feet 8-inches measured across the channel at the foundation level, with a height of 12-feet measured at the center of the channel up to the center of the arch ring. The bridge is a contributing element to the overall NRHP eligibility of the Pines to Palms Highway, which was created as a scenic travel way linking the mountain areas with the increasingly popular desert resorts, vacation, and health facilities around Rancho Mirage, Indian Wells, and Palm Desert. This closed-spandrel masonry and concrete arch bridge is state-owned and noted as a Category 2 (eligible) structure in the State Historic Bridge Inventory.

See Figure 3A, 3B, and 3C for the APE map which shows the Morrill Canyon Bridge and Strawberry Creek Bridge.

This page intentionally left blank.

REVISED AREA OF POTENTIAL EFFECTS (APE)
FOR EA :1G470: RIV 74 REPLACE BRIDGES/UPGRADE GUARDRAIL
STATE ROUTE 074-PM 2.5/3.5, 53/54 IN RIVERSIDE COUNTY



This page was intentionally left blank.

REVISED AREA OF POTENTIAL EFFECTS (APE)
FOR EA: 1G470: RIV 74 REPLACE BRIDGES/UPGRADE GUARDRAIL
STATE ROUTE 074-PM 2.5/3.5, 53/54 IN RIVERSIDE COUNTY



<p>1:2,525</p> <p>0 135 270 540 810</p> <p>0 45 90 180 270</p> <p>Feet Meters</p>		<p>REVISED APE</p> <p>APPE</p> <p>Figure 3B, Strawberry Creek Bridge APE</p>	<p>NOVEMBER 2020</p> <p>EA: 1G470 08-RIV-074-PM 2.5/3.5, 53/54 PN 08-1600-0001 RIV 74 REPLACE BRIDGES/ UPGRADE RAIL</p> <p>Page 2 of 2</p> <p>CALTRANS DIST INFORMATIONAL ONLY</p>
<p>APE Approval</p> <p>11/24/2020</p> <p>Date</p>		<p>Caltrans Project Manager</p> <p>11/2 /2020</p> <p>Date</p>	
<p>Caltrans PQS</p>		<p>Caltrans</p>	

This page was intentionally left blank.

2.5.1 Impacts on Section 4(f) Properties

2.5.1.1 BUILD ALTERNATIVES

Morrill Canyon Bridge Alternative M1, Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3

Facilities, Functions, and/or Activities Potentially Affected

Morrill Canyon Bridge and Strawberry Creek Bridge are located within the USFS Cleveland National Forest and San Bernardino National Forest. Construction of the build alternatives would result in short-term construction-related traffic delays along SR-74 in the vicinity of the two bridges. Under each of the build alternatives, removal of the Morrill Canyon Bridge and Strawberry Creek Bridge would constitute an adverse effect.

Accessibility

Under the build alternatives for Morrill Canyon Bridge and Strawberry Creek, the following would likely occur: temporary impacts due to construction-related traffic delays along SR-74 in the area of Morrill Canyon Bridge, and Strawberry Creek Bridge. A two-way traffic detour south of the existing Morrill Canyon Bridge would maintain traffic flow for Morrill Canyon Bridge Alternative M1. At the Strawberry Creek Bridge, a reverse traffic control with temporary traffic signal would be utilized for Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and a two-way traffic detour south of the existing bridge would be utilized for Strawberry Creek Bridge Alternative S3 to maintain traffic flow and accessibility. These impacts are not related to the historic value of the Morrill Canyon Bridge, or Strawberry Creek Bridge.

Visual

Under each of the build alternatives, possible visible changes associated with a new structure would include vegetation and tree removal to accommodate the increased width of the new bridges. Furthermore, under each of the build alternatives, the new bridge rail will be built to match the current aesthetics of the structure.

Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3 would result in bridge replacement, which would constitute an adverse effect. Based on the proposed construction methods and the application of the Criteria of Adverse Effect, Caltrans has determined that there are historic properties that would be affected pursuant to Section 106 PA Stipulation IX.B, and that the project would have an adverse effect on the Morrill Canyon Bridge, and the Strawberry Creek Bridge. All consist of built-environment resources that are considered elements of, or connect to, the highway in some manner.

Noise

Under each of the build alternatives, the following would likely occur: (1) a temporary increase in community noise due to use of construction equipment and vehicles during construction activities. This impact is not related to the historic value of the Morrill Canyon Bridge, or Strawberry Creek Bridge.

Air Quality

Under this alternative, the following would likely occur: (1) disturbance of asbestos containing materials (ACMs); (2) increases in construction-related emissions; and (3) potential diesel health risk from construction activities. These impacts are not related to the historic value of the Morrill Canyon Bridge, or Strawberry Creek Bridge.

Water Quality

The following temporary construction-related impacts could occur (1) release of hazardous materials [this effect is unlikely as explained further in the Initial Study/Environmental Assessment (IS/EA) prepared for the project]; (2) excavation of earthwork, resulting in an increase in surface water runoff, erosion, and increased pollution to local surface waters due to increased sediment loadings or discharge of construction-related pollutants (this effect is unlikely as explained further in the IS/EA for the project). These temporary construction-related impacts are not related to the historic value of the Morrill Canyon Bridge, or Strawberry Creek Bridge.

Morrill Canyon Bridge Alternative M1, and Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3 is not expected to permanently nor substantially affect the quantity or quality of surface water in the study area. Although the alternatives would result in a bridge that is wider than the existing structure, resulting in a slight increase in impervious surfaces and contributing to an increase in the amount of onsite runoff, BMPs would be implemented. Additionally, this alternative would not alter the existing drainage patterns beyond a potentially slight increase in surface runoff. No permanent impacts would occur.

Vegetation

Clearing, grubbing, and bridge pier construction as a result of Morrill Canyon Bridge Build Alternative M1, and Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3 are anticipated to directly impact Southern Coast Live Oak Riparian Forest within the Morrill Canyon Bridge project impact area (PIA) and Southern Sycamore Alder Riparian Woodland in the Strawberry Creek Bridge PIA. Areas where the proposed lane widening, shoulder widening, the placement of the upgraded guard rails and/or any other associated or required project construction encroaches on to undeveloped/undisturbed natural vegetation communities are considered permanent impacts. Temporary impacts would generally be caused by access for construction equipment and grading limits. The project will also have the potential to impact San

Miguel savory, summer holly, mesa horkelia, intermediate monardella, and southern mountains skullcap for which suitable habitat is present within the Morrill Canyon biological study area (BSA) and San Jacinto mariposa-lily, Plummer's mariposa-lily, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California beardtongue, and southern mountains skullcap for which suitable habitat is present within the Strawberry Creek BSA. To ensure that the project will not impact special-status plant species with suitable habitat present in the BSA, avoidance and minimization measures will be implemented. The impacts to vegetation and plant species is not related to the historic value of the Morrill Canyon Bridge, or Strawberry Creek Bridge

Wildlife

Clearing, grubbing, and construction noise have the potential to impact wildlife species including nesting birds. Clearing and grubbing would remove vegetation where shoulder widening will occur, which would decrease foraging and nesting habitat availability for avian species. The project is anticipated to permanently impact suitable habitat for southern mountain yellow-legged frog in the Strawberry Creek Bridge PIA and habitat occupied by Coast Range newt and arroyo toad in the Morrill Canyon Bridge BSA. Arroyo toad and Coast Range newt also have the potential to be crushed by construction equipment during construction activities. Decreasing slopes in the area adjacent to Morrill Canyon Bridge could potentially allow adult arroyo toads to climb up slopes and access the roadway which would result in higher mortalities or injuries for the species on SR-74. No day-roosting habitat for bats is present within either of the two bridge structures, however, day roosting habitat is present in the foliage, crevices, or cavities of mature trees and snags that will be removed during clearing associated with the installation of the temporary bridges for Morrill Canyon Bridge Alternative M1 and Strawberry Creek Bridge Alternative S3.

The project bridges and their corresponding BSAs are located within the Western Riverside County Multiple Species Habitat Conservation Plan (WRCMSHCP). The MSHCP resources detected during the surveys in the Morrill Canyon Bridge BSA include arroyo toad and Coast Range newts, which are anticipated to be impacted by this project. The project will impact mountain yellow-legged frog habitat in the Strawberry Creek Bridge PIA.

The impacts to wildlife species is not related to the historic value of the Morrill Canyon Bridge, or Strawberry Creek Bridge.

2.5.1.2 NO-BUILD ALTERNATIVE

Facilities, Functions, and/or Activities Potentially Affected

No replacement of Morrill Canyon Bridge or Strawberry Creek Bridge would occur.

Maintenance activities would continue, however, no construction-related impacts would occur with the No-Build Alternative.

Accessibility

As there would be no construction on the bridges, traffic-related delays along SR-74 would not occur. Accessibility along the bridges would remain the same and maintained as currently experienced.

Visual

Under the No-Build Alternative, bridge replacement would not occur; therefore, impacts on visual setting/aesthetic conditions would not occur.

Noise

Under the No-Build Alternative, bridge replacement would not occur; therefore, impacts from noise would not occur.

Air Quality

Under the No-Build Alternative, bridge replacement would not occur; therefore, impacts on air quality would not occur.

Water Quality

Under the No-Build Alternative, bridge replacement would not occur; therefore, impacts on water quality would not occur.

Vegetation

Under the No-Build Alternative, bridge replacement would not occur; therefore, impacts on vegetation would not occur.

Wildlife

Under the No-Build Alternative, bridge replacement would not occur; therefore, impacts on wildlife would not occur.

2.5.2 Applicability of the Programmatic Section 4(f)

As an alternative to preparing a full individual Section 4(f) evaluation, a programmatic evaluation may be utilized. Programmatic Section 4(f) evaluations streamline the documentation and approval process and amount of interagency coordination that is required for an individual Section 4(f) evaluation. Draft and final evaluations do not need to be prepared and FHWA legal sufficiency review is not required. Interagency coordination is required only with the official(s) with jurisdiction and not with DOI, USDA, or HUD. If any of the following conditions exist, use of any of the programmatic applications do not apply:

- Construction of transportation facilities on new alignment;

- Projects for which an EIS is prepared (does not apply to the Net Benefit Programmatic);
- Specific conditions of each type of programmatic application are not met;
- Projects with one or more Section 4(f) uses that do not meet the criteria for use of any of the programmatic 4(f)s; or
- Proximity impacts resulting in constructive use are involved.

Caltrans, as assigned by FHWA, has determined that certain highway projects may comply with the requirements of Section 4(f) under a nationwide programmatic evaluation rather than through an individual evaluation. Five nationwide programmatic Section 4(f) evaluations are available. One covers projects that use historic bridges. The second covers projects that use minor amounts of land from parks, recreational areas, and wildlife and waterfowl refuges. The third covers projects that use minor amounts of land from historic sites. The fourth covers independent walkway and bikeway projects. The fifth applies when there is a net benefit to a Section 4(f) property. For the historic bridge programmatic Section 4(f) Evaluation, the project must meet the conditions for all programmatic 4(f) applications (above) with regard to the type of project, lack of proximity impacts resulting in a constructive use, and the type of environmental document and all of the following conditions:

- The bridge is to be replaced or rehabilitated using federal funds;
- The bridge must listed on or eligible for listing on the National Register of Historic Places;
- The bridge cannot be a National Historic Landmark;
- Caltrans, as delegated by FHWA, determines that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Mitigation; and
- Caltrans, SHPO, and the ACHP must have reached agreement through full implementation of the Section 106 process on project effects and a Memorandum of Agreement on mitigation measures.

The project meets the applicability criteria for the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges (1983) because:

- All build alternatives for the project is eligible for Federal-aid funding;
- The Morrill Canyon Bridge is a Category 2 bridge and eligible for the National Register of Historic Places (NRHP);
- The Strawberry Creek Bridge is a Category 2 bridge and eligible for the NRHP;
- The Morrill Canyon Bridge and Strawberry Creek Bridge is not a National Historic Landmark; and
- Caltrans, as delegated by FHWA, has determined that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Mitigation.

The historic bridges covered by this Programmatic Section 4(f) Evaluation are historic, yet also part of either a Federal-aid highway system or a state or local highway system. The programmatic evaluation can be used because, even though historic bridges are on or eligible for inclusion on the NRHP, the bridges must perform as an integral part of a modern transportation system.

The programmatic evaluation acknowledges that the project will impair the historic integrity of the bridge by replacement/demolition. If the project meets the certain conditions as outlined in requirements for this programmatic evaluation, it will satisfy the requirements of Section 4(f) and confirm there is (1) no feasible and prudent alternative and (2) that the project includes all possible planning to minimize harm.

At the time the FONSI is signed, the Department will also approve this Programmatic Section 4(f) Evaluation based on SHPO approval of the Memorandum of Agreement (MOA) which occurred after public circulation of the environmental document. An executed MOA details the stipulations required to resolve the adverse effects of the undertaking on these Historic Properties, as required by CFR 800 and the Section 106 Programmatic Agreement. The MOA was executed on February 26, 2021 between Caltrans and SHPO. The text that follows is supporting documentation for Caltrans' determination.

2.5.3 Avoidance Alternatives and Other Findings

The following alternatives avoid any use of the historic bridge:

1. Do Nothing.
2. Build a new structure at a different location without affecting the historic integrity of the existing Morrill Canyon Bridge, as determined by procedures implementing the National Historic Preservation Act (NHPA).
3. Build a new structure at a different location without affecting the historic integrity of the existing Strawberry Creek Bridge, as determined by procedures implementing the NHPA.

Under the Do Nothing Alternative, no new replacement bridge or other physical improvements would be constructed at Morrill Canyon Bridge or Strawberry Creek Bridge. The existing bridges would be left in its current condition, and no structural or functional deficiencies would be corrected. Ongoing maintenance would continue. The Do Nothing Alternative does not assume that the existing bridge would undergo seismic retrofitting.

The Do Nothing Alternative fails to address the project purpose and need and provides none of the project benefits cited with the project. This alternative would maintain the existing bridge structures with nonstandard bridge rails, lane widths and shoulder widths. The bridge structures

for Morrill Canyon Bridge and Strawberry Creek Bridge have exceeded their useful design life and will deteriorate further resulting in operational deficiencies and will necessitate future costly maintenance measures. With no improvements, there is no capital cost for this alternative. However, there would be continued costs associated with maintenance, periodic rehabilitation, and safety and operational improvements to the existing facility.

- **Maintenance**—The Do Nothing Alternative does not correct the situation that causes the bridge to be considered deficient and not meet current federal crash standards and design standards or deteriorated. These deficiencies would not offer protection to errant vehicles and do not result in a safer bridge rail configuration. Normal maintenance is not considered adequate to cope with the situation.
- **Safety**—The Do Nothing alternative does not correct the situation that causes the bridge to be considered deficient.

Replacement of the Morrill Canyon Bridge and Strawberry Creek Bridge is necessary because the current facility exhibits structural and functional deficiencies. The deficient conditions of the bridge structures are described in the Bridge Inspection Reports based on routine inspection of each of the bridges performed in August 2013. The Structure Replacement and Improvement Needs (STRAIN) Report, dated October 2014, also identifies several longitudinal and transverse cracks with efflorescence and minor spalls on the soffit of the arches.

Due to the significant deterioration and nonstandard features, there is a need to replace these bridge structures to meet current design, crash, and safety standards.

New Bridge with Permanent Alignment South while Preserving the Existing Morrill Canyon Bridge. With this alternative it is proposed to preserve the existing masonry arch bridge by realigning the roadbed approximately 62-feet south of the existing Morrill Canyon Bridge and resulting in the total realignment length of 2,400 feet. The new bridge would have two 12-foot lanes, 2-foot median buffer and 8-foot shoulders.

With this alignment, the replacement bridge would be located on the upstream side and approximately 20-feet away from the existing masonry arch Morrill Canyon Bridge to minimize the backwater effects on the new bridge including excess of unnaturally high stage of stream caused by under capacity to convey the water of the existing bridge on the downstream during major storm events. This alternative would have the largest environmental footprint when compared with the Morrill Canyon Bridge Alternative M1 and M2 and would affect several private owned parcels instead of 1 parcel with Morrill Canyon Bridge Alternative M1 and M2.

The upstream side of the channel, located west of the existing bridge along the eastbound travel lanes, runs almost parallel with the existing roadbed. As a result, a part of the new alignment will

fall within the upstream channel resulting in a 380-foot long bridge to span over the channel. Compared with the Morrill Canyon Bridge Alternative M1 and M2 with a proposed bridge length of 35-feet, the bridge length for this alternative is more than 10 times longer and would increase the structure cost and ultimately increase the total construction capital cost. Furthermore, part of this alignment, east of the replacement bridge on the eastbound travel, would cut through the existing hillside and would result in significant excavation. The roadway work is anticipated to add a significant cost increase to the total construction capital cost due to the proposed 2,400-foot realignment and additional construction days.

By preserving the existing masonry arch Morrill Canyon Bridge, Caltrans would assume future liability and maintenance issues due to the possibility of the structure deteriorating over time or damage caused by major flooding and storm events.

It is not feasible or prudent to construct a new bridge adjacent to or away from the existing bridge due to the significant environmental, right of way, total construction capital costs, and schedule delays due to design issues associated with this alternative.

New Bridge with Permanent Alignment South while Preserving the Existing Strawberry Creek Bridge. This alternative would preserve the existing masonry arch Strawberry Creek Bridge and realign the roadbed approximately 54-feet south of the existing bridge with a total realignment length of 1,800-feet. The new bridge would have two 12-foot lanes and 8-foot shoulders.

With this alignment, the new bridge would be located on the downstream side and approximately 20-feet from the existing masonry arch Strawberry Creek Bridge so as to avoid the overtopping flow of the existing bridge onto the new replacement bridge during a major storm event. This alternative would consist of the largest footprint compared with Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3 and would require more than 100-feet in width of Special Use Permit from the USFS. The realignment would also result in an 85-foot bridge compared with a 50-foot bridge as proposed in Strawberry Creek Bridge Alternative S1 (Preferred Alternative) and S3. This would result in an increase in the structure cost and ultimately would result in increasing the total construction capital cost. Furthermore, portions of this alignment, east of the replacement structure on the westbound travel lanes would cut through the existing hillside resulting in significant excavation. This hillside, based on visual assessment, is susceptible to rock fall. Due to these issues, moving the roadway closer to the cut slope would require additional measures. The construction related to the roadway is anticipated to add significant cost increases to the total construction capital cost due to the total realignment length of 1,800-feet and would result in longer construction times.

By preserving the existing masonry arch Strawberry Creek Bridge, Caltrans would also assume the liability and future maintenance issues due to the potential for structure deterioration and/or damage caused by major storm events.

For the above mentioned reasons, it is not feasible or prudent to construct a new bridge adjacent to or away from the existing bridge due to the significant environmental, right of way, total construction capital costs, and extended length of construction due to design issues associated with this alternative.

This page intentionally left blank.



This page intentionally left blank.

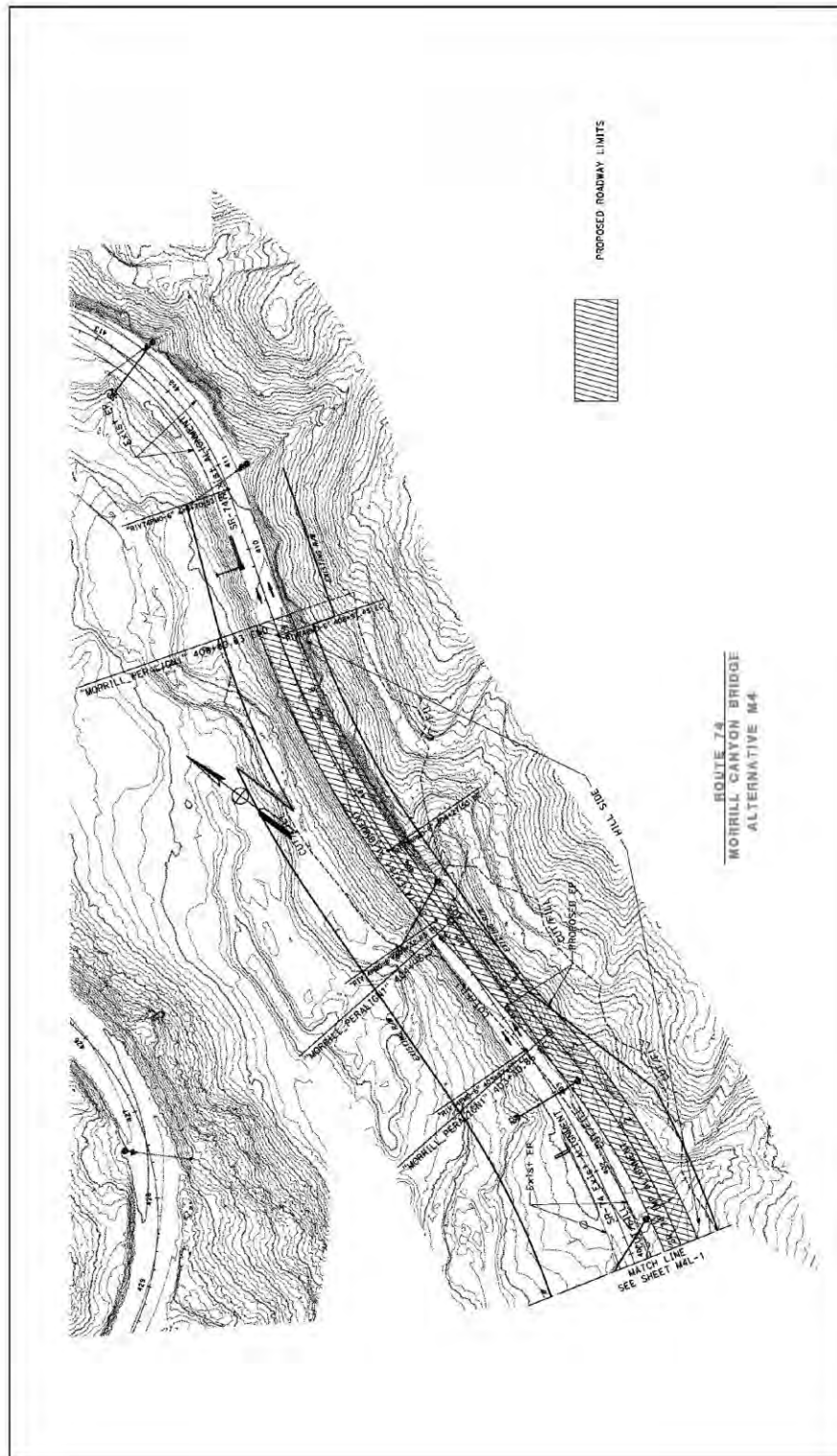


Figure 4, Sheet 2 of 2
Morrill Canyon Bridge Avoidance Alternative
SR-74 Bridge Replacement Project

This page intentionally left blank.

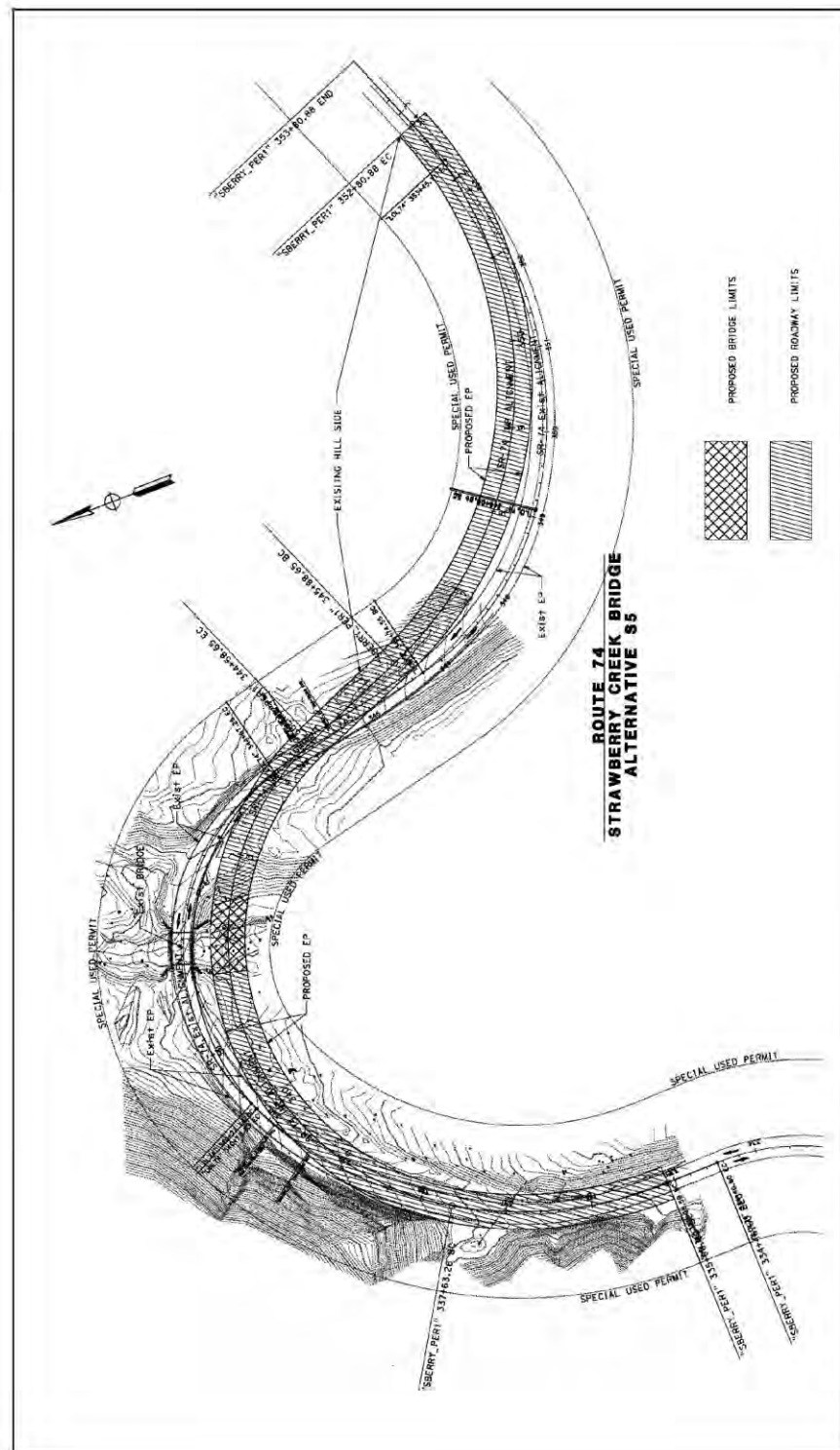


Figure 5
Strawberry Creek Bridge Avoidance Alternative
SR-74 Bridge Replacement Project

This page intentionally left blank.

2.5.4 Measures to Minimize Harm to the Section 4(f) Property

As part of the Section 106 process, a Memorandum of Agreement (MOA) was approved and executed, between the State Historic Preservation Officer (SHPO) and the Department to address the finding of Adverse Effect for the two bridges. The MOA provides stipulations that the replacement bridges be designed and developed in consultation with the SHPO to minimize the visual impact on the setting. The MOA was finalized after public review of the Environmental Assessment. This MOA also requires concurrence of the Department local office (Caltrans District 8). The executed MOA was signed on February 26, 2021 between Caltrans and SHPO.

The mitigation measures identified in the Memorandum of Agreement are identified below, pursuant to Section 106 PA Stipulation XI, 36 CFR 800.6(a) and 800.6(b)(1), which was also submitted to SHPO during public review of the Environmental Assessment and Programmatic Section 4(f) Evaluation.

- **HIST-1:** Historic American Engineering Record (HAER). Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.

Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).

Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.

Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in the paragraph above, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.

- **HIST-2:** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures (masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of

massing, general proportion, and material color and texture. The salvage and reuse of original materials will be considered as an option.

- **HIST-3:** Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway.
- **HIST-4:** Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- **HIST-5:** Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in the MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to MOA Stipulation IV F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of the MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in MOA Stipulation II.A-II.D (also identified as HIST-1 through HIST-5) of this stipulation have been met.
- **HIST-6:** As legally mandated, human remains, and related items discovered during the implementation of the terms of the MOA and the undertaking will be treated in accordance with requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Section 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined the California Native American Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.
- **HIST-7:** If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for

the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13 (c) assume any discovered property to be eligible for inclusion in the National Register.

Additionally, the project proposes other measures to ensure that the proposed Morrill Canyon Bridge and Strawberry Creek Bridge is consistent in architecture, scale, and size to the existing bridge and surroundings, to the extent feasible.

The following designs are standard requirements which are required by Caltrans for all projects:

- **Standard CR-1:** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.
- **Standard CR-2:** In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.

2.5.5 Coordination

Consultation with the SHPO and other cultural resources stakeholders has occurred. Caltrans, as assigned by FHWA, has obtained SHPO concurrence with the determination of eligibility and the finding of effect for this resource.

The following coordination has occurred to address cultural resources pursuant to Section 106 of the National Historic Preservation Act:

- January 6, 2020—The APE for Cultural Resources was established in consultation with Shannon Clarendon, Caltrans Principal Investigator-Prehistoric Archaeology and Prakash Gowda, Caltrans Project Manager.
- April 17, 2020—A HPSR and Finding of Effect (FOE) was prepared and submitted to SHPO.
- June 8, 2020—SHPO concurrence was received on the HPSR and FOE.
- December 2020 – Draft MOA developed and submitted to CSO/SHPO for review and comment.
- February 26, 2021 – Executed MOA signed between Caltrans and SHPO.

This page was intentionally left blank.

Chapter 3 Letters and Other Correspondence

Copies of letters and correspondence related to the coordination efforts done for the Programmatic Section 4(f) Evaluation are attached and included on the following pages.

This page was intentionally left blank.

CALIFORNIA STATE TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENVIRONMENTAL ANALYSIS

P.O. BOX 942874, MS 27

SACRAMENTO, CA 94273-0001

PHONE (916) 654-3567

FAX (916) 653-7757

TTY (916) 653-4086

www.dot.ca.gov



*Making Conservation
a California Way of Life*

April 17, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

RE: Finding of Adverse Effect for Route 74 Bridge Upgrade Project in Riverside County

Dear Ms. Polanco:

The California Department of Transportation is initiating consultation with the SHPO regarding the proposed Route 74 Bridge Upgrade Project (EA: 1G470) in Riverside County. This consultation is undertaken in accordance with procedures outlined in the January 1, 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Section 106 PA). Caltrans is currently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resource Code 5024 and Governor's Executive Order W-26-92* (PRC 5024 MOU).

The proposed project involves the replacement of bridge rails (through removal and replacement of bridge railings, extensive bridge modification, and/or full bridge replacement) on two structures located on Route 74; one on the Ortega Highway portion of the road (PM 3.08), and a second on the Pines-to-Palms Highway section of the road (PM 53.45) in Riverside County. Both structures are masonry arch bridges with solid masonry parapet railings.

Enclosed please find a Historic Properties Survey Report (HPSR) and a Finding of Effect (FOE) Report for the project. Caltrans has identified three Historic Properties in the APE; the Morrill Canyon Bridge at PM 3.08 (Category 2), the Strawberry Creek Bridge at PM 53.45 (Category 2), and the Pines-to-Palms Highway, all of which have been previously determined eligible for the NRHP. The FOE proposes that a Finding of Adverse Effect is appropriate for the Undertaking. We are consulting with you at this time in accordance with Section 106 PA Stipulation X.C(1), which requires consultation with the SHPO regarding findings of adverse effect.

Pursuant to Stipulation X.A of the PA, Caltrans has applied the Criteria of Adverse Effect set forth at 36 CFR 800.5(a)(1) and finds that the undertaking would have an adverse effect on historic properties, as detailed in Sections V and VI of the FOE. Therefore, Caltrans has

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

Ms. Julianne Polanco
April 17, 2020
Page 2

determined that **the undertaking as a whole will have an Adverse Effect** and is seeking SHPO concurrence with these findings pursuant to Section 106 PA Stipulation XI.C and 36 CFR 800.5. Caltrans will continue consultation regarding resolution of adverse effect. We look forward to receiving your written response within 30 days of your receipt of this transmittal in accordance with Stipulation X.B.(1) of the Section 106 PA.

If you have any questions, please contact me or Caltrans District 8 PQS Historian Andrew Walters (phone: 909-388-2647; email: Andrew_walters@dot.ca.gov). Thank you for your assistance with this undertaking.

Sincerely,

David Price
Section 106 Coordination Branch Chief
Cultural Studies Office

Enclosure: Finding of Adverse Effect with attachments for the Route 74 Bridge Upgrade Project in Riverside County.

c. Andrew Walters, Branch Chief Environmental Support/Cultural Studies, Caltrans District 8
Jill Hupp, 5024 Coordinator, Caltrans Cultural Studies Office

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



State of California • Natural Resources Agency

Gavin Newsom, Governor

**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

June 8, 2020

VIA EMAIL

In reply refer to: FHWA_2020_0417_002
CATRA_2020_0417_001

Mr. David Price, Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Finding of Adverse Effect for the Proposed Route 74 Bridge Upgrade Project,
Riverside County, CA

Dear Mr. Price:

Caltrans is initiating consultation about the subject undertaking in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*. Caltrans is also consulting in accordance with the Public Resources Code 5024 and pursuant to the *Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code 5024 and Governor's Executive Order W-26-92 (5024 MOU)*. As part of your documentation, Caltrans submitted a Historic Properties Survey Report (HPSR), an Archaeological Survey Report, and a Finding of Effect (FOE) for the proposed project.

Caltrans proposes to replace bridge rails (through removal and replacement of bridge railings, extensive bridge modification, and/or full bridge replacement) on two structures located on Route 74; one on the Ortega Highway portion of the road (PM 3.08), and a second on the Pines-to-Palms Highway section of the road (PM 53.45) in Riverside County. Both structures are masonry arch bridges with solid masonry parapet railings.

Mr. Price
June 8, 2020
Page 2 of 2

FHWA_2020_0417_002
CATRA_2020_0417_001

Caltrans has identified three Historic Properties in the APE; the Morrill Canyon Bridge at PM 3.08 (Category 2), the Strawberry Creek Bridge at PM 53.45 (Category 2), and the Pines-to-Palms Highway, all of which have been previously determined eligible for the NRHP.

Caltrans has applied the Criteria of Adverse Effect and found pursuant to Stipulation XI.C. of the PA, the project will have an adverse effect to the above historic properties.

Based on review of the submitted documentation, I have no objection to Caltrans' finding of adverse effect for this project.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov Jeanette Schulz at (916) 445-7031 with e-mail at jeanette.schulz@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer

STATE OF CALIFORNIA—TRANSPORTATION AGENCY

GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION

Cultural Studies Office
1120 N STREET
P. O. BOX 942874
SACRAMENTO, CA 94274-0001
PHONE (916) 653-0516
FAX (916) 653-7757
TTY (916) 653-4086



Making Conservation
a California Way of Life.

December 7, 2020

Julianne Polanco
State Historic Preservation Officer
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: Draft Memorandum of Agreement for the Route 74 Bridge Upgrade Project in
Riverside County (FHWA_2020_0417_002; CATRA_2020_0417_001)

Dear Ms. Polanco:

The California Department of Transportation is continuing consultation with the SHPO regarding the proposed Route 74 Bridge Upgrade Project in Riverside County (Undertaking). This consultation is undertaken in accordance with procedures outlined in the January 1, 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation* (Section 106 PA). Caltrans is currently complying with PRC 5024 pursuant to Stipulation III of the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer regarding compliance with Public Resource Code 5024 and Governor's Executive Order W-26-92* (PRC 5024 MOU).

The Undertaking proposes to upgrade the bridge rails of two bridges on Route 74 in Riverside County: the Morrill Canyon Bridge (Ortega Highway, PM 3.08) and the Strawberry Creek Bridge (Pines to Palms Highway, PM 53.45). Both structures are masonry arch bridges with solid masonry parapet railings that were previously determined eligible for listing in the National Register. Project activities would include the removal and replacement of the bridge railings, extensive bridge modification, and/or full bridge replacement. Your office concurred with a finding of adverse effect for the Undertaking on June 8, 2020.

Enclosed, please find a Memorandum of Agreement (MOA) that includes treatment measures to resolve adverse effects to the two bridges. Caltrans has thoroughly considered alternatives to this Undertaking and has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the

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

Julianne Polanco
December 7, 2020
Page 2 of 2

treatments set forth in the enclosed MOA will satisfactorily take into account the Undertaking's adverse effects on the historic property. Caltrans District 8 has a responsibility to fulfill the terms of the MOA and is participating as an invited signatory.

The Undertaking also constitutes uses of a 4(f) property under Section 4(f) of the Department of Transportation Act (23 CFR 774). Caltrans intends to treat this project under the *Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges*, pursuant to Section 6009(a) of SAFETEA-LU. For the purposes of Section 4(f), the SHPO's concurrence on the Finding of Adverse Effect and the Memorandum of Agreement will serve as concurrence on the 4(f) approval.

If you have any questions, please do not hesitate to contact me. We look forward to your response and participation as a signatory on this Memorandum of Agreement.

Sincerely,



DAVID PRICE
Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis

Enc: Draft Memorandum of Agreement for the Route 74 Bridge Upgrade
Project in Riverside County

Cc: Andrew Walters, Environmental Branch Chief, Caltrans District 8
Jill Hupp, PRC 5024 Coordinator, Caltrans Division of Environmental
Analysis

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

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT, RIVERSIDE COUNTY, CALIFORNIA**

WHEREAS, pursuant to §23 U.S.C. the Federal Highway Administration (FHWA), has assigned and California Department of Transportation (Caltrans, including all subordinate divisions defined below) has assumed FHWA responsibility for environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327*, which became effective on December 23, 2016, and applies to this undertaking; and,

WHEREAS, pursuant to the January 2014 *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (Section 106 PA), Caltrans is deemed to be a federal agency for all highway-aid projects it has assumed, and in that capacity Caltrans has assigned the role of "agency official" to the Caltrans Division of Environmental Analysis (DEA) Chief for the purpose of compliance with 36 CFR § 800. The responsibility for oversight, day-to-day responsibilities, and coordination of the Section 106 process are further delegated to the DEA Cultural Studies Office (CSO) Chief; and,

WHEREAS, Caltrans is proposing the Morrill Canyon Bridge and Strawberry Creek Bridge Replacement Project (Undertaking) to replace the Morrill Canyon Bridge (Bridge 56-0169) and the Strawberry Creek Bridge (Bridge 56-0180) on State Route (SR) 74 in Riverside County, as described in **Attachment A** to this memorandum of agreement (MOA); and

WHEREAS, the Area of Potential Effects (APE) for the Undertaking, included as **Attachment B** to this MOA, has been established as the area in and around the Morrill Canyon Bridge and Strawberry Creek Bridge, as well as the SR-74 roadway on either side of the bridges to accommodate all project activities, including project detours, signage, staging and traffic control. The APE is largely within Caltrans right-of-way, but includes minor private property acquisition; and

WHEREAS, Caltrans has determined that the Undertaking will have an adverse effect on Morrill Canyon Bridge (individually eligible, Criterion C), The Pines to Palms Highway (individually eligible, Criterion A), and the Strawberry Creek Bridge (contributor to the Pines to Palms Highway, Criterion A), properties determined to be eligible for inclusion in the National Register of Historic Places (National Register) and are therefore historic properties as defined at 36 CFR §800.16(I)(1); and

WHEREAS, Caltrans has consulted with the State Historic Preservation Officer (SHPO) pursuant to the Section 106 PA, and, where the Federal-Aid Highway PA so directs, in accordance with 36 CFR Part 800, the regulations implementing Section 106 of the National

Historic Preservation Act of 1966 (54 U.S.C. 4700, as amended (NHPA), regarding the Undertaking's effect on historic properties. Caltrans shall file a copy of this MOA with the Advisory Council on Historic Preservation (ACHP) pursuant to Stipulation X.C.4 of the Federal-Aid Highway PA; and

WHEREAS, Caltrans, in consultation with the SHPO, has determined that the Undertaking's adverse effects cannot be avoided, and that implementation of the treatments set forth in **Stipulation II** of this MOA will satisfactorily take into account the Undertaking's adverse effects on historic properties; and

WHEREAS, Caltrans District 8 has participated in the consultation and has been invited to participate in this MOA as an invited signatory; and

WHEREAS, Caltrans has consulted with the United States Forest Service (USFS) regarding the Undertaking and its effects on historic properties and has invited them to participate in the MOA as a concurring party; and

WHEREAS, Caltrans has consulted with the Lake Elsinore Historical Society and the Idyllwild Historical Society regarding the Undertaking and its effect on historic properties and has invited them to participate in the MOA as concurring parties; and

WHEREAS, Caltrans initiated consultation with Pala Band of Mission Indians, Pechanga Band of Luiseño Indians, Rincon Band of Luiseño Indians, and Soboba Band of Luiseño Indians regarding the Undertaking and its possible effects and received no responses indicating concern for cultural resources or interest in further participation in the Section 106 process; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties, and further agree that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

Caltrans shall ensure that the following measures are implemented:

STIPULATIONS

I. AREA OF POTENTIAL EFFECTS

- A. The Area of Potential Effects (APE) for the Undertaking is depicted in Attachment B to this MOA. The APE for the Undertaking is discontinuous, and was established to account for all direct/indirect impacts within the project's horizontal and vertical construction footprint at each bridge location. The APE is located predominantly within the Caltrans ROW and encompasses Morrill Canyon Bridge and Strawberry Creek Bridge, the highway leading onto and off of each structure, and any adjacent area that is needed for construction detours, potential realignment, and construction access roads, and four Temporary Construction Easements (TCEs). The width of the APE fluctuates between 30 meters and 49 meters with

the vertical component proposed to extend a maximum of 1.1 meter above the pavement to a maximum depth of 8 meters below pavement for construction of detours.

- B. If modifications to the Undertaking subsequent to the execution of this MOA necessitate the revision of the APE, District 8 will consult with Caltrans and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, District 8, and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with **Stipulation IV.B** below. If Caltrans, District 8, and the SHPO reach mutual agreement on the proposed revisions, then District 8 will submit a final map of the revisions, consistent with the requirements of Stipulation VIII.A and Attachment 3 of the Federal-Aid Highway PA no later than 30 days following such agreement. Any additional required identification and evaluation efforts necessitated due to changes to the APE will be undertaken consistent with the requirements of Stipulation VIII.B and VIII.C of the Federal-Aid Highway PA.

II. TREATMENT OF HISTORIC PROPERTIES

A. Historic American Engineering Record (HAER)

1. Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information.
2. Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A).
3. Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society.
4. Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in 3, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.

- B. Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures

(masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original material will be considered as an option.

- C. Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway..
- D. Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.
- E. Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in this MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to Stipulation IV.F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of this MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in **Stipulation II.A – II.D** of this stipulation have been met.

III. TREATMENT OF HUMAN REMAINS AND UNANTICIPATED EFFECTS

- A. As legally mandated, human remains, and related items discovered during the implementation of the terms of this Agreement and the Undertaking will be treated in accordance with the requirements of Health and Safety Code Section 7050.5(b). If pursuant to of Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Sections 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined by the California Native American

Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.

- B.** If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13(c) assume any discovered property to be eligible for inclusion in the National Register.

IV. ADMINISTRATIVE PROVISION

A. STANDARDS

1. **Definitions.** The definitions provided at 36 CFR Part 800.16 are applicable throughout this MOA.
2. Parties to this agreement are defined as follows:
 - a. **Signatory parties** have the sole authority to execute, amend, or terminate the MOA.
 - b. **Invited signatories** have the authority to amend or terminate the MOA.
 - c. **Concurring parties** signing the MOA do so to acknowledge their agreement or concurrence with the MOA but have no legal authority under the MOA to terminate or amend the MOA. Concurring with the terms of the MOA does not constitute their agreement with the Undertaking.
3. **Professional Qualifications.** Caltrans will ensure that only individuals meeting the *Secretary of the Interior's Professionally Qualified Standards for Archaeology and Historic Preservation* (48 Federal Register [FR] 44738-39) in the relevant field of study carry out or review appropriateness and quality of the actions and products required by Stipulation II in this MOA.
4. **Documentation Standards.** Written documentation of activities prescribed by **Stipulations I, II, and III** of this MOA shall conform to *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

B. RESOLVING OBJECTIONS

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA (other than the Undertaking itself), or to any documentation prepared in accordance with and subject to the terms of this MOA, Caltrans shall immediately notify the other MOA parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection.

Caltrans will honor the request of the other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30-day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.
3. If at the end of the 30-day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed response to the objection. The ACHP shall provide Caltrans with its advice on the resolution of the objection within 30 days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Caltrans shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring parties, and provide them with a copy of this written response. Caltrans will then proceed according to its final decision.
4. If the ACHP does not provide its advice regarding the dispute within the 30-day time period, Caltrans may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Caltrans shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA and provide them to the ACHP with a copy of such written response.
5. Caltrans responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged.
6. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

C. AMENDMENTS

1. Any Signatory or Invited Signatory to this MOA may propose that the MOA be amended, whereupon the parties shall consult for no more than 30 days, or as mutually agreed upon by the parties to consider such amendment. The amendment will be effective on the date a copy signed by all of the original Signatories and Invited Signatories is filed with the ACHP. If the parties cannot agree to appropriate terms to amend the MOA, any Signatory or Invited Signatory may terminate the agreement in accordance with **Stipulation IV.D**, below.
2. Attachments to this MOA may be amended through consultation as prescribed in the **Stipulation I**, and **II.E** as appropriate, without amending the MOA proper.

D. TERMINATION

1. If this MOA is not amended as provided for in **Section IV.C.**, or if a Signatory or Invited Signatory proposes termination of this MOA for other reasons, the party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR §800.16(y).
2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other MOA parties in writing. Termination hereunder shall render this MOA without further force or effect.
4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall comply with the requirements of 36 CFR 800.3-800.6, or request the comments of the ACHP, pursuant to 36 CFR Part 800.

E. DURATION OF THE MOA

The duration of this MOA shall be no more than five (5) years following the date of execution by the SHPO and Caltrans, or upon completion of the Undertaking, whichever comes first. If the terms are not satisfactorily fulfilled at that time, Caltrans shall consult with the Signatories, Invited Signatories, and Concurring Parties to extend it or to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA, or termination. In the event of termination, Caltrans will comply with Stipulations III through XI of the Section 106 PA if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

F. REPORTING REQUIREMENTS

1. Caltrans shall prepare an Annual Report documenting actions carried out pursuant to this PA. The reporting period shall commence one year from the date of execution. The Annual Report shall be distributed to all consulting parties to this MOA.
2. The Annual Report shall address the following: any scheduling changes proposed, historic property surveys and results, status of treatment and mitigation activities, ongoing and completed public education activities, any uses that are affecting or may affect the ability of the federal agency to continue to meet the terms of this MOA, any disputes and objections received, and how they were resolved, and any additional parties who have become Signatories, Invited Signatories, or Concurring Parties to this MOA in the past year.
3. Caltrans shall coordinate a meeting of the MOA parties to be scheduled within ninety (90) business days of distribution of the Annual Report, or another mutually agreed upon date, to discuss activities carried out pursuant to this MOA during the preceding year and activities scheduled for the upcoming year. This meeting, should it be deemed unnecessary, may be cancelled by mutual consent of the Signatory Parties.

G. EFFECTIVE DATE

This MOA will take effect on the date that it has been executed by the Signatory Parties.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR §800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36 CFR §800.6(c), that this MOA is an agreement with the ACHP for purposes of Section 110(1) of the NHPA, and shall further evidence that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**


SIGNATORY PARTY:

California Department of Transportation

By Philip J. Stolarski Date 2/26/21
Philip J. Stolarski, Chief
Division of Environmental Analysis

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

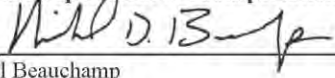
SIGNATORY PARTY:
California State Historic Preservation Officer

By  Date 2/26/21
Julianne Polanco, State Historic Preservation Officer

**MEMORANDUM OF AGREEMENT
BETWEEN
THE CALIFORNIA DEPARTMENT OF TRANSPORTATION
AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE MORRILL CANYON BRIDGE AND THE STRAWBERRY CREEK
BRIDGE REPLACEMENT PROJECT IN RIVERSIDE COUNTY, CALIFORNIA**

INVITED SIGNATORY:

California Department of Transportation, District 8

By  Date 02/26/2021
Michael Beauchamp
Title: District Director

Chapter 4 Other Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection either because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

Archaeological and historic sites within the Section 106 APE and all public and private parks, recreational facilities, and wildlife refuges within approximately 0.5 mile have been analyzed to determine whether they are protected Section 4(f) resources and whether the project would “use” the properties. There are no wildlife refuges with the 0.5 mile buffer.

4.1 Trails

The San Juan Loop Trailhead and Bear Canyon Trailhead are located south of the Morrill Canyon Bridge along SR-74 and as such, were subject to Section 4(f) considerations. Both trailheads are for non-motorized use, with the San Juan Loop Trailhead offering hiking, walking, and biking trails with toilet facilities. The Bear Canyon Trailhead offers hiking, walking, and biking trails. Currently, there are no bike or pedestrian paths along Morrill Canyon Bridge and the San Juan Loop trailhead and Bear Canyon Trailhead do not connect to the Morrill Canyon Bridge. A “use” of the proposed Section 4(f) resources does not occur, access to the trailheads would not be affected, and, as such, provisions of Section 4(f) are not triggered. Refer to Section 2.1.1 of the ISEA for further details on parks and recreational facilities.

4.2 Parks

The Morrill Canyon Bridge and Strawberry Creek Bridge is located within the U.S. Forest Service (USFS) Cleveland National Forest and San Bernardino National Forest. A Special Use Permit from the USFS at Strawberry Creek Bridge will be required. The project will not require or result in temporary access impacts to the Cleveland National Forest or San Bernardino National Forest. A “use” of these parks would not occur as a result of the project and provisions

of Section 4(f) are not triggered. Refer to Section 2.1.1 of the ISEA for further details on parks and recreational facilities.

Chapter 5 Additional References

23 CFR 774: Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites
(Section 4(F))

23 CFR 771.135: FHWA Environmental Impact and Related Procedures; Section 4(f)
Technical Advisory T6640.8A, Guidance for Preparing and Processing

Programmatic Section 4(f) Evaluation Annotated Outline, Caltrans. Located at:
<https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/forms-templates>

Section 4(f) Policy Paper, March 1, 2005

FHWA Guidance on Section 4(f) De Minimis

This page was intentionally left blank.

Appendix B Title VI Policy Statement

This page intentionally left blank.

Appendix B Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Govin Newsom, 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.

August 2020

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner.

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

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page:
<https://dot.ca.gov/programs/civil-rights/title-vi>.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at [<Title.VI@dot.ca.gov>](mailto:Title.VI@dot.ca.gov).

Original signed by
Toks Omishakin
Director

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

This page intentionally left blank.

Appendix C Environmental Commitments Record

This page intentionally left blank.

Appendix C Environmental Commitments Record (ECR)

DIST-CO-RTE: 08-RIV-74 **PM/PM:** PM 2.9/3.2 & 53.3/53.5 **EA/Project ID.:** EA 08-1G470 / PN 0816000001
Project Description: Replace Morrill Canyon Bridge (Bridge No. 56-0169, PM 3.08) and Strawberry Creek Bridge (Bridge No. 56-0180, PM 53.5) on SR-74 in Riverside County, California.
Date (Last modification): 03/17/21
Environmental Planner: Kourtney Graves **Phone No.:** (909) 383-6324
Construction Liaison: TBD **Phone No.:**
Resident Engineer: TBD **Phone No.:**

PERMITS

Permit	Agency	Application Submitted	Permit Received	Permit Expiration	Permit Requirement Completed by:	Permit Requirement Completed on:	Comments
Section 1602 Streambed Alteration Agreement	California Department of Fish & Wildlife	Enter date	Enter date	Enter date	Enter Name	Enter date	Enter comments
Porter-Cologne Act and Clean Water Act (CWA) Section 401 Water Quality Certification	Regional Water Quality Control Board	Enter date	Enter date	Enter date	Enter Name	Enter date	Enter comments
CWA Section 404 Nationwide Permit	US Army Corps of Engineers	Enter date	Enter date	Enter date	Enter Name	Enter date	Enter comments
National Pollutant Discharge Elimination System (NPDES) Permit	State Water Resources Control Board						

ENVIRONMENTAL COMMITMENTS

PA&ED

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
Other	TMP-1: A Transportation Management Plan (TMP) would be prepared and will be implemented during construction of the project. Public information and awareness campaigns, motorist information strategies, and incident management strategies in the TMP would inform the public of the proposed project.	Page 2-10, Environmental Document	Yes	Caltrans Maintenance/ Design/Resident Engineer/ Contractor	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Timberlands	TMB-1: In accordance with U.S. Forest Service guidelines, trees that are cut will remain on site and be used as mulch within the project limits.	Page 2-6, Environmental Document	Yes	Caltrans Maintenance/ Design/Resident Engineer/ Contractor						
Timberlands	TMB-2: For every tree cut, a 3:1 tree replacement ratio is required by the Caltrans District Landscape Architect. Hydroseeding and fiber roll methods will also be implemented as part of the erosion control measures.	Page 2-6, Environmental Document	Yes	Caltrans Maintenance/ Design/Resident Engineer/ Contractor						
Visual Resources	AES-1: Minimize Fugitive Light from Portable Sources Used for Construction. The construction contractor will minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height. For construction occurring on the ground, portable lights will be raised to a height no greater than 20 feet. All lights will be screened and	Page 2-12, Environmental Document	Yes	Caltrans Maintenance/ Design/Resident Engineer/ Contractor	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
	directed downward, toward work activities, and away from the night sky and nearby residents to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible.									
Cultural Resources	CR-1: If buried cultural resources are encountered during project activities, it is Caltrans' policy that all work stop in that area until a qualified archaeologist can evaluate the nature and significance of the find.	Page 2-18, Environmental Document, Archaeological Survey Report	Yes SSP 14-2.03	Contractor/ Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Cultural Resources	CR-2: In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendant (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.	Page 2-18 Environmental Document, Archaeological Survey Report	Yes SSP 14-2.03	Contractor/ Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Cultural Resources	HIST-1: Historic American Engineering Record (HAER). Prior to the start of construction, Caltrans shall contact the regional Historic American Building Survey/Historic American Engineering Record/Historic American Landscape Survey (HABS/HAER/HALS) coordinator at the National Park Service Interior Regions 8, 9, 10, and 12 Regional Office (NPS) to request that NPS stipulate the level of and procedures for completing the documentation. Within ten (10) days of receiving the NPS stipulation letter, Caltrans shall send a copy of the letter to all consulting parties for their information. Caltrans will ensure that all recordation documentation activities are performed or directly supervised by architects, historians, photographers, and/or other professionals meeting the qualification standards in the Secretary of Interior's Professional Qualification Standards (36 CFR 61, Appendix A). Upon receipt of the NPS letter accepting the HAER documentation, Caltrans will make archival, digital and bound library-quality copies of the documentation and provide them to the Caltrans Transportation Library and History Center at Caltrans Headquarters and the California State Library, the Office of Historic Preservation, the Eastern Information Center of the California Historical Resources Information System, and the Lake Elsinore Historical Society and the Idyllwild Historical Society. Caltrans shall notify SHPO that the documentation is complete and all copies distributed, as outlined in the paragraph above, and include the completion of the documentation in the annual report. All field surveys shall be completed prior to the start of construction.	Page 2-18 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Cultural Resources	HIST-2 Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Design to compile context-sensitive options for the replacement bridge structures that will take into account the historic significance of the original structures. Options include constructing bridge elements with materials that replicate the original elements; using in-kind or similar materials to those used in the original structures (masonry, stone elements, or concrete and stone); or material that is similar to the original in terms of massing, general proportion, and material color and texture. The salvage and reuse of original materials will be considered as an option.	Page 2-19 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans PQS, Caltrans Project Management, Caltrans Design, Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
Cultural Resources	HIST-3: Caltrans Design shall submit the final design plans and specifications for the Undertaking to District 8 Cultural Studies prior to commencement of construction and request review by a Caltrans Professionally Qualified Staff Principal Architectural Historian to ensure final plans for the Strawberry Creek Bridge include architectural details that convey the historical significance and character-defining elements of the original historic structure, and to ensure that the design is visually compatible with the National Register-eligible Pines-to-Palms Highway.	Page 2-19 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans Design, Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Cultural Resources	HIST-4: Caltrans District 8 PQS shall work with Caltrans District 8 Project Management and Caltrans District 8 Public Affairs to develop historical content on the Pines to Palms Highway, and the Strawberry Creek and Morrill Canyon Bridges to be placed on the Caltrans District 8 public website. The content will include historical narrative information, as well as historical photographs and plans, if available, and/or other project-related historic preservation information. The information will be maintained on the Caltrans District 8 website at a minimum for the life of the project, and will be archived in perpetuity for future access on the forthcoming Caltrans CSO Mitigation Website prior to termination of this MOA. The information link will also be made available to the Caltrans Transportation Library and History Center at Caltrans Headquarters in Sacramento for inclusion on its website and will also be offered to local historical societies and preservation groups.	Page 2-19 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans PQS, Caltrans Project Management, Caltrans Public Affairs, Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Cultural Resources	HIST-5: Caltrans shall prepare a construction monitoring plan and conduct periodic monitoring of construction activities to ensure the project is conducted in a manner that meets the stipulations outlined in the MOA. The monitoring plan and its ongoing status will be included in the annual reports submitted pursuant to MOA Stipulation IV F. Caltrans shall ensure that the construction monitoring plan is implemented. A monitoring report shall be prepared and submitted to SHPO to document project completion and compliance with the treatment of Historic Properties outlined in this section. The monitor shall meet the professional appropriate Federal qualifications standards in accordance with Stipulation IV.A.3 of the MOA. Caltrans will not authorize the execution of any Undertaking activity that may affect historic properties in the Undertaking's APE until the requirements set forth in MOA Stipulation II.A-II.D (also identified as HIST-1 through HIST-5) of this stipulation have been met.	Page 2-19 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Cultural Resources	HIST-6: As legally mandated, human remains, and related items discovered during the implementation of the terms of the MOA and the undertaking will be treated in accordance with requirements of Health and Safety Code Section 7050.5(b). If pursuant to Health and Safety Code Section 7050.5(c) the coroner determines that the human remains are or may be those of a Native American, then the discovery shall be treated in accordance with the provisions of Public Resources Code Section 5097.98 (a)(d). Caltrans, as the landowner, shall ensure, to the extent possible, that the views of the Most Likely Descendent(s), as determined the California Native American Heritage Commission, is taken into consideration when decisions are made about the disposition of Native American human remains and associated objects.	Page 2-20 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Cultural Resources	HIST-7: If Caltrans determines after construction of the Undertaking has commenced, that either the Undertaking will affect a previously unidentified property that may be eligible for the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with Stipulation XV.B of the Federal-Aid Highway PA and 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder and pursuant to 36 CFR §800.13 (c) assume any discovered property to be eligible for inclusion in the National Register.	Page 2-20 Environmental Document, Executed MOA between Caltrans and SHPO		Caltrans Cultural Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	
Water Quality	WQ-1: The project will comply with Caltrans Standard Specifications for construction site Best Management Practices (BMPs), including complying with U.S. Environmental Protection Agency's (U.S. EPA's) Construction	Page 2-24 Environmental Document	Yes 14-2.03	Contractor/ Caltrans	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
	General Permit, discharges of stormwater from the job site, compliance with permits issued by Regional Water Quality Control Board (RWQCB) for National Pollutant Discharge Elimination System (NPDES) Permit, and permits governing stormwater and non-stormwater discharges resulting from construction activities at the job site.			Environmental Engineering						
Water Quality	WQ-2: The project will comply with Caltrans Standard Specifications related to complying with the provisions of the current NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, and any subsequent permit, as they relate to construction activities for the project. This will include submission of the permit registration documents, including a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and signed certification statement to the State Water Resources Control Board (SWRCB) at least 14 days prior to the start of construction activity. The SWPPP will (1) meet the requirements of the Construction General Permit and identify potential pollutant sources associated with construction activities; (2) identify non-stormwater discharges; and (3) identify, implement, and maintain BMPs to reduce or eliminate pollutants associated with the construction site. The BMPs identified in the SWPPP will be implemented during the project construction. A Notice of Termination will be submitted to SWRCB upon completion of construction and the stabilization of the site.	Page 2-25 Environmental Document	Yes 13-3.01D(2)	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Water Quality	WQ-3: The project will comply with Caltrans Standard Specifications related to complying with the provisions of the current General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality as they relate to discharge of non-stormwater dewatering wastes for the project.	Page 2-25 Environmental Document	Yes 13-3.01D(2)	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Water Quality	WQ-4: The project will comply with Caltrans Standard Specifications related to complying with the provisions of the Section 401 Water Quality Certification, a Section 404 permit from the U.S. Army Corps of Engineers (USACE), and a Section 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife will be obtained prior to impacts within identified jurisdictional areas.	Page 2-25 Environmental Document	Yes 13-1.01D(2)	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Water Quality	WQ-5: Specifications related to complying with the provisions of the Department's current Statewide NPDES Permit, effective July 1, 2013 (known as the Department's MS4 permit). Project-specific BMPs and any applicable hydromodification features will be incorporated into final design. The BMPs will be properly designed and maintained to target pollutants of concern and reduce runoff from the project site.	Page 2-25 Environmental Document	Yes 13-1.01D(2)	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Geology	GEO-1: The project will implement Caltrans Standard Specifications Sections 13-05 and 21 related to erosion control during construction.	Page 2-29 Environmental Document	Yes Sections 13-05 and 21	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Geology	GEO-2: Earthwork will be performed in accordance with the Department's Standard Specifications, Section 19, which require standardized measures related to compacted fill, overexcavation, recompaction, and retaining walls, among other requirements.	Page 2-29 Environmental Document	Yes Section 19	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Geology	GEO-3: Construction will be conducted in accordance with Division III, "Earthwork and Landscape" Section 21-1 through 21-3 of the Department's Standard Specifications, requiring erosion protection and drainage control.	Page 2-29 Environmental Document	Yes Section 21-1 through 21-3	Contractor/ Caltrans Environmental Engineering During any ground disturbance, demolition or construction activities.	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
Hazardous Waste	HAZ-1: Section 7-1.02K(6)(j)(ii) - Preparation of a lead compliance plan if applicable.	Page 2-32 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Hazardous Waste	HAZ-2: Section 7-1.02K(6)(j)(iii) – Applies if earth material will be disturbed; and work could result in lead exposure; earth material is not a hazardous waste and does not exceed 320 mg/kg lead; earth material does not require disposal in a permitted landfill.	Page 2-32 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-3: Section 14-11.08 – Applies if material containing ADL at regulated concentrations as defined in the ADL Agreement with DTSC is present at the job site and will be excavated, stockpiled, transported, placed within project limits, or disposed of in a landfill.	Page 2-32 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-4: Section 14-11.09 – Applies if the project includes minimal disturbance of areas with regulated material containing ADL.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-5: Section 14-11.12 - Specifications for removing yellow traffic stripe and pavement markings with hazardous waste residue.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-6: Section 14-11.13 – Applies if work will disturb the existing paint system on a bridge.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-7: Section 14-11.16 – Applies for the removal and management of asbestos-containing construction materials in bridges.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-8: Section 36-4 - Specifications related to residue containing lead from paint and thermoplastic.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-9: Section 49-1.03 - Applies if expected difficult pile installation and the management of hazardous waste, contaminated materials, and naturally occurring asbestos, including serpentine rock. This specification applies for all types of pile installation.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-10: Section 14-9.02 – Applies for the demolition or rehabilitation of a bridge or building requiring notification to the U.S. EPA, California Air Resources Board, APCD, or AQMD to comply with air quality regulations.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Hazardous Waste	HAZ-11: Section 14-11.14 – Applies if the project will generate treated wood waste.	Page 2-33 Environmental Document, ISA	Yes	Contractor/ Caltrans Environmental Engineering	Enter action					
Biology	BIO-1: Equipment Staging, Storing, and Borrow Sites: Equipment, vehicles, and materials staged and stored in Caltrans right of way must be sited in previously paved or previously disturbed areas only and must avoid native vegetation. Approval of additional staging, storing or borrow sites must require the Caltrans Biologist to analyze project impacts and provide authorization.	Page 2-39 Environmental Document, Natural Environment Study	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-2: Artificial Lighting: Artificial lighting for the project site must be directed specifically at the work site only.	Page 2-63 Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
Biology	BIO-3: Pre-Construction Surveys: Pre-construction arroyo toad, Coast Range newt, and mountain yellow-legged frog surveys must be conducted by an authorized Contractor-supplied biologist immediately prior to the start of ground-disturbing activities, including the installation of arroyo toad, Coast Range newt, and mountain yellow-legged frog exclusion fencing, within the project impact area. If an arroyo toad, Coast Range newt, or mountain yellow-legged frog individual is located, the Resident Engineer and a Caltrans biologist will be contacted, and avoidance and minimization measures must be required.	Page 2-63 Environmental Document NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-4: Work Avoidance: Avoid blasting during the arroyo toad breeding season (March 1-June 30) within the Morrill Canyon Bridge project area.	Page 2-63 Environmental Document NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-5: Species Avoidance: If during construction activities arroyo toad, Coast Range newt, and mountain yellow-legged frog is discovered within the project site, the contractor-supplied biologist must have the authority to halt all construction activities and direct movements of equipment and personnel to avoid injury to mortality to arroyo toad, Coast Range newt, and mountain yellow-legged frog. Arroyo toad, Coast Range newt, and mountain yellow-legged frog cannot be handled or harassed and must leave the job site under their own accord.	Page 2-63 Environmental Document NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-6: Worker Environmental Awareness Program (WEAP): A qualified contractor-supplied biologist must present a biological resource information program/WEAP prior to ground-disturbing activities to all personnel that must be present within the project limits for longer than 30 minutes at any given time	Page 2-39 Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-7: Biological Monitor: The qualified contractor-supplied biologist must monitor project-related activities to ensure that measures (including the construction guidelines in WRCMSHCP Volume 1 Section 7.5.3 and the Standard Best Management Practices in WRCMSHCP Appendix C) are being implemented and documented.	Page 2-40 Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-8: ESA Fencing: To prevent entry by arroyo toad, Coast Range newt, and mountain yellow-legged frog into the work site, temporary exclusion fencing must be installed outlining the perimeter of any construction staging, storage, or batch plant areas.	Page 2-63 Environmental Document, NES-MI	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-9: ESA Fence Monitoring: Fence and enclosure (onsite cleared areas) inspections must occur daily throughout the duration of the project prior to commencing construction activities and after construction activities are completed. If during construction, the fence fails, work must stop until it is repaired and the Contractor-supplied biologist inspects (and clears) the site.	Page 2-63 Environmental Document, NES-MI	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-10: ESA Fence Removal: All ESA fencing will be removed as a last order of work. During removal, a biological monitor will be present.	Page 2-63 Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies	Enter action	Enter date	Enter Name	Enter date	Enter remarks	No
Biology	BIO-11: Animal Entrapment: To prevent inadvertent entrapment of arroyo toad, Coast Range newt, and mountain yellow-legged frog during project activities, all excavated steep-walled holes or trenches more than one foot must be covered at the close of each working day by plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks. At the beginning of each working day, all such holes or trenches must be inspected to ensure no animals have been trapped during the previous night. Before such holes or trenches are filled, they must be thoroughly inspected for trapped animals. Trapped animals must be released by the Contractor-supplied biologist.	Page 2-64, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-12: Handling: The qualified biologist must avoid use of insecticides, sunscreens, or any other lotions, creams or products on their skin, clothing,	Page 2-64, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
	footwear, or field equipment immediately prior to and during handling of arroyo toad, Coast Range newt, and mountain yellow-legged frog.									
Biology	BIO-13 Preconstruction Nesting Bird Survey: If project-related activities cannot avoid the nesting season, generally regarded as February 1 through September 30, then pre-construction nesting bird surveys must be conducted 3 days prior to construction by a Contractor-supplied biologist to locate and avoid nesting birds. If an active avian nest is located, a no construction buffer must be established.	Page 2-63, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-14 Rare insect host plant pre-construction clearance survey, flagging, and fencing: No more than one week prior to project-related activities, a qualified biologist must perform a pre-construction survey for rare insect host plants. Should any rare insect host plants be found, the Resident Engineer and Caltrans Biologist must be contacted, and host plants must be flagged by the biologist for visual identification to construction personnel for work avoidance. Should multiple plants in a single location be found, the groupings must be fenced with environmentally sensitive area temporary fencing.	Page 2-65, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-15 Flagging and Fencing: Within one week prior to construction a pre-construction survey must be conducted for special status plant species and must be flagged by the Contractor-supplied biologist for visual identification to construction personnel for work avoidance. Portions of the BSA that feature multiple plants in a single location must be fenced with environmentally sensitive area temporary fencing.	Page 2-40, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-16 Rare Plant Translocation: If a special status plant species are found within the work area and cannot be fenced but can survive transplantation, the Contractor-supplied biologist must contact the Caltrans Biologist to determine the time and suitable translocation area for the plant species to be moved. Additional requirements and actions must be determined at the time in which such situation occurs.	Page 2-52, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-17 Tree Removal: All mature trees to be removed as part of the project must be more closely evaluated by a qualified bat biologist for their potential to support roosting bats. Trees that are identified as suitable bat roost sites must be removed using a two-step process that occurs over a 2-day period. On Day 1, branches and limbs that do not contain crevices or cavities must be removed using hand tools or chainsaws. On Day 2, the remainder of the tree may be removed. Trimming or removal of any mature trees (including untrimmed palm trees) and snags during the maternity season (April 1-August 31) must be avoided to prevent "take" of nonvolant (flightless) young. Tree removal should be performed between September 1 and October 31 to the greatest extent feasible to avoid direct impacts to bats roosting in foliage, crevices, and cavities of trees. This time period is after young are volant (flying), but before expected onset of torpor (winter inactivity). This work may also be conducted between February 15 and March 31, following winter torpor and prior to the start of the maternity season. If removal of mature trees (including trimming of palm fronds or removal of palm trees) during the bat maternity season is necessary for project construction, all mature trees to be removed that have also been identified as containing suitable bat roosting habitat should be surveyed at night prior to removal. Any trees confirmed during those surveys as housing bat maternity colonies must be avoided until the end of maternity season.	Page 2-64, Environmental Document, NES	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-18 The project will mitigate for temporary impacts through restoration and enhancement of onsite riparian/riverine areas.	Page 2-48, Environmental Document	Yes	Contractor/ Caltrans Biological Studies						
Biology	BIO-19 Permanent impacts on riparian/riverine habitat and federal/state jurisdictional waters are proposed to be mitigated by either purchase of suitable mitigation bank credits or through permittee-responsible mitigation.	Page 2-48, Environmental Document	Yes	Contractor/ Caltrans Biological Studies						

Category	Task and Brief Description	Source	Included in PS&E package	Responsible Branch/Staff	Action to Comply	Due Date	Task Completed by	Task Completed on	Remarks	Mitigation for significant impacts under CEQA?
	For either option, the mitigation will be done prior to project impacts, and Caltrans will coordinate with the Wildlife/Regulatory Agencies on which mitigation option is optimal/available based on project timelines.									
Biology	BIO-20 Relocation Plan. An exclusionary fencing and relocation plan for arroyo toad must be submitted to the USFWS and CDFW for approval prior to commencing project activities.	Page 2-72, Environmental Document	Yes	Contractor/ Caltrans Biological Studies						
Biology	HCP-1 To address impacts to occupied arroyo toad habitat, and per requirements set forth within MSHCP species objectives, Caltrans will pursue full replacement mitigation for impacts to arroyo toad. To achieve this, Caltrans will continue to work with the Wildlife Agencies (USFWS and CDFW) and the Western Riverside Conservation Authority to identify whether mitigation will be achieved through acquisition and conservation of occupied arroyo toad habitat, or via installation of a conservation easement within occupied arroyo toad habitat. Once a MSHCP offset has been identified and acquired, Caltrans will provide the Wildlife Agencies with a revised DBESP to address arroyo toad impacts, thereby ensuring consistency with the MSHCP; and The items in HCP-1 will be addressed prior to the onset of ground disturbing activities.	Page 2-42, Environmental Document	Yes	Contractor/ Caltrans Biological Studies						

Appendix D Acronyms and Abbreviations

This page intentionally left blank.

Appendix D **Acronyms and Abbreviations**

Acronym	Definition
°F	degrees Fahrenheit
AADT	Annual Average Daily Traffic
AB	Assembly Bill
AB 32	Assembly Bill 32
AB 52	Assembly Bill 52
ACM	asbestos-containing materials
ADI	Area of Direct Impact
ADL	aerially deposited lead
AF	acre-foot
APE	Area of Potential Effect
ARB	Air Resources Board
ASR	Archaeological Survey Report
bgs	below ground surface
BLM	Bureau of Land Management
BMP	Best Management Practice
BSA	biological study area
BTU	British thermal unit
CAFE	Corporate Average Fuel Economy
CAP	Climate Action Plan
Cal/EPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CBC	California Building Code
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH ₄	methane
CHL	California Historical Landmarks
CHMIRS	California Hazardous Material Incident Reporting System
CHP	California Highway Patrol
CIWQS	California Integrated Water Quality System
CMP	corrugated metal pipe
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent

Acronym	Definition
CO-CAT	Coastal and Ocean Working Group of the California Climate Action Team
County	County of Riverside
CPHI	California Points of Historical Interest
CREC	controlled recognized environmental condition
CRHR	California Register of Historical Resources
CTP	California Transportation Plan
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEH	Department of Environmental Health
Department	California Department of Transportation
DO	dissolved oxygen
DP-30	Director's Policy 30
DPP	Design Pollution Prevention
DPR	Department of Pesticide Regulation
DSA	disturbed surface area
DWA	Desert Water Agency
ECHO	Enforcement & Compliance History Information
EIC	Eastern Information Center
EMI	Emissions Inventory Data
EO	Executive Order
EPACT92	Energy Policy Act of 1992
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FINDS	Facility Index System
FIRM	Flood Insurance Rate Map
FMMP	Based on California Department of Conservation's Farmland Mapping and Monitoring Program
FPPA	Farmland Protection Policy Act
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
Guidelines	Section 404(b)(1) Guidelines
H&SC	Health and Safety Code
H ₂ S	hydrogen sulfide
HCM	Highway Capacity Manual, 6th Edition
HFC	hydrofluorocarbon
HHS	Department of Health and Human Services
HPSR	Historic Property Survey Report
HSWA	Hazardous and Solid Waste Amendments
IPCC	Intergovernmental Panel on Climate Change

Acronym	Definition
LBP	lead-based paint
LCFS	low carbon fuel standard
LEDPA	least environmentally damaging practicable alternative
L_{eq}	equivalent noise level
LOS	level of service
LOTB	log of test boring
LSEV	Low Speed Electric Vehicle
MCE	Maximum Considered Earthquake
MEP	Maximum Extent Practicable
mg/cm^2	milligram per square centimeter
mg/kg	milligram per kilogram
mg/L	milligram per liter
MGS	Midwest Guardrail System
MLD	Most Likely Descendant
MMTCO _{2e}	million metric ton of carbon dioxide equivalent
MOE	measure of effectiveness
MOU	Memorandum of Understanding
mph	mile per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSAT	mobile source air toxic
msl	mean sea level
MTBE	methyl tertiary-butyl ether
MU [DA]	Mixed Use, Development Agreement
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NFIP	National Flood Insurance Program
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NO _x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	Natural Resources Conservation Service

Acronym	Definition
NRHP	National Register of Historic Places
NSR	Noise Study Report
O ₃	ozone
OEHHA	Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
OSTP	Office of Science and Technology Policy
PA	Programmatic Agreement
Pb	lead
pCi/L	picocuries per liter
PDT	Project Development Team
PeMS	Department Freeway Performance Measurement System
Plan	Multiple Species Habitat Conservation Plan
PM	particulate matter
PM	Post Mile
PM ₁₀	particulate matter less than 10 microns
PM _{2.5}	particulate matter less than 2.5 microns
PMP	Paleontological Mitigation Plan
POAQC	project of air quality concern
ppm	part per million
ppt	part per thousand
PRC	California Public Resources Code
PS&E	Plans, Specifications, and Estimate
PSR	Project Study Report
PSR-PDS	Project Study Report – Project Development Study
R	Revised
RAC	Replenishment Assessment Recharge
RAP	Relocation Assistance Program
RARE	Rare, Threatened, or Endangered Species
RCP	reinforced concrete pipe
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gas
ROW	right of way
RSA	Resource Study Area
RTIP	Regional Transportation Improvement Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
Safeguarding California Plan	Safeguarding California: Reducing Climate Risk
SB	Senate Bill
SB 32	Senate Bill 32
SB 375	Senate Bill 375

Acronym	Definition
SB 391	Senate Bill 391
SB 97	Senate Bill 97
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SLR	sea-level rise
SSP	Standard Special Provision
State Parks	California Department of Parks and Recreation
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPPs	Storm Water Pollution Prevention Plans
SWRCB	State Water Resources Control Board
TCE	temporary construction easement
TCR	Transportation Concept Report
TCWG	Transportation Conformity Working Group
TDS	Total Dissolved Solids
TMDL	Total Maximum Daily Load
TMP	Traffic Management Plan
TNM	Traffic Noise Model
TPH-g	total petroleum hydrocarbons gasoline
TSCA	Toxic Substances Control Act
U.S.	United States
U.S. EPA	U.S. Environmental Protection Agency
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	U.S. Department of Transportation
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGRCP	U.S. Global Change Research Program
UST	underground storage tank
VHD	vehicle-hours delay
VMT	vehicle miles traveled
VOC	volatile organic compound
vpmp	vehicle per lane per mile
WDR	Waste Discharge Requirement
WILD	Wildlife Habitat
WPCP	Water Pollution Control Program
WQOs	water quality objectives

This page was intentionally left blank.

Appendix E References

This page intentionally left blank.

Appendix E References

- California Department of Transportation. 2017. *2017 Project Initiation Report To Request Programming in the 2018 SHOPP*. May.
- _____. 2016. *Preliminary Environmental Analysis Report*. May.
- _____. 2020a. *Bridge Replacement Project, Natural Environment Study, Riverside County, State Route 74*. November.
- _____. 2020b. *Historic Property Survey Report*. March.
- _____. 2020c. *Initial Site Assessment (ISA) Checklist*. August.
- _____. 2020d. *Transportation Air Quality Conformity Findings Checklist*. August.
- _____. 2020e. *Location Hydraulic Study Form*. May.
- _____. 2020f. *Summary Floodplain Encroachment Report*. May.
- _____. 2020g. *Supplemental Historic Property Survey Report*. November.
- _____. 2020h. *Updated Initial Site Assessment (ISA) Checklist*. November.
- _____. 2020i. *Questionnaire to Determine Visual Impact Assessment (VIA) Level*. September.
- County of Riverside. 2015. *County of Riverside General Plan, Riverside Extended Mountain Area Plan*. December.
- County of Riverside. 2015. *County of Riverside General Plan, Elsinore Area Plan*. December.

This page intentionally left blank.

Appendix F List of Technical Studies

This page intentionally left blank.

Appendix F List of Technical Studies

The technical studies listed below were used as supporting documentation in the preparation of this Initial Study/Environmental Assessment. All of the technical studies listed were prepared specifically for the proposed SR-74 Bridge Replacement Project.

- *Bridge Replacement Project, Natural Environment Study, Riverside County, State Route 74* (November 2020)
- *Historic Property Survey Report* (March 2020)
- *Supplemental Historic Property Survey Report* (November 2020)
- *Initial Site Assessment (ISA) Checklist* (August 2020) (updated November 2020)
- *Location Hydraulic Study Form* (May 2020)
- *Preliminary Environmental Analysis Report* (May 2016)
- *Project Initiation Report to Request Programming in the 2018 SHOPP* (May 2017)
- *Questionnaire to Determine Visual Impact Assessment (VIA) Level* (September 2020)
- *Summary Floodplain Encroachment Report* (May 2020)
- *Transportation Air Quality Conformity Findings Checklist* (August 2020)

This page was intentionally left blank.