State Route 121 Tulucay Creek Bridge Replacement Project

NAPA COUNTY, CALIFORNIA
DISTRICT 4 – PM 6.4 – 6.5
EA 04-4J820/EFIS 0416000041

DRAFT Initial Study with Proposed Mitigated Negative Declaration

Prepared by the
State of California, Department of Transportation

June 2022

Caltrans

General Information about this Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study with Proposed Mitigated Negative Declaration (IS/MND), which examines the potential environmental impacts of the alternatives being considered for the proposed Project located in Napa County, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the Project is being proposed, what alternatives 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.

What you should do:

- Please read this document.
- This IS/MND and other Project information are available to download at the Caltrans environmental document website (https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs). In addition, the document will be made available at the following location:

  Napa County Library
  500 Coombs St
  Napa CA 94559

- We'd like to hear what you think. If you have any comments about the proposed Project, including a request that Caltrans hold a public meeting, please send your written comments via postal mail or email to Caltrans by the August 4, 2022, deadline.
- Send comments via postal mail to:

  Krishma Dutta
  California Department of Transportation, District 4
  P.O. Box 23660, MS 8B, Oakland, CA 94623

- Send comments via email to: Krishma.Dutta@dot.ca.gov

What happens next:

After comments are received from the public and reviewing agencies, Caltrans may give environmental approval to the proposed Project and select the Preferred Alternative, do additional environmental studies, or abandon the Project by selecting the No Build Alternative. If the Project is given environmental approval and funding is obtained, Caltrans could design and construct all or part of the Project.

Alternative formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternative formats, please call or write to Department of Transportation, District 4, Attn: Krishma Dutta, Environmental Planning, PO Box 23660, MS 8B, Oakland, CA 94623; (510) 286-5935 (Voice), or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1-800-855-3000 (Spanish TTY to Voice and Voice to TTY), 1 (800) 854-7784 (Spanish and English Speech-to-Speech), or 711.

DRAFT Initial Study with Proposed Mitigated Negative Declaration

04-NAP-121	6.4-6.5	04-4J820
Dist. – Co. – Rte.	PM	E.A.

Project title:	State Route 121 Tulucay Creek Bridge Replacement Project
Lead agency name and address:	California Department of Transportation, District 4 P.O. Box 23660, MS 8B, Oakland, CA 94623
Contact person and phone number:	Maxwell Lammert, Branch Chief Phone: (510)-506-9862
Project location:	Post Mile (PM) 6.4 to 6.5 in Napa County, California
General plan description:	Highway
Zoning:	Transportation Corridor; Commercial Tourist
Other public agencies whose approval is required (e.g., permits, financial approval, or participation agreements):	• Clean Water Act 404 Nationwide Permit from the U.S. Army Corps of Engineers • Clean Water Act 401 Water Quality Certification from the State Water Resources Control Board • Section 1602 Lake and Streambed Alteration Agreement from the California Department of Fish and Wildlife • California Transportation Commission • Finding of Effect and Memorandum of Agreement from the State Historic Preservation Officer • Section 7 Biological Opinion from the National Oceanographic and Atmospheric Administration Fisheries • Letter of Concurrence from the U.S. Fish and Wildlife Service

The document, maps, Project information, and supporting technical studies are available for review weekdays from 8 a.m. to 5 p.m. at the Caltrans District 4 Office, 111 Grand Avenue, Oakland, CA 94612. The document is also available to download at the Caltrans environmental document website (https://dot.ca.gov/caltrans-near-me/district-4/d4-popular-links/d4-environmental-docs).

6/27/2022

Scott M. Williams
Caltrans District 4, Acting Office Chief
Office of Environmental Analysis
CEQA Lead Agency

Date

Proposed Mitigated Negative Declaration

Pursuant to Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) has prepared this Initial Study with Proposed Mitigated Negative Declaration (IS/MND) for the proposed State Route 121 Tulucay Creek Bridge Replacement Project (Project) at Post Mile 6.4 to 6.5 in Napa, California. The Project includes replacement of the existing Tulucay Creek Bridge to conform to creek channel alignment, with roadways and sidewalks in both directions aligned and widened to conform to the new bridge approaches. The new bridge would meet Americans with Disabilities Act standards and would have a vehicular capacity similar to that of the existing bridge. Additional Project information is provided in Chapter 1.

Determination

The Proposed Mitigated Negative Declaration is included to notify the public and reviewing agencies that Caltrans intends to adopt a Mitigated Negative Declaration for this Project. This Mitigated Negative Declaration is subject to change based on comments received by the public and reviewing agencies.

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

The Project would have no effect on agriculture and forestry, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources, population and housing, or recreational resources.

In addition, the Project would have less than significant effects to aesthetics, air quality, biological resources, hazards and hazardous materials, hydrology and water quality, noise, public services, transportation, utilities and service systems, and wildfire.

With the following mitigation measures (MMs) incorporated, the Project would have less than significant effects to cultural resources and tribal cultural resources.

- **MM-CULT-1: Worker Environmental Awareness Training.** All construction personnel will attend a mandatory environmental education program delivered by an agency-approved archaeologist prior to working on the Project.

- **MM-CULT-2: Phase III Data Recovery Plan.** If archaeological resources cannot be avoided, a Phase III Data Recovery Plan will be implemented by a qualified archaeologist for the significant archaeological site that is directly affected. Data Recovery will only occur in the portions of the site being directly affected by the Project.

- **MM-CULT-3: Archaeological Monitoring Plan**. An Archaeological Monitoring Plan will be implemented during construction. This would include establishing an Archaeological Monitoring Area (AMA) and having an archaeologist and tribal representative monitor job site activities within the archaeological monitoring area to reduce the Project's impacts to the resource within the Project limits. No work can be conducted within the AMA unless the archeological monitor is present. Reference Caltrans Standard Specification 14-2.03.

Melanie Brent
Caltrans District 4, Deputy District Director
Division of Environmental Planning and Engineering
CEQA Lead Agency

Date

Table of Contents

General Information about this Document iii
DRAFT Initial Study with Proposed Mitigated Negative Declaration v
Proposed Mitigated Negative Declaration vii
Chapter 1 Project Description 1-1
1.1 Introduction 1-1
1.1.1 Overview 1-1
1.1.2 Project Funding 1-1
1.2 Project Background 1-3
1.3 Purpose and Need 1-3
1.3.1 Purpose 1-3
1.3.2 Need 1-3
1.4 Project Description 1-4
1.5 Project Alternatives 1-4
1.5.1 Pre-Construction 1-7
1.5.2 Construction 1-8
1.5.3 Post- Construction 1-15
1.5.4 No-Build Alternative 1-16
1.5.5 Alternatives Considered but Eliminated from Further Discussion 1-16
1.6 Permits and Approvals 1-16
1.7 Project Elements that Apply to Both Build Alternatives 1-17
Chapter 2 California Environmental Quality Act Evaluation 2-1
Environmental Factors Potentially Affected 2-1
2.1 Determination 2-2
2.2 CEQA Environmental Checklist 2-3
2.2.1 Aesthetics 2-5
2.2.2 Agriculture and Forestry Resources 2-8
2.2.3 Air Quality 2-10
2.2.4 Biological Resources 2-12
2.2.5 Cultural Resources 2-20
2.2.6 Energy 2-22
2.2.7 Geology and Soils 2-24
2.2.8 Greenhouse Gas Emissions 2-27
2.2.9 Hazards and Hazardous Materials 2-29
2.2.10 Hydrology and Water Quality 2-33
2.2.11 Land Use and Planning 2-37
2.2.12 Mineral Resources 2-39
2.2.13 Noise 2-40
2.2.14 Population and Housing 2-44
2.2.15 Public Services 2-45
2.2.16 Recreation 2-47
2.2.17 Transportation 2-48
2.2.18 Tribal Cultural Resources 2-51
2.2.19 Utilities and Service Systems 2-53
2.2.20 Wildfire 2-55
2.2.21 Mandatory Findings of Significance 2-58
2.3 Climate Change 2-61
2.3.1 Regulatory Setting 2-61
2.3.2 Environmental Setting 2-65
2.3.3 Project Analysis 2-68
2.3.4 Greenhouse Gas Reduction Strategies 2-70
2.3.5 Adaptation 2-73
Chapter 3 List of Preparers 3-1

Chapter 4 Distribution List 4-1
Agencies 4-1
Federal Agencies 4-1
State Agencies 4-1
Regional and Local Agencies....4-2
Elected Officials....4-2
Federal Officials 4-2
State Officials 4-3
County Officials 4-3
City Officials 4-3

List of Tables

Table 1-1. Permit or Approval Document and Approving Agency 1-17
Table 2-1. Environmental Factors Potentially Affected....2-1
Table 2-2. Hazardous Materials Sites within 0.50-mile radius of the Project 2-31
Table 2-3. Current and Foreseeable Projects....2-59
Table 3-1. List of Preparers and Reviewers....3-1

List of Figures

Figure 1-1. Regional Vicinity Map 1-2
Figure 1-2. Project Elements, Alternative 2....1-5
Figure 1-3. Project Elements, Alternative 3....1-6
Figure 1-4. Stages of Construction for Build Alternative 2 1-11
Figure 1-5. Stages of Construction for Build Alternative 3 1-12
Figure 2-1. U.S. 2019 Greenhouse Gas Emissions....2-66
Figure 2-2. California 2019 Greenhouse Gas Emissions by Economic Sector 2-67
Figure 2-3. Change in California GDP, Population, and GHG Emissions since 2000....2-67

List of Appendices

Appendix A Project Area Photos
Appendix B Project Features, Avoidance and Minimization Measures, and Mitigation Measures
Appendix C Title VI Policy Statement
Appendix D List of Abbreviations
Appendix E List of Technical Studies and References
Appendix F Species Lists

Chapter 1 Project Description

1.1 Introduction

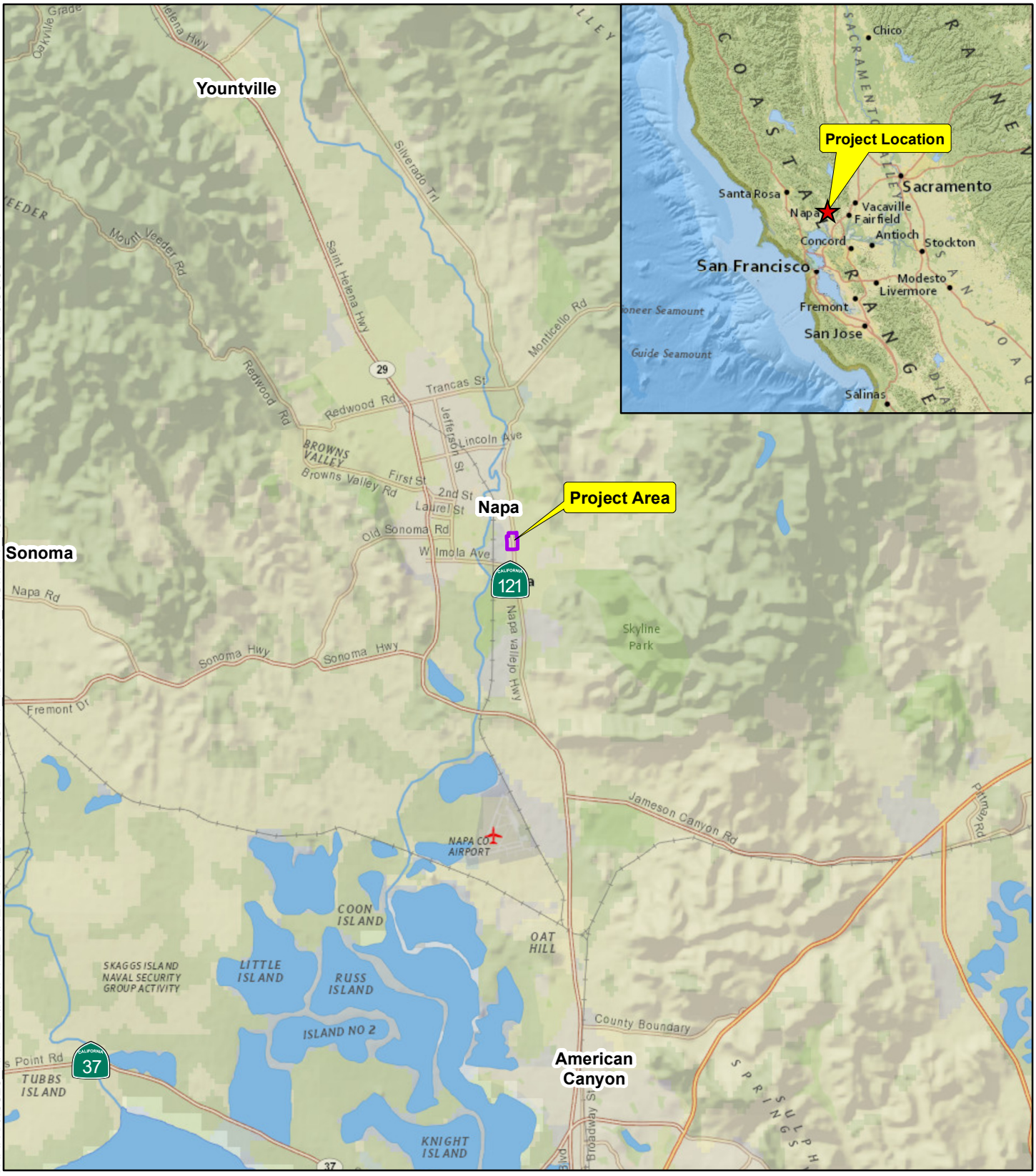
1.1.1 Overview

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA) for the State Route (SR) 121 Tulucay Creek Bridge Replacement Project (Project) at Post Mile (PM) 6.4-6.5 in Napa, California (Figure 1-1). Refer to Appendix A for Project area photos of the additional commercial development around the Project area. The Project involves the replacement of the existing two-span, concrete Tulucay Creek Bridge (Bridge 21-0003) with a single-span, precast, pre-stressed, concrete box bridge (new Bridge 21-0109). The existing bridge is 45 feet long and 77 feet wide and has four 12-foot lanes (two in each direction), two 6-foot outside shoulders (one in each direction), and a 9-foot median. The Tulucay Creek Bridge was constructed in 1918 and widened to its existing four-lane width in 1943. The existing bridge does not contain any piles and the existing abutments are situated on top of the soil (spread footings). The existing bridge is considered a conventional highway.

SR 121 is a vital transportation link in the region that provides access for recreational and commercial traffic, tourists, and local and regional commuters. The segment of SR 121 within the Project area contains Class II bike lanes. SR 121 runs north from its junction with SR 37 at Sears Point in Sonoma County, heads eastward through the Carneros wine region in southern Sonoma County and Napa Valley, then runs through the city of Napa over the Maxwell Bridge. SR 121 ends at SR 128 near Lake Berryessa in Napa County. The SR 121 corridor provides direct access between the City of Sonoma and Napa County. SR 121 also serves a portion of the commercial goods movement corridor between Napa, Sonoma, Marin, and San Francisco counties.

1.1.2 Project Funding

The total estimated support and capital cost for the Project is $32.9 million and would be funded through the 201.110 State Highway Operation and Protection Program (SHOPP) for the 2020 SHOPP cycle fiscal year.



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LEGEND

Project Area

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N

Miles

FIGURE 1-1
REGIONAL VICINITY MAP

Caltrans

State Route 121
Tulucay Creek Bridge Replacement Project
EA 4J820, NAPA-121 Post Mile 6.4 / 6.5
Napa County, California

1.2 Project Background

The Project Scope Summary Report for the SR 121 Tulucay Creek Bridge Replacement was approved on October 15, 1997 (Caltrans 2019). Subsequently, a Supplemental Project Scope Summary Report was approved on July 8, 2005. The Project design was developed under Expenditure Authorization (EA) 20940, but the bridge replacement project was un-programmed in 2012 because federal funding for the Project expired. Since then, further investigations led to a project change request approved in 2013, which changed the scope of the project from a bridge replacement to a bridge repair. This change resulted in an interim bridge repair project (Caltrans 2014) to maintain a structurally sound bridge until the existing bridge could be replaced. This Project (EA 4J820) was then re-initiated in September 2018 with the same scope as that of the original project (EA 20940) to replace the bridge (Caltrans 2019).

CEQA and National Environmental Policy Act (NEPA) documents were approved for a bridge replacement project in 2001 but were subsequently repurposed to evaluate the bridge repair project. The purpose of this current environmental process is to disclose the impacts of this newly programmed bridge replacement project that entails a different scope and design due to bridge standards updates that occurred in 2001 (Caltrans 2021a). A new CEQA and NEPA document is necessary because the Project site and environmental setting conditions have changed considerably since the early 2000s.

1.3 Purpose and Need

1.3.1 Purpose

The purpose of this Project is to restore the structural integrity of the Tulucay Creek Bridge to allow for continued use of the bridge by the traveling public.

1.3.2 Need

Caltrans prepared a *Bridge Needs Report* that identified longitudinal cracks at the top of the reinforced concrete tee beams and deterioration of the concrete and reinforcement of the existing bridge. The bridge is subject to strain from the additional weight of the asphalt concrete placed on the structure over the years. These conditions affect the integrity of the structure (Caltrans 2021b).

1.4 Project Description

The Project proposes to replace the existing bridge with a new single-span, precast, pre-stressed, concrete box bridge, including bridge railings. The new bridge would have four 12-foot lanes (two lanes in each direction), two outside shoulders approximately 8 feet wide, two sidewalks of between 6 and 10 feet, a 14-foot median, and crash cushions fixated at the end of the bridge rails. The proposed shoulders would be signed and striped as Class II bike lanes. As described in Section 1.5, the bridge in Alternative 2 would be approximately 100 feet wide and would have 10-foot-wide sidewalks on each side. The bridge for Alternative 3 would be narrower and would be approximately 96 feet wide with one 6-foot-wide sidewalk in the southbound direction and one 10-foot-wide sidewalk in the northbound direction. Section 1.5.5 discusses Alternative 1, which was eliminated from further evaluation.

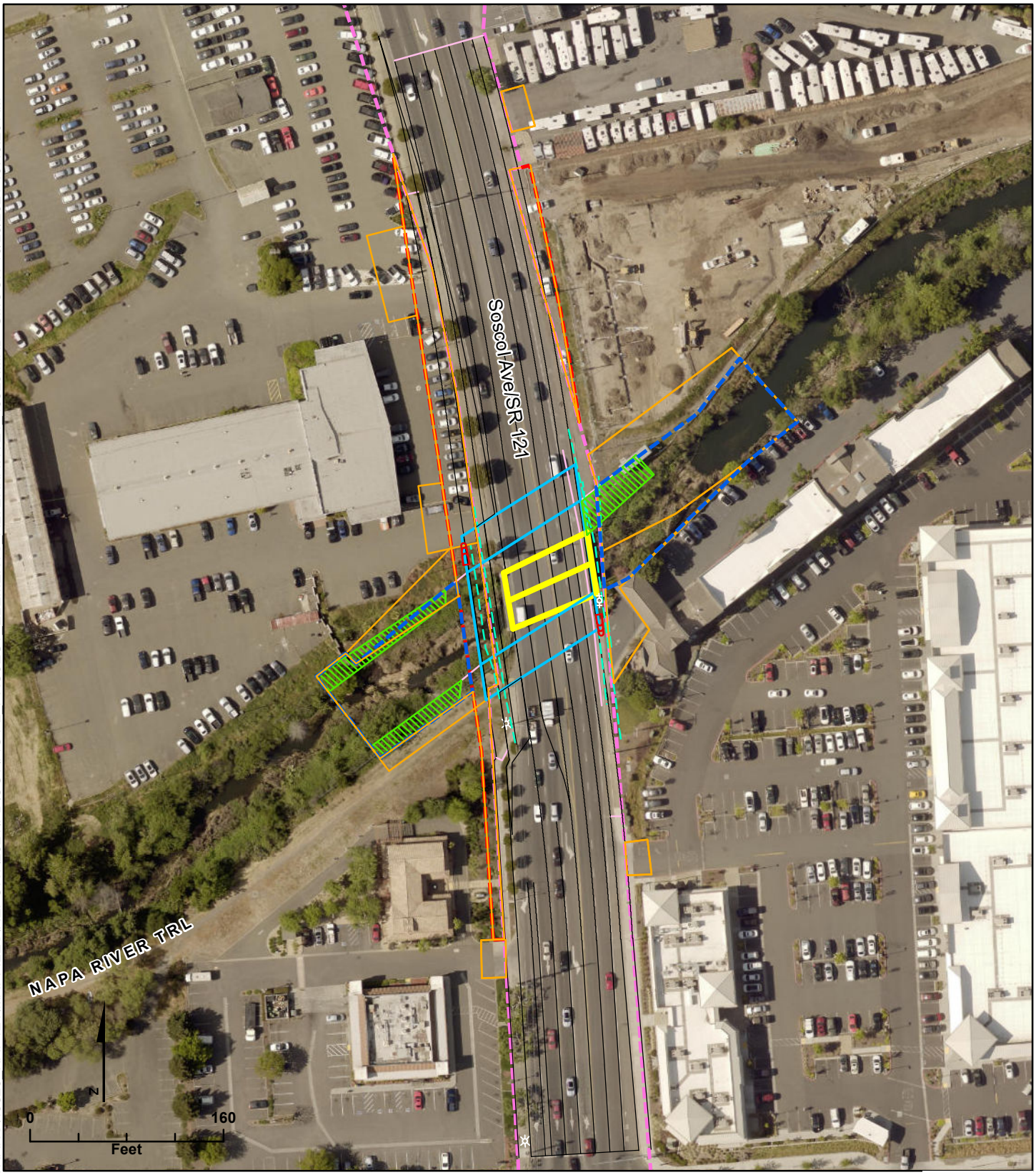
The curve of the new bridge would be improved to conform to the creek channel alignment. The roadway and sidewalks in both directions would be aligned and widened to conform to the new bridge approaches. The new bridge would meet Americans with Disabilities Act standards and would have the same vehicular capacity of the existing bridge.

1.5 Project Alternatives

This section discusses the proposed build alternatives (Alternative 2 and Alternative 3) and the No-Build Alternative. The No-Build Alternative proposes to keep the existing bridge and not build a new bridge.

For Alternative 2, the new bridge would be 77 feet long with an overall width of approximately 100 feet, including the bridge rails. The bridge would have four 12-foot lanes (two lanes in each direction), two 8-foot outside shoulders, two 10-foot sidewalks, and a 14-foot median. The curve of the new bridge would conform to the creek channel alignment. Figure 1-2 shows the footprint of Alternative 2. The roadway and sidewalks in both directions would be aligned and widened to conform to the new bridge approaches.

For Alternative 3, the new bridge length would be the same as Alternative 2; however, the new bridge width would be 96 feet wide as opposed to 100 feet. In addition, the southbound sidewalk in Alternative 3 would be 6 feet wide as opposed to 10 feet. Figure 1-3 shows the Alternative 3 footprint. The alignment of this alternative would shift to the east and therefore would require additional right of way (ROW) along the northbound side of SR 121. This alternative would maintain the existing centerline alignment and allow equal widths of widening in both directions.



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LEGEND

- Existing Bridge
- Existing Right of Way
- Existing Utilities
- Geosynthetic Reinforced Embankment
- Proposed Bridge
- Proposed Drainage Easement
- Proposed New Pavement
- Proposed Right of Way
- Proposed Utilities
- Temporary Construction Easement
- Temporary Roadways
- Crash Cushons

FIGURE 1-2
PROJECT ELEMENTS
ALTERNATIVE 2
State Route 121
Tulucay Creek Bridge Replacement Project
EA 4J820, NAPA-121 Post Mile 6.4 / 6.5
Napa County, California

Caltrans

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LEGEND

- Existing Bridge
- Existing Right of Way
- Existing Utilities
- Geosynthetic Reinforced Embankment
- Proposed Bridge
- Proposed New Pavement
- Proposed Right of Way
- Proposed Utilities
- Temporary Construction Easement
- Temporary Roadways
- Crash Cushions

FIGURE 1-3
PROJECT ELEMENTS
ALTERNATIVE 3
State Route 121
Tulucay Creek Bridge Replacement Project
EA 4J820, NAP-121 Post Mile 6.4 / 6.5
Napa County, California

Sections 1.5.1 through 1.5.3 discuss the common elements of both build alternatives at the various stages of the Project, while Section 1.5.4 describes the No-Build Alternative. Differences between the build alternatives will be discussed at the end of each section.

1.5.1 Pre-Construction

CONSTRUCTION STAGING AREAS

Construction staging is anticipated to occur within Caltrans ROW on the existing paved lanes that would be closed during construction activities and within temporary construction easement areas.

BEST MANAGEMENT PRACTICES

Best management practices (BMPs), including project features (PFs) and avoidance and minimization measures (AMMs), would be implemented at various points of the Project (pre-construction, construction, and post-construction). These measures are used to minimize environmental disturbance. Comprehensive lists of the project features and AMMs are provided in Appendix B. A few pre-construction measures would include:

- Caltrans would delineate construction areas and environmentally sensitive areas (areas containing sensitive habitats and/or cultural resources adjacent to or within the Project limits for which physical disturbance is not allowed) on the final construction plans.
- Construction work windows would be incorporated where applicable to avoid nesting bird season.
- An agency-approved biologist would conduct pre-construction surveys for special-status species. The biologist would be present during construction activities, including establishment of environmentally sensitive areas, vegetation clearing and grubbing, ground disturbance, and other work activities when special-status species may be harmed or harassed. A special-status species list for the Project area is provided in Appendix F.
- During construction, an agency-approved archaeologist would conduct archaeological and Native American monitoring.
- A Storm Water Pollution Prevention Plan would be developed and temporary construction BMPs would be implemented in compliance with the requirements of the State Water Resources Control Board as outlined in the Construction General Permit (CGP).

IN-CREEK WORK

Two 14-foot-wide temporary access ramps (36 feet and 50 feet long) would be constructed so that equipment can access the creek bed to construct the bridge, abutments, and creekside retaining walls and to conduct fish passage improvements. These temporary access ramps would be located east along Tulucay Creek near the Cambria Hotel and on the west by the Computer Engineer Group buildings. The banks of the creek would be graded before a geosynthetic-reinforced embankment is constructed. This method involves placing geosynthetic fabric on the graded channel, adding soil on top of the fabric, and then compacting it to stabilize. Geosynthetic materials are made from hydrocarbons and are used with soil or rock to strengthen a weak embankment area. Geosynthetic reinforcement may be required to provide additional stability in the construction of the embankment on soft soil by carrying part of the load so that the stress on soft soil is reduced. In-creek work would be restricted to the dry season from June 1 to October 31.

UTILITIES

Utilities would be temporary relocated or protected in place during construction. Utilities to be relocated would occur inside and outside the Project footprint and would include a PG&E underground gas line and overhead electrical line, AT&T overhead telephone line, and a City of Napa underground water line, water meter, and fire hydrant. The existing fiber optic cables under the existing bridge would either be relocated prior to construction or would be protected in place. A sewer line located in the concrete apron is anticipated to be protected in place. Work in the creek bed would be needed during the temporary utility relocation and protection in place of utilities.

Both Alternative 2 and Alternative 3 would require manhole relocation. For Alternative 2, a manhole approximately 10 feet from the proposed new bridge would be relocated. For Alternative 3, the relocated manhole would be nearer (approximately 2.5 to 3 feet from) to the proposed new bridge. The potential relocation of the manholes will be determined during future coordination with the utility owner.

1.5.2 Construction

CONSTRUCTION METHODS

Demolition and construction of the bridge would be the same for both build alternatives and would occur in the same four stages. In addition, the build alternatives share common construction methods such as the excavation depth for abutments and cast-in-drilled hole (CIDH) piles, the number of piles to be used for each abutment, sheet piles for temporary shoring and staging, curing for the abutments, approach slab and railings installation, and the pouring and curing of the

sidewalks. The stages of construction can be seen in Figure 1-4 and Figure 1-5 for Alternatives 2 and 3, respectively.

During Stage 1, the deck would be saw-cut and approximately 6 feet of the southbound lane would be removed to allow for the construction of the southbound side of the new bridge. The construction of the new foundations would first require excavations approximately 16 feet deep. For both alternatives, it is estimated that the abutments would contain 22 CIDH piles, each 24 inches in diameter (22 piles per abutment, for a total of 44 piles). The contractor would then drill holes approximately 40 feet deep behind existing abutment locations for the abutment CIDH piles. For both alternatives, there are two locations at the abutments where the footing is lower than the current elevation. At these locations, the contractor would use sheet piles for temporary shoring and staging, which would require the use of vibratory or impact hammers. Once the holes are drilled, CIDH piles would be placed within the drilled holes containing reinforced bars before being set in place with poured concrete.

Once the abutments are built, a crane would lower an 8- to 4-foot-wide precast concrete box girders in place for the bridge deck. Type 732 railing would be built in place along the sidewalk and on the precast structure. One temporary northbound sidewalk approximately 7 feet 8 inches wide would be open and available to pedestrians during construction. In addition, during Stages 1 and 2 of construction, the Project would comply with Caltrans guidelines consistent with the *Manual on Uniform Traffic Control Devices* (FHWA 2009) such as reducing the speed limit to 35 miles per hour (mph) and posting share-the-road signage to accommodate bicyclists.

During Stage 2, the processes for Alternative 2 and Alternative 3 would differ as follows:

- For Alternative 2, the process would be similar to Stage 1, except the removal of the deck, pier and abutment would take place on the northbound side of the existing bridge and 39 feet of the bridge lanes would be removed. Construction of the foundations, abutments, precast deck, and the railings would be the same as Stage 1 activities. One temporary southbound sidewalk approximately 6 feet wide would be open and available to pedestrians during construction. In addition, share-the-road signage would be posted and vehicle speed limit would be reduced to 35 mph.

- For Alternative 3, 26 feet of the northbound lane would be removed, then excavation for abutments and CIDH piles would be completed and installed. In the final Stage 2 task, a crane would lower a 7- to 4-foot-wide precast concrete box girders in place for the bridge deck.

During Stage 3, the remaining 26 feet under Alternative 2, or 31 feet under Alternative 3, of the northbound lane, median, and southbound lane of the existing bridge would be removed to allow the construction of the central part of the new bridge joining the deck, pier and abutments together. Two 14-foot-wide temporary access ramps (36 feet and 50 feet long) would be needed for demolition equipment to access the existing pier. Two temporary sidewalks, northbound and one southbound, each approximately 6 and 10 feet wide, would be open and available to pedestrians during construction of this stage. In addition, during Stages 3 and 4 of construction, compliance with *Manual on Uniform Traffic Control Devices* guidelines such as a reduction of speed to 35 mph and signs alerting motorists that bicyclists are permitted to use the full traffic lane would be posted to accommodate bicyclists. If feasible, a temporary bike path would be created to accommodate bicyclists during Stages 3 and 4 of construction.

During Stage 4, the sidewalks would be poured and cured in place. Under Alterative 2, one temporary sidewalk, approximately 14 feet wide, would remain open and be available to pedestrians during construction. Under Alterative 3, one temporary sidewalk, approximately 12 feet wide in the southbound direction or 14 feet wide in the northbound direction, would remain open and available to pedestrians during construction.

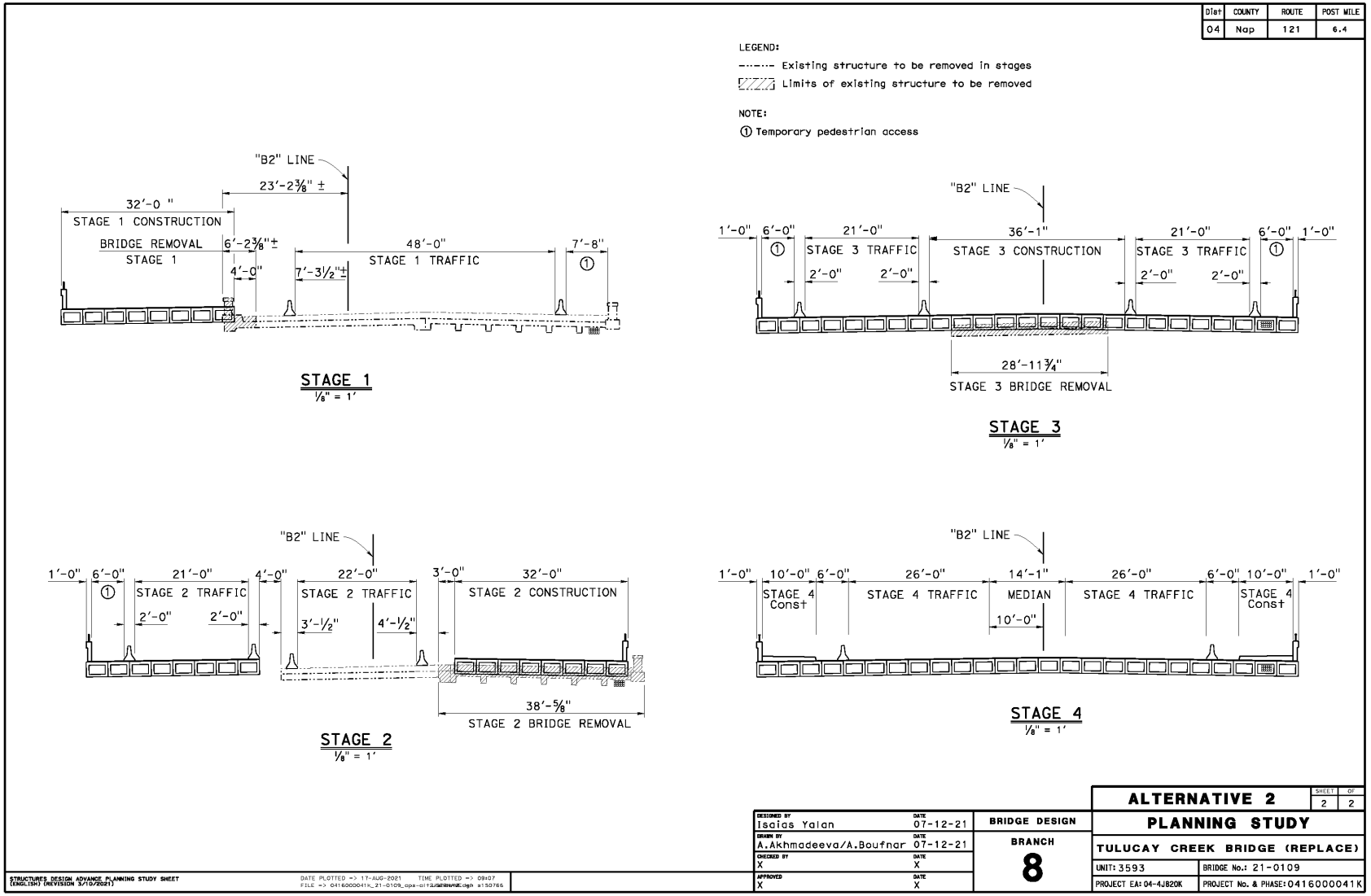

Figure 1-4. Stages of Construction for Build Alternative 2

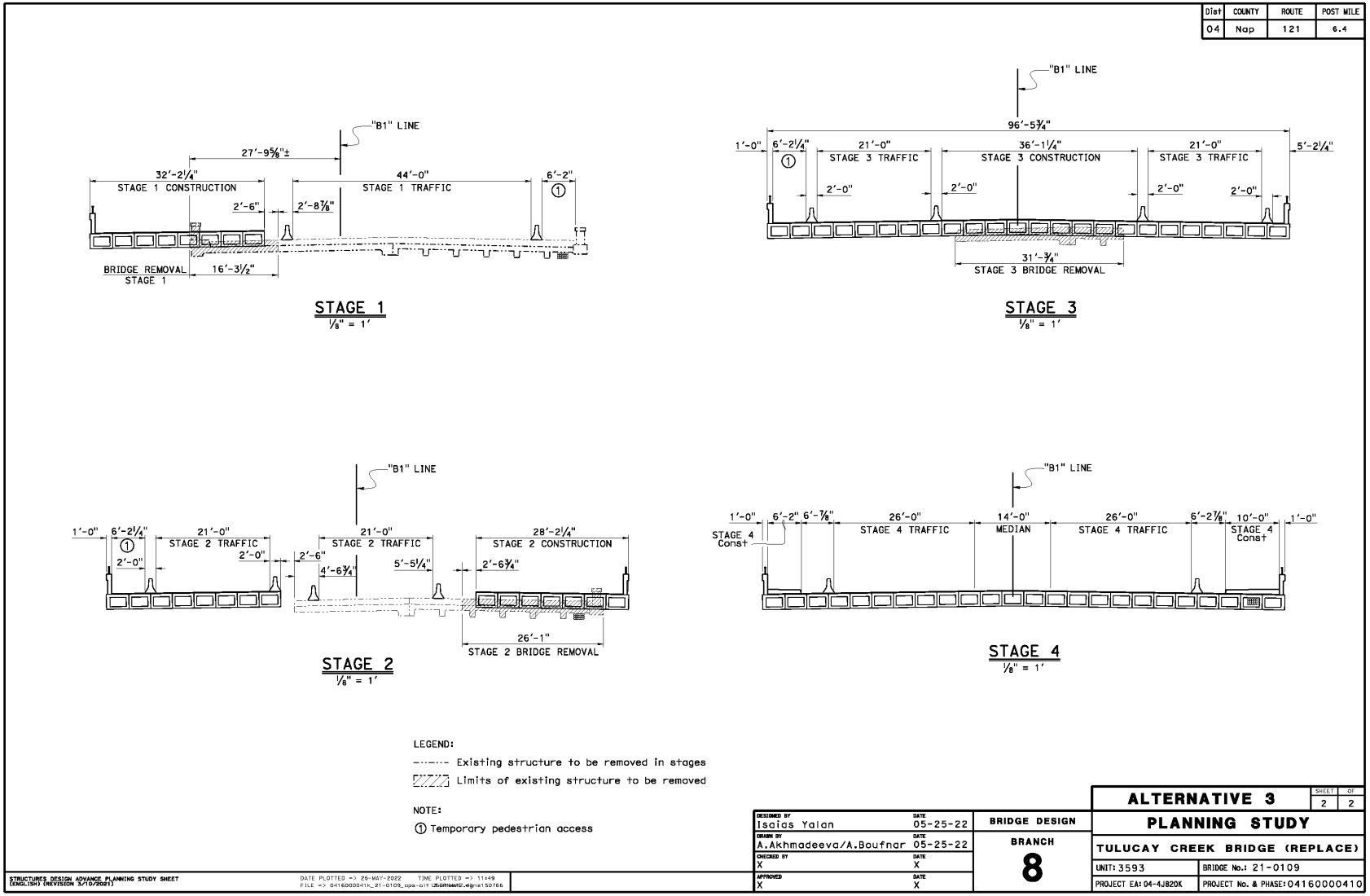

Figure 1-5. Stages of Construction for Build Alternative 3

RIGHT OF WAY

Permanent ROW (fee acquisition) and temporary construction easements (TCEs) would be required for both alternatives. Both build alternatives under consideration would be wider and longer than the existing bridge, and therefore, would require both additional land to be acquired adjacent to the bridge as well as additional roadway approaching the bridge to taper the roadway approaches. Alternative 2 would result in seven TCEs and the partial acquisition (fee acquisition) of four parcels. Alternative 3 would also result in seven TCEs, with the partial acquisition of eight parcels. Drainage easements are also proposed on the east and west sides of the bridge within the creek (Figures 1-2 and 1-3).

GRADING OF CREEK BANKS AND PROTECTION

Both build alternatives under consideration would be wider than the existing bridge, and the change in the alignment would require grading within the creek. Bank slope protection such as a retaining wall or rock slope protection would be installed. The retaining wall on the northwestern side of the creek would be affected by the Project and may have to be replaced, repaired, or removed. A portion of the retaining wall would be removed due to the bridge widening. The degree to which the wall would be affected would be determined during the geotechnical investigation.

FISH PASSAGE

Tulucay Creek is designated critical habitat and there are known anadromous fish occurrences, so habitat restoration/enhancement would be required, and the Project would not result in any new fish passage barriers. A special-status species list for the Project area is provided in Appendix F.

Past proposed fish passage improvements were considered. Past design proposed for passage improvements included rock weirs to form creek pools and improve flow as well as geoweb matting to mitigate against seasonal stormwater flows and to prevent erosion. For this Project, a new design would be considered and may use willow cuttings, large woody debris, and bioengineered materials to assist with creating favorable creek flows and pools. In addition, fish passage elements would be developed with coordination and input from necessary resource agencies and would be finalized in future Project phases.

CREEK IMPROVEMENTS

Both build alternatives under consideration are proposing to widen the creek bed from the existing 40-foot width to approximately 65 feet wide. Grading along the slope is anticipated to conform to the proposed abutment locations and would occur perpendicular to the creek at a minimum of 30 feet north from where the existing northern abutment is located. Within the Project footprint, there is a concrete lining that extends approximately 18 feet upstream of the existing bridge to the

downstream end of the bridge, with concrete cutoff walls on both ends. The cutoff wall at the upstream end incorporates the concrete encasement for a 16-inch sewer line. For the new bridge, the concrete lining along the channel bottom would remain and be extended to the new abutment locations. The encasement, which previously was an impediment to fish passage, may be buried or leveled with the proposed channel elevation.

DRAINAGE SYSTEMS

Both build alternatives under consideration would replace and relocate an existing drainage inlet approximately 20 to 30 feet north of the bridge that discharges roadway runoff through the northeastern abutment wall. Due to the relocation of the existing drainage inlet, the alignment of the pipe would be different; however, it would be adjusted to follow the existing pipe alignment. The pipe would also be upsized from a 12-inch pipe to an 18-inch pipe. The anticipated maximum depth of excavation would be approximately 8 feet for drainage systems at the northeast and northwest of the bridge. ROW for the drainage easement has been requested.

A concrete spillway that drains to the creek on the northwestern side would be replaced with a drainage inlet and pipe. A 54-inch storm drain outlet to the creek on the southwestern side downstream of the bridge would need to be investigated further to determine whether this pipe would be affected by the Project.

At least one new drainage system is anticipated to be constructed near the southbound approach to the bridge situated in the northwest quadrant. The new drainage system would intercept runoff from the roadway and discharge into the creek. The anticipated maximum depth of excavation would be approximately 8 feet. There are a few existing drainages on the north side that would be replaced with a pipe and culvert system that drains north of SR 121.

TRAFFIC MANAGEMENT PLAN

A traffic management plan (TMP) would be implemented during construction to minimize and prevent delays and inconvenience to the traveling public. An emergency response plan would also be prepared. The TMP would include press releases, changeable message signs, ground-mounted signs, lane closure charts, and Construction Zone Enhanced Enforcement Program (COZEEP) features to increase the safety of motorists and construction workers within State highway project construction zones, Caltrans and the California Highway Patrol jointly operate COZEEP. COZEEP is used to increase traffic enforcement above normal levels during the various construction stages when lane closures increase the potential for traffic accidents within the highway construction project zone, especially at night. Lane closures are anticipated; however, four lanes of traffic would remain open during construction. Night work would occur after 9 p.m. for up to 12 nonconsecutive

nights between February 2025 and December 2027. Refer to Appendix B for the full description of the TMP.

VEGETATION REMOVAL

Tulucay Creek flow is seasonal, with only small amounts of flow during the summertime. The creek bed and banks have vegetation that would be removed during grading and construction of retaining walls (Figures 1-2 and 1-3) and bridge abutments. Moreover, creek bed vegetation would either be removed or affected during construction of fish passage improvements and a work platform for building retaining walls. Some vegetation removal and impacts would occur during widening of the bridge approaches to conform to the new widened bridge. Tree removals are not anticipated.

CONSTRUCTION EQUIPMENT

Construction equipment would include, but is not limited to, the following: excavators, graders, cranes, loaders, telescoping forklifts, backhoe loaders, concrete saws, concrete pumps, concrete trucks, mobile batch plants, pavers, rollers, compactors, air compressors, portable generators, portable lighting, and pile driving hammers for sheet piles (impact and vibratory).

BICYCLES AND PEDESTRIANS

During construction and demolition, at least one temporary sidewalk in either the northbound or southbound direction would be open to pedestrians and adhere to Americans with Disabilities Act standards throughout Project construction. An existing sidewalk in the northbound direction near the Cambria Hotel would be open to pedestrians. Under existing conditions, no sidewalks continue over the existing Tulucay Creek Bridge for pedestrian use; however, there is a concrete edge attached to the southbound concrete barrier of the bridge that is approximately 1 foot high by 1 foot wide with a 4-inch sloping face, which pedestrians may currently use to cross the bridge. The pedestrian access route would maintain road crossings and access to businesses. When insufficient shoulder width is available during construction, bicyclists would be encouraged to share roadways with vehicles. Compliance with *Manual on Uniform Traffic Control Devices* guidelines would be implemented throughout construction and would include posting signage for vehicles to reduce speed to 35 mph and share the roadway. If feasible, during Stages 3 and 4 of construction, a temporary bike path would be created to accommodate bicyclists.

1.5.3 Post- Construction

SITE CLEANUP AND POST-CONSTRUCTION ACTIVITIES

All construction materials and debris would be removed from the construction work areas and recycled or properly disposed of offsite. Caltrans would restore all areas temporarily disturbed by Project activities, such as staging areas and access roads,

to near or better than pre-construction conditions in accordance with applicable permits and Caltrans standard requirements.

SCHEDULE

Construction is anticipated to begin in February 2025 and end in December 2027. A total of 250 working days is estimated. Both Alternative 2 and Alternative 3 would require three construction seasons because of the in-creek work restrictions that occur from June 1 to October 31.

1.5.4 No-Build Alternative

Under the No-Build Alternative, the existing Tulucay Creek Bridge would not be replaced with a new bridge. The longitudinal cracks at the top of the tee beams would continue to grow, and the concrete and reinforcement of the bridge would continue to deteriorate. In addition, the bridge would continue to be subjected to strain from the weight of asphalt concrete placed on the structure. The sidewalks would not be constructed, and the existing bridge would continue to not meet Americans with Disabilities Act standards. As a result, the structural integrity of the bridge and the safety of traveling public would continue to pose a risk. Therefore, this alternative does not meet the purpose and need for the Project.

1.5.5 Alternatives Considered but Eliminated from Further Discussion

Build Alternative 1 was previously considered and eliminated from further evaluation by Caltrans during the project initiation phase under EA 20940. Alternative 1 proposed to construct a new bridge with the same dimensions as Alternative 2; however, the bridge profile would remain the same level as the existing bridge. Alternative 1 was eliminated from further consideration because of concerns regarding the proposed bridge profile and the potential traffic delays associated with the duration of the alternative's proposed stages of construction.

1.6 Permits and Approvals

The permits, agreements, and certifications that would be required for Project construction are outlined in Table 1-1.

Table 1-1. Permit or Approval Document and Approving Agency

Approving Agency	Permit or Approval Document
California Department of Fish and Wildlife (CDFW)	1602 Lake and Streambed Alteration Agreement
Regional Water Quality Control Board – San Francisco Bay (RWQCB)	Clean Water Act Section 401 Water Quality Certification
U.S. Army Corps of Engineers (USACE)	Clean Water Act Section 404 Nationwide Permit 14
National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries)	Biological Opinion
U.S. Fish and Wildlife Service (USFWS)	Letter of Concurrence

1.7 Project Elements that Apply to Both Build Alternatives

Each Project alternative includes the measures (called project features) in this section, which are included as part of the Project description. Standardized measures (such as BMPs) are those measures that are generally applied to most or all Caltrans projects. These standardized or pre-existing measures allow little discretion regarding their implementation and are not specific to the circumstances of a particular project.

The following project features apply for both Build Alternatives:

PF-AES-1: Vegetation Protection. Existing trees and vegetation would be preserved to the extent feasible. Trees and vegetation outside of the clearing and grubbing limits would be protected from the contractor's operations, equipment, and materials storage. Tree trimming and pruning, where required, would be under the direction of a certified arborist.

PF-AES-2: Erosion Control. After construction, all areas cleared within the Project limits for uses such as contractor access, staging, and trenching operations would be treated with appropriate erosion control measures where required.

PF-AES-3: Construction Staging. Except as detailed in the contract plans, staging areas would not affect existing landscaped areas resulting in death and/or removal of trees and shrubs, or disruption and destruction of existing irrigation facilities.

PF-AES-4: Construction Waste. During construction operations, unsightly material and equipment in staging areas would be placed where they are less visible and/or covered where possible.

PF-AES-5: Construction Lighting. Construction lighting would be directed toward the immediate vicinity of active work and would avoid light trespass through directional lighting, shielding, and other measures as needed.

PF-AQ-1: Dust Control. Dust control measures would be included in the Storm Water Pollution Prevention Plan and implemented to minimize construction impacts to existing communities. The plan would incorporate measures such as sprinkling, speed limits, covering transported material loads, and timely revegetation of disturbed areas as needed, as well as posting a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints and at the Bay Area Air Quality Management District regarding compliance with applicable regulations. Water trucks or dust palliatives would be applied to the site, including unvegetated areas, and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emissions or at the ROW line, depending on air pollution control district and air quality management district regulations and local ordinances.

PF-AQ-2: Idling and Access Points. Idling times would be minimized either by shutting off equipment when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure [Title 13, Section 2485 of California Code of Regulations]). Clear signage would be provided for construction workers at all access points. Construction activities involving the extended idling of diesel equipment or vehicles would be prohibited, to the extent feasible.

PF-AQ-3: Maintaining Construction Equipment and Vehicles. All construction equipment and vehicles would be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment would be checked by a certified mechanic and determined to be running in proper condition prior to operation.

PF-BIO-1: Documentation at Project Site. A Permit Compliance Binder would be maintained at the construction site at all times and presented to resource agency (U.S. Army Corps of Engineers [USACE], National Oceanic and Atmospheric Administration’s National Marine Fisheries Service [NOAA Fisheries], U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW], and/or San Francisco Bay Regional Water Quality Control Board [RWQCB]) personnel upon request. The Permit Compliance Binder would include a copy of all original permits

and agreements, and any extensions and amendments to the permits and agreements.

PF-BIO-2: Work According to Documents. Except as they are contradicted by measures within the permits and agreements, all work would be conducted in conformance with the Project description in the permits and agreements and the AMMs provided in the permits and agreements.

PF-BIO-3: In-channel Work Period. With the exception of non-ground disturbing vegetation removal (to avoid impacts to nesting birds), in-channel work and any dewatering necessary would be scheduled between June 1 and October 31. The in-channel work window may be extended via email request and written resource agency approval. Extension requests must be submitted a minimum of two weeks prior to the October 31 work cessation period for in-channel work.

PF-BIO-4: Water Diversion Plan. Caltrans would submit a water diversion plan to the appropriate agencies for review prior to construction. The approved temporary water diversion system would be used during construction so there is no flowing water in the river bed during in-stream construction activity.

PF-BIO-5: Work Period in Dry Weather Only. Work in the bed, bank, channel, and any associated riparian habitat would only be conducted during periods of dry weather. Forecasted precipitation would be monitored. When 0.25 inch or more of precipitation is forecasted to occur, work would stop before precipitation commences. No Project activities would be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, all sites currently under construction and all sites scheduled to begin construction within the next 72 hours would be inspected for erosion and sediment problems and corrective action would be taken as needed; 72-hour weather forecasts from the National Weather Service would be consulted and work would not start back up until runoff ceases and there is less than a 50 percent forecast for precipitation for the following 24-hour period.

PF-BIO-6: Environmental Training. Prior to the start of construction, a biologist would provide a training session for all work personnel to identify any sensitive species that may be in the area, their basic habits, how they may be encountered in their work area, and procedures to follow when they are encountered. Any personnel joining the work crew later would receive the same training before beginning work. Upon completion of the education program, employees would sign a form stating they attended the program and understand all protection measures. A pamphlet that contains images of sensitive species that may occur within the Project, environmentally sensitive areas (ESAs) within the Project site, and notes key

avoidance measures, as well as employee guidance would be given to each person who completes the training program. These forms would be made available to the resource agencies upon request.

PF-BIO-7: Mark Environmentally Sensitive Areas. Before construction begins, ESAs would be clearly delineated using high visibility orange fencing, flagging, or similar marking to delineate sensitive habitats. The ESA marking would remain in place throughout construction. It may be removed during the wet season (and subsequently re-installed), if needed to prevent materials from being washed away. The final Project plans would depict all locations where ESA markings would be installed and how it would be installed. The bid solicitation package special provisions would clearly describe acceptable marking material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs. ESA markings would be maintained in good repair throughout the Project as needed.

PF-BIO-8: Nesting Bird Surveys. If Project activities occur between February 1 and September 30, then a pre-construction survey(s) would be conducted for nesting birds no more than 3 days before construction. If active nests are found, then an appropriate buffer would be established and the nest would be monitored for compliance with the Migratory Bird Treaty Act and Fish and Game Code Section 3503.

PF-BIO-9: Active Nest Buffers. If an active bird nest is found during construction activities, then the following ESA buffers would be established: If an active raptor nest is observed, a 300-foot ESA buffer would be implemented to avoid impacting the young until they have fledged; if an active nest of non-raptor migratory birds is observed, a 50-foot ESA buffer would be implemented to protect the young until they have fledged, or as otherwise determined by consultation with USFWS and CDFW regarding appropriate action to comply with the Migratory Bird Treaty Act and Fish and Game Code Section 3503.

PF-BIO-10: Stormwater Best Management Practices. Water pollution control and erosion control BMPs would be developed and implemented to minimize wind- or water-related erosion. They would follow the requirements of the RWQCB and standards outlined in Construction site BMPs manual.

PF-BIO-11: Construction Site Management Practices. The following site restrictions would be implemented to avoid or minimize potential impacts on sensitive biological resources:

a. Enforce a speed limit of 15 miles per hour for Project vehicles in unpaved portions of the site to reduce dust and excessive soil disturbance.

b. Locate construction access, staging, storage, and parking areas within the Caltrans ROW and outside of any designated ESA to the extent practicable. Access routes, staging and storage areas, and contractor parking would be limited to the minimum necessary to construct the proposed Project. Routes and boundaries of roadwork would be clearly marked before initiating construction.

c. Certify, to the maximum extent practicable, borrow material is nontoxic and weed free.

d. Enclose food and food-related trash items in sealed trash containers and remove them from the site at the end of each day.

e. Prohibit pets from entering the Project area during construction.

f. Prohibit firearms within the Project site, except for those carried by authorized security personnel or local, state, or federal law enforcement officials.

PF-BIO-12: Invasive Weed Control. To reduce the spread of invasive, non-native plant species and minimize the potential decrease of palatable vegetation for wildlife species, Caltrans would comply with Executive Order 13112. This order is to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health effects. If noxious weeds are disturbed or removed during construction-related activities, the contractor would be required to contain the plant material associated with these noxious weeds and dispose of them in a manner that would not promote the spread of the species. The contractor would be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing of materials. Areas subject to noxious weed removal or disturbance would be replanted with fast growing native grasses or a native erosion control seed mixture. Where seeding is not practical, the target areas within the Project area will be covered to the extent practicable with heavy black plastic solarization material until the end of the Project.

If work occurs in sensitive habitat, vehicles and equipment would be thoroughly cleaned before arriving on the site to prevent the spread of noxious weeds from other locations.

PF-BIO-13: Vegetation and Tree Removal. Vegetation would be cleared only where necessary and cut above soil level, except in areas that would be permanently affected or excavated. This would allow plants that reproduce vegetatively to resprout after construction.

PF-BIO-14: Restore Disturbed Areas. Temporarily disturbed areas would be restored to the maximum extent practicable. Exposed slopes and bare ground would be reseeded with native grasses to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, native species will be replanted, based on the local species composition.

PF-BIO-15: Bat Protection. A habitat assessment would be conducted for potentially suitable bat roosting habitat prior to construction activities. If the habitat assessment reveals any structures are suitable roosting habitat for bats, then the appropriate exclusionary measures would be implemented prior to construction, during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance may include exclusionary blocking or filling potential cavities with foam, visual monitoring and/or staging Project work to avoid bats. If bats are known to use the structures, then exclusion netting would not be used.

If the habitat assessment reveals suitable bat habitat in trees and tree removal is scheduled from April 16 through August 30 and/or October 16 through February 28, then presence/absence surveys would be conducted 2 to 3 days prior to any tree removal or trimming. If presence/absence surveys are negative, then tree removal would proceed following a two-phased tree removal system. If presence/absence surveys indicate bat occupancy, then the occupied trees would only be removed from March 1 through April 15 and/or August 31 through October 15 by following the two-phased tree removal system. The two-phased system would be conducted over 2 consecutive days. On the first day, (in the afternoon) limbs and branches would be removed by a tree cutter using chainsaws or other hand tools. Limbs with cavities, crevices, or deep bark fissures would be avoided and only branches or limbs without those features would be removed. On the second day, the entire tree would be removed.

Bats would not be disturbed without specific notice to and consultation with CDFW.

PF-BIO-16: Prevent Inadvertent Entrapment. To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1 foot deep would be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earthen fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled, they would be thoroughly inspected for trapped animals. Pipes, culverts, or similar structures stored in the Project area overnight would be inspected before they are subsequently moved, capped, or buried.

PF-BIO-17: Night Lighting. Nighttime work would be avoided to the maximum extent practicable. For unavoidable nighttime work, all lighting would be shielded and

directed downward, toward the active construction area to avoid exposing nocturnal wildlife to excessive glare.

PF-CULT-1: Discovery of Human Remains. Stop potentially damaging work if human remains are uncovered during construction, assess the significance of the find, and pursue appropriate management.

California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code Sections 7050.5 and 7052, and California Public Resources Code Section 5097.

If remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' Office of Cultural Resource Studies (OCRS) will be called. Caltrans OCRS stall will assess the remains and, if determined human, will contact the County Coroner as per Public Resources Code Sections 5097.98, 5097.99, and 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the Coroner will contact the Native American Heritage Commission who will assign a Most Likely Descendant. Caltrans will consult with the Most Likely Descendant on treatment and reburial of the remains. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

PF-GHG-1: Waste Reduction. If practicable, nonhazardous waste and excess material would be recycled. If recycling is not practicable, the material would be disposed of appropriately.

PF-GHG-2: Energy Reduction. Solar energy would be used to reduce the use of non-renewable energy during construction.

PF-HAZ-1: Caltrans Standard Specifications and Hazardous Waste Regulations. Caltrans Standard Specifications latest section 13-4, "Job Site Management," would be implemented to prevent and control spills or leaks from construction equipment and from storage of fuels, paints, cleaners, solvents, and lubricants. All aspects of the Project associated with transport, storage, use, and disposal of hazardous materials would be done in accordance with the California Health and Safety Code and the appropriate local, state, and federal hazardous waste regulations. Handling and management of hazardous materials would comply with Caltrans latest Standard Specification section 14-11, "Hazardous Waste and Contamination," which outlines handling, storing, and disposing of hazardous waste.

PF-HAZ-2: Soil and Groundwater Investigation. A soil and groundwater investigation for metals, primarily lead, and other contaminants of concern (e.g., petroleum hydrocarbons and volatile organic compounds) would be completed during the Project's design phase to characterize and profile the soil and groundwater to be encountered by the construction of the proposed build alternatives. Depending upon the findings of the site investigation, appropriate hazardous waste management special provisions would be prepared and included in the Project specifications**.**

PF-TRA-1: Traffic Management Plan. A Traffic Management Plan (TMP) would be developed by Caltrans during the design (Plans, Specifications, and Estimate [PS&E]) phase. The TMP would include elements such as haul routes and phasing to reduce impacts to local residents, as feasible, and maintain access for police, fire, and medical services in the local area. The TMP would also include public information, motorist information, incident management, construction detours to local residents and tourist, as feasible, as well as implementation of Construction Zone Enhanced Enforcement Program (COZEEP) features. Prior to construction, Caltrans would notify adjacent property owners, businesses, the Napa County Transportation Authority (NVTA), Napa County, the Chamber of Commerce and Visitors Bureau, and the Napa County Regional Park and Open Space District regarding construction activities and access changes. In addition, Caltrans would coordinate with the local fire department and emergency response services prior to construction to minimize potential disruption to emergency services.

PF-UTIL-1: Trash Management. All food-related trash items, such as wrappers, cans, bottles, and food scraps, would be disposed of in closed containers and removed by the contractor at least once daily from the Project limits. A trash reduction system would also be developed by the contractor, approved by Caltrans, and implemented per Caltrans Statewide National Pollution Discharge Elimination System Permit and RWQCB Cease and Desist Order.

PF-UTIL-2: Notify Utility Owners of Construction Schedule to Protect Utilities. Caltrans would notify utility companies, such as PG&E and AT&T, of construction schedules for proposed Project work so that they can relocate the gas, telephone, cable, and overhead distribution lines prior to construction and minimize disruption of utility service.

Chapter 2 California Environmental Quality Act Evaluation

The following discussions evaluate potential environmental impacts of the proposed Project as described in Chapter 1 as they relate to the CEQA checklist to comply with State CEQA Guidelines (Title 14 California Code of Regulations, Division 6, Chapter 3, Section 15091).

Environmental Factors Potentially Affected

As part of the scoping and environmental analysis carried out for the proposed Project, the following environmental issues were considered, but no adverse impacts were identified. As a result, there is limited discussion in this document on the following resources: agriculture and forestry, energy, geology and soils, land use and planning, mineral resources, population and housing, and recreation.

The environmental factors checked in Table 2-1 would be potentially affected by the proposed Project. Further analyses of these environmental factors are included in the following sections.

Table 2-1. Environmental Factors Potentially Affected

X	Aesthetics		Agriculture and Forestry	X	Air Quality
X	Biological Resources	X	Cultural Resources		Energy
	Geology/Soils		Greenhouse Gas Emissions	X	Hazards and Hazardous Materials
	Hydrology/Water Quality		Land Use/Planning		Mineral Resources
X	Noise		Population/Housing	X	Public Services
	Recreation	X	Transportation/Traffic	X	Tribal Cultural Resources
X	Utilities/Service Systems	X	Wildfire	X	Mandatory Findings of Significance

2.1 Determination

On the basis of this initial evaluation:

	I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT (EIR) is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature:	**Date:**
Printed Name: Scott M. Williams	

2.2 CEQA Environmental Checklist

The following checklist analyzes two build alternatives, each of which have very similar Project footprints. Due to the similar footprints, it is anticipated that the impact determination to each resource area would apply to both alternatives. Any and all differences between the two build alternatives are specified and discussed further under the pertinent resource area.

This checklist (presented at the beginning of each resource section in the form of a table listing the pertinent questions applicable to the resource and a single column where the degree of impact is indicated) identifies physical, biological, social, and economic factors that might be affected by the proposed Project. In many cases, technical studies performed in connection with the Project 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 checklist are related to CEQA impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

As noted previously, Project Features, which may include both design elements of the proposed Project and standardized measures that are applied to all or most Caltrans projects, such as 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 are considered prior to any significance determinations. A full list of the proposed Project's project features, AMMs, and mitigation measures (MMs) can be reviewed in Appendix B.

Section 2.2.1 through Section 2.2.21 of this chapter presents the CEQA determinations under Appendix G of the CEQA Guidelines. The CEQA determinations depend on the level of potential environmental impact that would result from the Project. The level of significance determinations is defined as follows:

- No Impact: Indicates no physical environmental change from existing conditions.
- Less than Significant Impact: Indicates the potential for an environmental impact that is not significant with or without the implementation of avoidance and minimization measures.
- Less than Significant Impact with Mitigation Incorporated: Indicates the potential for a significant impact that would be mitigated with the implementation of a mitigation measure to a level of less than significant.

- Potentially Significant Impact: Indicates the potential for significant and unavoidable environmental impact.

2.2.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the Project:

Question	CEQA Determination
a) Have a substantial adverse effect on a scenic vista?	Less Than Significant Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Less Than Significant Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	Less Than Significant Impact
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Less Than Significant Impact

A Visual Impact Assessment was completed for the SR 121 Tulucay Creek Bridge Replacement Project (Caltrans 2022a), with details of the assessment included in this section. SR 121 from PM 6.0 to 9.4, which includes the Project site, is listed as an eligible state scenic highway.

The existing Tulucay Creek Bridge was constructed in 1918 and widened to its existing four-lane width in 1943. The bridge is at an elevation equal to that of the highway, carrying four lanes of traffic with a striped center median across its approximately 70-foot width and similar span. A tall vertical concrete wall east of the highway runs along the creek's south bank, with partial concrete reinforcement along the banks at the other three quadrants, greatly limiting the amount of riparian vegetation present. Southbound highway users may be aware of the existence of the bridge and creek primarily due to the gap in commercial development, but on the northbound side the creek is more narrowly confined and therefore less noticeable. The only element of the bridge visible from the roadway is a solid stone barrier adjacent to the roadway.

Hills rise to the north but are seen only at a distance and above commercial buildings. While there are views far beyond the site, none are highly scenic or special. There is not an extensive riparian corridor to make the presence of the creek obvious. The components of the existing bridge seen immediately adjacent to the roadway are limited to the solid hewn stone blocks of the barrier and slightly taller

rectangular end posts. The best view of the creek is seen southbound and on the approach to the bridge, although motorists and others can see the creek channel at mid-distance over and beyond the bridge barrier. Because the barrier is solid, there are no views of the creek where it is nearest to the roadway. The highway, heavy traffic, and unadorned buildings, rather than elements of a natural environment, are the dominant visual features of the landscape.

a, b, c) Less Than Significant Impact

The Project would widen the roadway, add sidewalks, and remove stone elements from the existing bridge using modern elements that meet Caltrans design standards. The stone features of the existing bridge are visible from the highway; however, they exist as minor features to the contributing landscape aesthetics and are easily overlooked by highway users. The removal of these features would not result in a substantial visual change. With the implementation of PF-AES-1 through PF-AES-5 and AMM-AES-1 and AMM-AES-2, temporary construction impacts including vegetation removal and visual change from construction activities would result in a less than significant impact.

In addition, the Project would incorporate AMM-AES-2, which would install see-through bridge rails to provide views of Tulucay Creek that are currently blocked by the existing solid stone barrier. The Project would not adversely affect any scenic resources identified as requiring special consideration, such as a rock outcropping, important tree grouping, or historic property, as defined by CEQA statues or guidelines or by Caltrans policy. Existing vistas will be unaltered. Project elements would not affect the appearance of the highway corridor and would be visually consistent with the character of the corridor and surrounding area; therefore, impacts would be less than significant.

d) Less Than Significant Impact

The Project would not create a new source of substantial light or glare. Day and nighttime construction activities could temporarily create new sources of light and glare near the Project area; however, implementation of PF-AES-5 and AMM-AES-3 would minimize visual impacts from light and glare to less than significant.

AVOIDANCE AND MINIMIZATION MEASURES

AMM-AES-1: Minimize Construction Appearance: During construction, Caltrans would minimize the appearance of construction equipment and staging areas on SR 121, and would locate construction equipment beyond direct view of the motoring public and residential properties to the extent feasible.

AMM-AES-2: Bridge Rail Design: During the design phase, Caltrans would design the bridge to incorporate see-through bridge rails that allow views of the creek and adjacent vegetation as directed by Caltrans Landscape Architecture staff.

AMM-AES-3: Glare Effects: During the design phase, Caltrans would design the concrete portions of the bridge including the concrete anchor blocks, wing walls, and abutments. The design would be treated with a combination of roughening surface texture and coloring concrete to reduce glare, as directed by the Caltrans Office of Landscape Architecture.

AMM-AES-4: Post-Construction Site Grading and Contours: Prior to completion of construction activities, Caltrans would use contour grading and slope rounding to produce smooth, flowing contours consistent with site topography, to increase context sensitivity and reduce engineered appearance of slopes.

AMM-AES-5: Aggregate Material Color and Scale: Prior to completion of construction activities, if creek work requires the import of aggregate or creek bed materials, Caltrans would select materials that are similar in color to the native creek materials.

2.2.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project and to the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:

Question	CEQA Determination
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	No Impact

The Project site is located on SR 121 and is within the city of Napa. The site is identified on the California Important Farmland database as urban and built-up land (California Department of Conservation 2017).

The Project would be constructed within the Caltrans ROW and TCEs, with surrounding commercial, open space, and residential uses. The *City of Napa Zoning Map* prepared by the City of Napa Geographic Information System Department designates the Project area to the west of SR 121 as Community Commercial and to the east of SR 121 as Tourist Commercial (City of Napa 2021a).

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

The Project area is designated by the Farmland Mapping and Monitoring Program as urban and built-up land (California Department of Conservation 2017). Therefore, there would be no impact to agriculture and farming resources. In addition, the California Timberland Productivity Act discourages premature or unnecessary conversion of timberland to urban and other uses and discourages expansion of urban services into timberland (CDTFA 2021). The California Timberland Productivity Act does not apply because there are no forest resources or timberlands in the Project vicinity or in the Project area.

Further, no portion of the Project area is zoned agricultural, forest land or timberland, nor is it under a Williamson Act contract (California Department of Conservation 2017). Therefore, there would be no impact or conflict with any agricultural, forest land or timberland, or Williamson Act contract land resources.

2.2.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:

Question	CEQA Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

a, b) No Impact

The Project is located in the San Francisco Bay Area Air Basin (SFBAAB), which is regulated by the Bay Area Air Quality Management District. The SFBAAB is considered to be in federal and state nonattainment for ozone and fine particulate matter 2.5 microns ($PM_{2.5}$) and in state nonattainment for particulate matter 10 microns (PM_{10}). The SFBAAB is in attainment or unclassified for other state and federal air quality standards.

The Project falls under “widening narrow pavements or reconstructing bridges (no additional travel lanes)” activities and is therefore exempt from air quality conformity determination under 40 Code of Federal Regulations (CFR) 93.126. An air quality study is not required. The Project would not add capacity, and therefore would not result in operational degradation of air quality. Project construction is limited in duration and a substantial amount of pollutants would not be generated that would result in a cumulatively considerable net increase of criteria pollutants. The Project would not conflict with or obstruct implementation of an applicable air quality plan or result in a cumulatively net increase in any criteria pollutant; therefore, there would be no impact.

c, d) Less Than Significant Impact

The Project vicinity contains hotels, residential communities, and businesses. As the Project is not capacity increasing, the build alternatives would not increase criteria pollutants or odors over current conditions. Although construction activities would impact nearby sensitive receptors, generation of air emissions and odors would be temporary and limited to the period of construction. In addition, implementation of PF-AQ-1 through PF-AQ-3 would minimize impacts from emissions during the construction phase. Impacts would be less than significant.

2.2.4 Biological Resources

Would the Project:

Question	CEQA Determination
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW, U.S. Fish and Wildlife Service (USFWS), or NOAA Fisheries?	Less Than Significant 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 CDFW or USFWS?	Less Than Significant Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, or similar) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Less Than Significant Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

A Natural Environment Study was prepared for the Project to evaluate the effects of this Project on biological resources, including sensitive plants and wildlife species (Caltrans 2022j). This section summarizes the findings of this study.

The biological study area (BSA), which includes the Project footprint and 250 feet upstream and downstream of the bridge within the Tulucay Creek channel, totals 3.9 acres for the Project. The BSA contains a portion of the existing roadway and bridge structure, bare ground, and potential waters of the United States, and is adjacent to several commercial developments. Vegetation within the BSA consist of wild oats and annual brome grassland, Himalayan blackberry (*Rubus aremeniacus*) riparian scrub, and cattail (*Typha* sp.) marshes.

As a part of the Natural Environment Study, databases were used to evaluate potential impacts that could occur to sensitive biological resources as a result of the Project. The database search included: the California Natural Diversity Database (CNDDB) (CDFW 2022), the USFWS Information for Planning and Conservation Database (USFWS 2022), the NOAA Fisheries (2022) database, the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California (CNPS 2022), and the California Fish Website database (University of California Agriculture and Natural Resources 2022). In addition to database queries, reconnaissance field visits were conducted on January 11, 2022, with a focus on fish species and California red-legged frog habitat.

Technical studies from the 2016 Tulucay Bridge Repair Project (Caltrans EA 4G920) were referred to for the preparation of the Natural Environment Study after a 2022 field visit was performed and confirmed that conditions with the Project footprint and BSA have not significantly changed. The technical studies referenced in the Natural Environment Study included a rare plant habitat assessment and an aquatic resource delineation.

a) Less Than Significant Impact

With implementation of the project features and AMMs identified in Appendix B, the Project would have less than significant adverse effects, either directly or through habitat modification, on any identified candidate, sensitive, or special-status species in local or regional plans, policies or regulations, or by the CDFW, USFWS, or NOAA Fisheries. All temporary impacts would be restored to pre-Project conditions and suitable mitigation for permanent impacts will be determined during agency consultation.

Special-status species potentially present within or adjacent to the BSA are discussed in the following section.

Special-Status Plant Species: Three special-status plant species, Suisun Marsh aster (*Symphyotrichum lentum*), congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*), and Lyngbye's sedge (*Carex lyngbyei*), were determined to have low potential to occur in the BSA, but were not observed during the rare plant habitat assessment in 2016. Suisun Marsh aster and congested-headed hayfield tarplant have a California Rare Plant Rating of 1B.2; and Lyngbye's sedge has a California Rare Plant Rating of 2B.2 by CNPS, but have no state or federal designation.

In addition, implementation of PF-BIO-6, PF-BIO-7, PF-BIO-13, and PF-BIO-14 and AMM-BIO-1 through AMM-BIO-3 would minimize potential impacts to special-status species. Impacts would be considered less than significant.

California Red-Legged Frog: The California red-legged frog (*Rana draytonii*) is federally listed as threatened and is also a state species of special concern. Suitable breeding habitat for California red-legged frog was not identified within the BSA, however, suitable dispersal habitat consisting of non-breeding aquatic waters and upland habitat is present within the BSA. The Project is within the current known range of California red-legged frog; however, no CNDDB records of California red-legged frog are within 5 miles of the BSA. The nearest record for this species, dated 2008, is located approximately 6.35 miles south of the Project. At this recorded site, 1 adult was observed in an isolated side pool, described as quality breeding habitat, within North Slough Creek containing emergent vegetation (CDFW 2022). There are 10 other recorded occurrences located within a 10-mile radius, with 9 occurrences located 7 to 10 miles southeast of the Project limits and 1 occurrence located approximately southwest of the Project limits in a non-specific location. These recorded occurrences identified adult and/or juvenile individuals in ponds or pooled areas within creeks, with one area confirmed as a breeding location (CDFW 2022).

The Project is located outside of designated critical habitat for California red-legged frog. The nearest designated critical habitat units, SON-2 and SON-3 are located approximately 4.25 and 6 miles southeast of the Project, respectively.

Implementation of PF-BIO-5 through PF-BIO-7 and PF-BIO-16 and AMM-BIO-4 through AMM-BIO-9 would minimize potential impacts to California red-legged frog. Impacts would be considered less than significant.

Modifications to California red-legged frog habitat is anticipated to benefit this species by recontouring the channel, widening the bridge abutments, and removing the center pier. Further measures to reduce impacts, if needed, would be determined in coordination with USFWS.

Central California Coast (CCC) Steelhead: The CCC Distinct Population Segment of steelhead (*Oncorhynchus mykiss*) is listed as federally threatened. Designated critical habitat for CCC steelhead is also present within the BSA. Although there are no CNDDB occurrences of CCC steelhead within 5 miles of the BSA, juvenile CCC steelhead were observed in Tulucay Creek in 2001 (Leidy et al. 2005). Additionally, several juvenile CCC steelhead were observed in two tributaries to Tulucay Creek, Murphy Creek and Spencer Creek, in 2007 (NCRCD 2009).

Tulucay Creek serves primarily as a migration corridor from the Napa River to upstream tributaries; therefore, a potential exists for this species to occur in the Project footprint during the rainy season, when flow is sufficient. Proposed Project activities are scheduled to take place during the dry season, when adult or juvenile CCC steelhead are not expected to be migrating into or out of fresh water, and a water diversion plan will be implemented, so that there is no flowing water during in-stream construction activities. Thus, CCC steelhead are not expected to be present.

With implementation of PF-BIO-3, PF-BIO-4, PF-BIO-6, and PF-BIO-10, potential impacts to CCC steelhead and their associated habitat would be avoided/minimized. Impacts would be considered less than significant.

Caltrans will be seeking a Biological Opinion for the Project from NOAA Fisheries. Additional measures to reduce impacts to CCC steelhead would be determined in coordination during this consultation.

Western Pond Turtle: The western pond turtle (*Emys marmorata*) is a California special species of concern. Recorded occurrences of two adults observed in May 2003 and two adults or subadults observed in August 2016 were within the Project footprint. There are five other western pond turtle occurrences within 5 miles of Tulucay Bridge (CDFW 2022). Suitable aquatic and upland habitat for western pond turtle is present within the BSA; therefore, western pond turtle could occur at the Project location.

Implementation of PF-BIO-5 through PF-BIO-7 and PF-BIO-16 and AMM-BIO-4 through AMM-BIO-9 would avoid and/or minimize potential impacts to western pond turtle. Impacts would be considered less than significant.

Western Brook Lamprey, Western River Lamprey, and Pacific Lamprey: Three species of lamprey, the western brook lamprey (*Lampetra planeri*), western river lamprey (*Lampetra ayresii*), and Pacific lamprey (*Entosphenus tridentatus)*, are all California special species of concern. According to the University of California Agriculture and Natural Resources Fish Database (2022), these three species of lamprey have historically been present in Tulucay Creek. Upon observation of site conditions, it was determined that the sandier upstream channel and muddy downstream channel constituted suitable habitat for lamprey species.

Implementations of PF-BIO-3, PF-BIO-4, PF-BIO-6, and PF-BIO-10 would minimize potential impacts to lamprey species and their associated habitat. Impacts would be considered less than significant.

Saltmarsh Common Yellowthroat: The saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*) is a California special species of concern. Marginally suitable habitat, in the form of riparian vegetation, is present within the BSA. According to CNDDB, one saltmarsh common yellowthroat was observed approximately 0.3 mile west of the BSA in 1989, along the Napa River; two adults saltmarsh common yellowthroat were observed approximately 1.4 miles south of the BSA in 1989, along the Napa River; and numerous sightings were recorded at Fagan ecological reserve approximately 4.5 miles south of BSA (CDFW 2022).

Implementation of PF-BIO-6, PF-BIO-8, PF-BIO-9, and PF-BIO-14 would minimize potential impacts to the saltmarsh common yellow throat; however, no impacts are anticipated for saltmarsh common yellowthroat.

Pallid Bat and Western Red Bat: Two species of bats, the pallid bat (*Antrozous pallidus*) and western red bat (*Lasiurus blossevillii*), are California special species of concern. Numerous CNDDB occurrences of pallid bats are located within 5 miles of the BSA and one CNDDB occurrence of western red bat is within 10 miles of the BSA (CDFW 2022). However, the bridge lacks crevices and there are no large hollow trees in the vicinity of the BSA that could be used by roosting bats.

Implementation of PF-BIO-6, PF-BIO-13, PF-BIO-15, and PF-BIO-17 would minimize potential impacts to bat species; however, no Project impacts to bats are anticipated.

b) Less Than Significant Impact

The Project would not have a substantial adverse effect on riparian habitat or environmentally sensitive natural communities.

The riparian habitat within the BSA is disturbed and is comprised of cattail marshes and Himalayan blackberry scrub. Impacts to this habitat would result from clearing and grading to access the bridge and conduct fish passage improvements.

The Project is located in the Napa U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle, which is designated essential fish habitat for Chinook and coho salmon (NOAA Fisheries 2022). Impacts to essential fish habitat would include temporary disturbance resulting from removal of the center pier and installation and removal of a temporary creek diversion system, however the Project would not adversely impact the hydrology or bathymetry of Chinook salmon or coho salmon essential fish habitat. The Project would benefit essential fish habitat by reducing erosion and sedimentation build-up and easing upstream and downstream migration.

In addition, implementation of PF-BIO-3, PF-BIO-4, PF-BIO-6, PF-BIO-7, PF-BIO-10, PF-BIO-13, and PF-BIO-14 would minimize potential impacts to riparian habitat or

environmentally sensitive natural communities; therefore, impacts would be less than significant.

c) No Impact

There are no wetlands under federal or state jurisdiction present within the Project footprint; therefore, there would be no impact to protected wetlands.

d) Less Than Significant Impact

The Project would have less than significant impact to migratory fish or wildlife movement. The in-stream work would occur between June 1 and October 31, when Tulucay Creek within the Project footprint is anticipated to be dry and CCC steelhead are not expected to be present; however, as a precaution, a temporary creek diversion system would be installed to divert water through the construction site. Potential CCC steelhead habitat would be temporarily impacted from stream grading and vegetation removal, while removal of the center pier would permanently add potential suitable habitat. The Project would not result in any new barriers to fish passage following construction because Tulucay Creek would retain a low-flow channel suitable for fish passage, if water is present.

Implementations of PF-BIO-3, PF-BIO-4, PF-BIO-6, and PF-BIO-10 would minimize potential impacts to CCC steelhead and their associated habitat. Impacts would be considered less than significant.

e) No Impact

The Project would not conflict with any local policies or ordinances protecting biological resources. No trees would be removed during the Project; therefore, there would be no impact.

f) No Impact

There are no existing Habitat Conservation Plans or Natural Community Conservation Plans within Napa County (Data Basin 2021). The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. There would be no impact.

AVOIDANCE AND MINIMIZATION MEASURES

Caltrans would incorporate the following AMMs into the Project to offset or avoid potential impacts to biological resources.

AMM-BIO-1: Rare Plant Surveys. Prior to construction, botanical surveys will be conducted in areas of suitable habitat for rare plant species during the appropriate blooming season(s).

AMM-BIO-2: Avoid Rare Plants. The Project footprint may be adjusted, if practicable, to completely or partially avoid affecting special-status plant species.

AMM-BIO-3: Minimize Disturbance to Rare Plants. If complete or partial avoidance is not practicable, other minimization measures may be implemented to reduce the severity of the impact to the special-status plant species. These actions may include one or a combination of the following:

- Collection of special-status plants seeds, bulbs, other propagules, or topsoil prior to construction for use in future onsite restoration or enhancement actions
- Restoration of enhancement of suitable special-status plant habitat onsite
- Restoration or enhancement of suitable special-status plant habitat offsite

AMM-BIO-4: California Red-Legged Frog and Western Pond Turtle Entanglement and Trapping. To prevent wildlife from becoming entangled or trapped in erosion control materials, plastic monofilament netting (that is, erosion control matting) or similar material will not be used. Acceptable substitutes will include coconut coir matting or tackifying hydroseeding compounds.

AMM-BIO-5: Protocol for Species Observation. If California red-legged frog or western pond turtle are encountered in the Project footprint, work within 50 feet of the animal will cease immediately and the Resident Engineer and approved biological monitor will be notified. Based on the professional judgment of the biological monitor, if Project activities can be conducted without harming or injuring the animal, it may be left at the location of discovery and monitored by the biological monitor. Project personnel will be notified of the finding, and at no time will work occur within 50 feet of the animal without a biological monitor present.

AMM-BIO-6: Pre-construction Surveys. An approved biologist will conduct pre-construction surveys for California red-legged frog / western pond turtle as needed. A visual encounter survey will be conducted immediately before ground-disturbing activities. Suitable habitat within the Project footprint will be visually inspected. If California red-legged frog / western pond turtle is found within the Project footprint and at risk of harm, then it will be relocated outside of the Project footprint by the approved biologist.

AMM-BIO-7: Biological Monitoring. A biological monitor will be present during construction activities where take of a listed species could occur. Through communication with the Resident Engineer or designee, the biological monitor may stop work if deemed necessary for any reason to protect listed species; the biological monitor will advise the Resident Engineer or designee on how to proceed accordingly.

AMM-BIO-8: Handling of Listed Species. If, at any time, a listed species is discovered, the Resident Engineer and the agency-approved biologist will be immediately informed. The agency-approved biologist will determine whether relocating the species is necessary and will work with the corresponding agency (USFWS or CDFW) prior to handling or relocating, unless otherwise authorized.

AMM-BIO-9: Wildlife Exclusion Fencing. Before starting construction, at the discretion of the Caltrans biologist, wildlife exclusion fencing will be installed along the Project footprint perimeter in the areas where wildlife could enter the Project footprint. Wildlife exclusion fencing will be removed following completion of construction activities. At the discretion of the Caltrans biologist, wildlife exclusion fencing may be removed at times when construction is no longer active in the area.

2.2.5 Cultural Resources

Would the Project:

Question	CEQA Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in Section 15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	Less than Significant Impact with Mitigation Incorporated
c) Disturb any human remains, including those interred outside of formal cemeteries?	Less than Significant Impact with Mitigation Incorporated

Caltrans prepared a Section 106 Summary Memo for the Project that identified the area of potential effects (APE) under Section 106 of the National Historic Preservation Act, as amended, (Section 106) in accordance with Stipulation VIII.A and Attachment 3 of 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* (PA) (Caltrans 2022b). The properties within the architectural APE were exempted from evaluation under the PA. This includes the Tulucay Creek Bridge because it is listed as a Category 5 bridge (ineligible for the National Register of Historic Places) in the Caltrans' Statewide Historic Bridge Inventory.

Caltrans prepared a Historic Properties Survey Report to document its identification efforts and has determined that, pursuant to Section 106 PA Stipulation IX.B and, if applicable, Public Resources Code 5024 Memorandum of Understanding Stipulation IX.B, there are historic properties within the APE that may be affected (Caltrans 2022b). An archaeological site was identified that had been determined eligible for the National Register of Historic Places on March 8, 2000, by the State Historic Preservation Officer (SHPO). The determination of eligibility automatically placed the site on the California Register of Historical Resources and makes it an historical resource under CEQA.

a) <u>No Impact</u>

The Tulucay Creek Bridge was previously evaluated for the National Register of Historic Places and determined ineligible during the 1986 Caltrans Bridge Inventory

and the 2003 Masonry Bridge Survey and Inventory. It is listed as a Category 5 bridge in Caltrans's Statewide Historic Bridge Inventory, "ineligible for National Register listing," and this determination remains valid.

The properties within the architectural APE have been exempted from evaluation under the PA, including Tulucay Creek bridge. There are no other historical resources known to be present within the APE; therefore, there would be no historical properties affected by the Project and would result in no impact.

b, c) Less Than Significant Impact with Mitigation Incorporated

Under Section 106, Caltrans anticipates an adverse effect to the archaeological site due to the proposed excavation and construction of new abutments, utility relocation, and drainage.

Caltrans, in consultation with the SHPO and appropriate tribes, will prepare a Finding of Effect and Memorandum of Agreement under the Section 106 process. The Memorandum of Agreement will outline the specific measures to mitigate the impacts to the archaeological site. Proposed mitigation measures may include worker environmental awareness training, an archaeological monitoring plan, and a phase III data recovery plan if archaeological resources cannot be avoided. Additional mitigation measures may be included depending on continuing consultation with tribes and SHPO.

MITIGATION MEASURES

MM-CULT-1: Worker Environmental Awareness Training. All construction personnel will attend a mandatory environmental education program delivered by an agency-approved archaeologist prior to working on the Project.

MM-CULT-2: Phase III Data Recovery Plan. If archaeological resources cannot be avoided, a Phase III Data Recovery Plan will be implemented by a qualified archaeologist for the significant archaeological site that is directly affected. Data Recovery will only occur in the portions of the site being directly affected by the Project.

MM-CULT-3: Archaeological Monitoring Plan. An Archaeological Monitoring Plan will be implemented during construction. This would include establishing an Archaeological Monitoring Area (AMA) and having an archaeologist and tribal representative monitor job site activities within the archaeological monitoring area to reduce the Project's impacts to the resource within the Project limits. No work can be conducted within the AMA unless the archeological monitor is present (Reference Caltrans Standard Specification 14-2.03).

2.2.6 Energy

Would the Project:

Question	CEQA Determination
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact

An *Energy Analysis Report* was completed for this Project (Caltrans 2022i). The findings of the report are detailed in this section.

Energy consumption is related to greenhouse gas (GHG) emission; as energy is consumed, GHG emissions are released into the environment. California legislation Assembly Bill (AB) 32 called for a return to 1990 GHG levels by 2020, and long-term, the law calls for emissions to be reduced to 80 percent below 1990 levels by 2050 (Caltrans 2022i).

2021 CEQA Guidelines, Appendix F, provides guidelines on energy conservation. The means of achieving this goal include, decreasing overall per capita consumption, decreasing reliance on fossil fuels such as coal, natural gas, and oil, and increasing reliance on renewable energy sources. Since the Project is not capacity increasing, nor will it provide congestion relief, a qualitative energy analysis is required to comply with CEQA. Therefore, the *Energy Analysis Report* includes energy use during construction (quantitative), during operation (qualitative), and maintenance (qualitative) (Caltrans 2022i).

a, b) <u>No Impact</u>

The construction and operation of the Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Construction activities would result in short-term energy consumption from the use of petroleum fuels by off-road construction equipment, and from on-road vehicles used by construction workers to travel to and from the site during construction and to deliver construction materials. To assess energy consumed by construction equipment and vehicles, the Caltrans Construction Emissions Tool 2020 (CAL-CET 2020), version 1.0, was used to quantify carbon dioxide (CO_2) emissions. U.S. Environmental Protection Agency (USEPA) GHG equivalency formulas were used to convert CO_2 to fuel volumes. Energy usage in terms of fuel consumption is anticipated to be 65,520.63 gallons of

diesel fuel. It was assumed that diesel would be used by all construction vehicles and equipment (Caltrans 2022i). With the implementation of PF-GHG-1, PF-GHG-2, PF-AQ-2, and PF-AQ-3, energy consumption from construction activities would be minimized. The Project is not a capacity-increasing transportation project and would not increase use of energy resources. The Project would not conflict with state and local plans for renewable energy and energy efficiency. Therefore, there would be no impact.

2.2.7 Geology and Soils

Would the Project:

Question	CEQA Determination
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	No Impact
ii) Strong seismic ground shaking?	No Impact
iii) Seismic-related ground failure, including liquefaction?	No Impact
iv) Landslides?	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact

A *Structures Preliminary Geotechnical Report for the Tulucay Creek Bridge Replacement* (Caltrans 2021c) and a *Geologic, Seismic, and Palaeontologic Analysis – Bridge Replacement Project* (Caltrans 2022c) were prepared for the Project. This section includes the findings of these studies.

The Project is located in the Napa Valley, approximately 4 miles north of American Canyon and 20 miles north of Vallejo via Highway 29 (City of Napa 2015), in the central portion of the Coast Ranges Geomorphic Province of California (California

Geologic Survey 2002). There are four active fault zones in the region outside the county—the San Andreas, Hayward, Calaveras, and Healdsburg-Rodgers Creek faults—as well as three active faults within Napa County—the Cordelia, Green Valley, and the West Napa faults (City of Napa 2015). The Project is located approximately 2.2 miles east of the northern section of the West Napa Fault, a dextral strike-slip fault that forms a part of the larger San Andreas system. The northern section of the West Napa Fault, named the Browns Valley Section, is delineated by a zone of north-northwest-striking late Pleistocene faults that generally lack geomorphic evidence of Holocene displacement (USGS 2000).

a, b, c, d) No Impact

The Project area is not mapped as active as part of the Alquist-Priolo Special Studies Zone Act and is not zoned for fault rupture by the California Geologic Survey. The site is not within 1,000 feet of a known fault Holocene or younger in age (Caltrans 2021c). The closest fault to the Project site is the West Napa Fault, Browns Valley Section, which is located approximately 2 miles west of the Project area (USGS 2021). Napa County is located in a highly active seismic region, and earthquake-related ground shaking is expected to occur during the design life of the Project. While strong ground shaking may occur at the site, the Project proposes to replace the bridge, and no additional impacts to the public would occur. The Project would not expose the public to fault rupture nor seismically induced slope instability or liquefaction. There are no hazards due to collapsible or expansive soils, erodible soils, or landslides (Caltrans 2022c).

The site is underlain by Quaternary Stream Channel deposits, and the bridge abutments lie on engineered fill (Caltrans 2022c). The Project site and adjacent areas are relatively flat. The existing abutment and approach embankment slopes consist of dense and stiff compacted fill soil. The Project site is located more than 0.5 mile from the nearest coastline and is situated approximately 20 feet above mean sea level. Based on these soil conditions, the location of the Project and the existing fill slopes, the site is not considered subject to instability during a seismic ground motion event and the risk for tsunami does not exist (Caltrans 2021c). All components of the Project would be designed in accordance with standard engineering practices and with Caltrans standard specifications and current seismic design criteria to minimize impacts from ground shaking and liquefaction. During construction, the Project would implement erosion control measures and BMPs outlined in the Stormwater Pollution Prevention Plan to minimize soil erosion or the loss of topsoil. Therefore, there would be no impact.

e, f) No Impact

The Project would not involve a septic system or alternative wastewater system. In addition, the Project site is underlain by Quaternary Stream Channel deposits, which are too recent to contain significant fossils. No paleontological units would be disturbed by the Project. Therefore, there would be no impact.

2.2.8 Greenhouse Gas Emissions

Would the Project:

Question	CEQA Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	No Impact

A *Construction-Related Greenhouse Gas (GHG) Emissions Analysis* was prepared for the Project (Caltrans 2022d). This section includes the findings of the study.

This Project proposes to replace the existing two-span, Tee-beam, concrete Tulucay Creek Bridge (Bridge #21-0003) with a single-span, pre-stressed concrete box bridge (new Bridge #21-0109) on SR 121 from PM 6.4 to PM 6.5 in Napa County.

Construction-generated GHGs includes emissions resulting from material processing by onsite construction equipment, workers commuting to and from the Project site, and traffic delays due to construction. The emissions would be produced at different rates throughout the Project depending on the activities involved at various phases of construction. The analysis was focused on vehicle-emitted GHG. Carbon dioxide is the single most important GHG pollutant due to its abundance when compared with other vehicle-emitted GHGs, including methane, nitrous oxide, hydrofluorocarbons, and black carbon.

The construction-related GHG emissions were calculated using the Construction Emissions Tool developed by Caltrans. It was estimated that for a construction duration of 12 months, the total amount of carbon dioxide produced during construction would be 667 tons (Caltrans 2022d).

a) No Impact

The GHG emissions resulting from construction activities would not result in long-term adverse effects. Implementation of PF-AQ-2, PF-AQ-3, PF-GHG-1, and PF-GHG-2 would result in reducing GHG emissions from construction activities. Therefore, there would be no impact.

b) No Impact

The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions from GHGs. With innovations such as longer pavement lives, improvements in traffic management, and changes in materials, construction-related GHG emissions produced during construction would be offset by longer intervals between maintenance and rehabilitation activities (Caltrans 2022d). There would be no impact.

2.2.9 Hazards and Hazardous Materials

Would the Project:

Question	CEQA Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Less Than Significant Impact
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?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less Than Significant Impact

a, b) Less Than Significant Impact

Project construction is expected to temporarily involve the transport, storage, use, and disposal of hazardous materials (e.g., fuels, paints, cleaners, solvents, and lubricants) that could pose a significant threat to human health and the environment if they are not properly managed. The transport, storage, use, and disposal of hazardous materials are subject to local, state, and federal hazardous waste regulations designed to reduce risks associated with hazardous materials, including potential risks associated with accidental release of hazardous materials. Compliance with the existing regulations is mandatory; therefore, construction of the

proposed build alternatives is not expected to create a significant hazard to construction workers, the public, or the environment through the routine transport, use, or disposal of hazardous materials. In August 2017, Caltrans Hazardous Waste Branch conducted a bridge survey to ascertain the presence or absence of asbestos-containing materials and lead-based paints on the existing Tulucay Creek Bridge (Caltrans 2017a). The results of the bridge survey did not identify asbestos or asbestos-containing materials; however, lead-based paints were identified on the bridge. Construction activities that disturb lead-based paints on the existing bridge could expose workers and nearby residents and business occupants to lead. During Project construction, lead-based paints would be handled according to the Project specifications and local, state, and federal requirements. In addition, the surface and near-surface soils to be disturbed by the proposed build alternatives could contain regulated concentrations of aerially deposited lead from historic leaded gasoline emissions. A soil investigation for metals, primarily lead, and other contaminants of concern (e.g., petroleum hydrocarbons and volatile organic compounds) would be completed to characterize and profile the soil to be encountered by the construction of the proposed build alternatives. Depending upon the findings of the soil investigation, lead-contaminated soils would be handled and disposed of in accordance with appropriate Project specifications. With the implementation of PF-HAZ-1 and PF-HAZ-2, the impact would be less than significant.

c, e) No Impact

There are no schools located within a 0.25-mile radius of the Project site and no public or private airports within a 2-mile radius of the Project site; therefore, there would be no impact.

d) Less Than Significant Impact

The Project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, a screening of the State Water Resources Control Board GeoTracker database identified 34 closed sites and four open sites within a 0.50-mile radius of the Project area that have impacted or have the potential to impact groundwater and surface water quality. Due to the close proximity of these sites to the Project area, potential residual contamination at these sites could affect soils or groundwater in the Project area.

A groundwater investigation for contaminants of potential concern (e.g., petroleum hydrocarbons and volatile organic compounds) would be completed to evaluate the groundwater condition within the Project area. With the implementation of PF-HAZ-2, the impact would be less than significant.

Table 2-2. Hazardous Materials Sites within 0.50-mile Radius of the Project

Site	Designation	Address	Distance from Project (miles)	Cleanup Status
Former Napa, Chrysler, Jeep, Dodge, Ram	Cleanup Program Site	333 Soscol Ave Napa, CA 94559	0.041	Open – Remediation
Kastner Pontiac Olds GMC Whlse	Leaking Underground Storage Tank (LUST) Cleanup Site	282 Soscol Ave Napa, CA 94558	0.12	Open – Assessment & Interim Remedial
Kastner Honda	Cleanup Program Site	282 Soscol Ave Napa, CA 94558	0.13	Open – Eligible for Closure
Napa Sanitation District FMR Imola Treatment Plant	Cleanup Program Site	942 Hartle Court Napa, CA 94559	0.46	Open- Site Assessment

f, g) Less Than Significant Impact

Construction and operation of the Project would not significantly interfere with an emergency evacuation or response plan. Implementation of PF-TRA-1 would ensure emergency response times are not impacted by construction activities (Section 2.2.17). In addition, fire prevention measures (AMM-WF-1) would be in place during construction to reduce wildfire related impacts (Section 2.2.20). Therefore, the impact would be less than significant.

AVOIDANCE AND MINIMIZATION MEASURES

AMM-WF-1: Implement Fire Prevention Practices During Construction. Caltrans would implement the following fire prevention practices into the Project construction specifications:

- Internal combustion engines (stationary and mobile) would be equipped with spark arrestors. Spark arrestors would be in good working order.
- The contractor would keep all construction sites and staging areas free of grass, brush, and other flammable materials.
- Personnel would be trained in the practices of the fire safety plan relevant to their duties.

- Construction and maintenance personnel would be trained and equipped to extinguish small fires.
- Work crews would have fire-extinguishing equipment on hand, as well as emergency numbers and cell phone or other means of contacting the fire department.
- Smoking would be prohibited while operating equipment and would be limited to paved or graveled areas or areas cleared of all vegetation. Smoking would be prohibited within 30 feet of any combustible material storage area (including fuels, gases, and solvents). Smoking would be prohibited in any location during a Red Flag Warning issued by the National Weather Service for the Project area.

2.2.10 Hydrology and Water Quality

Would the Project:

Question	CEQA Determination
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Less than Significant Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	No Impact
i) result in substantial erosion or siltation on- or off-site;	No Impact
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	No Impact
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	No Impact
iv) impede or redirect flood flows?	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact

A *Draft Location Hydraulic Study Report* (Caltrans 2022e) and a *Water Quality Study* (Caltrans 2022f) were prepared for the Project. This section includes the findings of these studies.

The Project is on SR 121 from PM 6.4 to PM 6.5 in Napa County, California. The Project proposes to replace the existing bridge with a larger, single-span, precast, pre-stressed concrete box bridge, approximately 77 feet long and 100 feet wide for Alternative 2 or 77 feet long and 96 feet wide for Alternative 3. There is a maximum increase in the bridge profile grade of 1 foot, 3 inches. New retaining walls are

proposed in the northeast, northwest, and southwest quadrants, and grading in the creek is anticipated.

Watershed Description

The Project is within the Tulucay Creek-Frontal San Pablo Bay Estuaries subwatershed and Watershed, which is part of an undefined hydrologic sub-area (206.50) of the San Pablo Hydraulic Unit and Napa River Hydraulic Area (Caltrans 2022f). The subwatershed is part of a hydrologic sub-area that encompasses approximately 266,735 acres (Caltrans 2022f).

A tributary to the Napa River, Tulucay Creek discharges to the Napa River approximately 0.25 mile downstream of the Project site. Tulucay Creek flows from east to west and is contributed to by Camille Creek approximately 600 feet upstream, and by Kreuse Creek, Spencer Creek, and Murphy Creek further upstream. The watershed area encompasses 12.6 square miles that include urban areas, agricultural, undeveloped lands, and hilly terrain further west. This section of the creek passes through a restrictive urban environment, particularly on the upstream end (Caltrans 2022e).

Floodplains

Federal Emergency Management Agency Flood Insurance Map number 06055C0517F, dated September 29, 2010, shows that this Project is located within Zone AE base floodplain. Zone AE denotes a base floodplain with known flood elevations. Near the bridge, the base flood elevation is approximately 21 feet. Per the flood insurance map, SR 121 is within the Tulucay base floodplain from just north of the bridge on the northern end to Shelter Avenue on the southern end. Per Federal Emergency Management Agency Flood Insurance Study 06088CV000C dated August 2016, the channel is not classified as a Regulatory Floodway (Caltrans 2022e).

Hydrologic Data

The hydrologic data for Tulucay Creek were obtained from USGS StreamStats. The combined watershed area from the tributaries of Tulucay Creek is 12.6 square miles. The mean annual rainfall is 28.8 inches (Caltrans 2022e).

Design Discharges

The flow used in the floodplain analysis is the Q100 year flow. In a hydraulic report from the Napa County Flood Control, dated August 22, 2016, a Q100 of 4,530 cubic feet per second was recommended, and that discharge value will be used for the model.

The expected disturbed soil area of the Project would be 0.9 acre. The new impervious surface is the addition of the net new impervious and the replaced impervious surface. According to the initial design information, the net new impervious would be about 0.07 acre and the replaced impervious surface would be about 0.25 acre. The resultant new impervious surface would be 0.32 acre. The RWQCB for this location is San Francisco Bay RWQCB Region 2.

a) Less Than Significant Impact

The calculated disturbed soil area for this Project is less than 1.0 acre; therefore, the construction activities are not subject to the CGP. However, a Storm Water Pollution Prevention Plan, temporary construction site BMPs, and post-construction stormwater treatment BMPs would be in place to reduce potential impacts from the Project. The anticipated sources for potential impacts to the water quality during construction may include, but are not limited to, the following:

- Debris due to the demolition of the bridge
- Sedimentation due to creek diversion
- Increase in the pH of water due to concrete work
- Debris and sediments from ground-disturbing activities and clearing the sediment in the drainage system and stream water
- Oil and grease from vehicles and construction equipment
- Sanitary wastes
- Chemicals used for equipment and operations
- Trash

According to the Caltrans District 4 Regional Board 2 Trash Generation Map, the Project limits are in a low-trash-generating area and does not need to implement trash capture devices (Caltrans 2022f).

In addition, the new impervious surface area is less than 1.0 acre. However, Section 401 and 404 permits require post-construction storm water treatment measures to be provided for the new impervious surface area.

With implementation of PF-WQ-1 through PF-WQ-8, the Project would not substantially degrade water quality and the impact would be less than significant.

b, e) No Impact

The Project would have no effect to groundwater supplies or groundwater recharge areas in the Project vicinity. In addition, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan; therefore, there would be no impact.

c) No Impact

Although the proposed bridge would increase impervious surfaces through the widening of roadways and sidewalks, the volume of excavation in the channel would be greater than the volume of fill for the raised roadway profile. This would result in a minimal net fill, which is anticipated to increase flow capacity compared to existing conditions. The base flood surface water elevation is not anticipated to rise. The existing drainage pattern of the site and area is not anticipated to significantly change, nor is the Project anticipated to substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite. Due to the increased flow capacity of the channel, the Project is not anticipated to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The Project is not anticipated to impede or redirect flood flows. There would be no impact.

d) No Impact

Tulucay Creek discharges into the Napa River 1 mile from the Project site and eventually discharges into the tidally influenced water body of San Pablo Bay, 7 miles away. The current mean high tide reaches 0.5 mile up from Tulucay Creek but does not reach the Project site. The Project site is impacted by future highest predicted sea level rise. The future tidal waters reach the Project site but do not overtop the banks, and they are contained within the creek, upstream and downstream of the Project site (Caltrans 2022e). There is no risk of release of pollutants due to Project inundation; therefore, there would be no impact.

2.2.11 Land Use and Planning

Would the Project:

Question	CEQA Determination
a) Physically divide an established community?	No Impact
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact

The Project site is located on SR 121 within the city of Napa and would be constructed within the Caltrans ROW, with surrounding commercial, open space, and recreational uses. The *City of Napa Zoning Map* designates the Project area to the west of SR 121 as Community Commercial and to the east of SR 121 as Tourist Commercial (City of Napa 2021a).

The city of Napa is located in the north part of the San Francisco Bay Area and lies approximately 4 miles north of American Canyon and 20 miles north of Vallejo via Highway 29 (City of Napa 2015). SR 121 is one of the highways in Napa County that carries the most significant portions of the county's daily traffic, and Goal 6 of the Napa countywide transportation plan Vision 2040 Moving Napa Forward is to prioritize the maintenance and rehabilitation of the existing system (NVTA 2015). The proposed new Tulucay Creek Bridge would provide a reliable crossing over Tulucay Creek and support the high traffic demand for SR 121. The City of Napa's General Plan identifies goals, policies, and implementation programs that focus on preserving and enhancing Napa's special community identity by managing future growth, maintaining the qualities of its neighborhoods, and providing for maintenance of surrounding open space (City of Napa 2015).

a, b) No Impact

The Project would not physically divide an established community, because two lanes of traffic, in both directions, would remain open during construction. Once construction is completed, the new bridge would serve the same use as the existing bridge and would maintain the same number of travel lanes and shoulders. In addition to lanes remaining open during construction, a TMP would be implemented during construction to minimize and prevent delays and inconvenience to the traveling public. Therefore, there would be no impact.

The Project would not conflict with the *City of Napa General Plan* (City of Napa 2015), as there would be no change to the roadway configuration and would not affect its users. There would be no impact.

2.2.12 Mineral Resources

Would the Project:

Question	CEQA Determination
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?	No Impact
b) Result in the loss of availability of a locally- important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact

The Project is not in an area of known mineral resources. Within the vicinity of the Project, Napa County identifies three mines that are designated as active by the State Department of Conservation, Office of Mine Reclamation (Napa County 2009). Of those three, Napa Quarry is identified as a significant mine (Napa County 2009) and is located approximately 1.4 miles south of the Project.

a, b) No Impact

The Project would not conflict with a resource recovery plan, nor would it impact the active mine, and it would not result in the loss of availability of a locally important mineral resource recovery site. Therefore, there would be no impact.

2.2.13 Noise

Would the Project result in:

Question	CEQA Determination
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	Less Than Significant Impact
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	No Impact

A *Construction Noise Analysis Memo* was prepared for the Project (Caltrans 2022g). This section includes the findings of the study.

The proposed Project does not qualify as Type I or Type II, as defined under the 23 CFR 772 and the Caltrans Traffic Noise Analysis Protocol. A Type I project is defined in 23 CFR 772 as a proposed federal or federal-aid highway project, for the construction of a highway at a new location or the physical alteration of an existing highway that significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. A Type II project is defined in 23 CFR 772 as a Federal or Federal-aid highway project for noise abatement on an existing highway. A traffic noise study is not required (Caltrans 2022g).

Construction noise levels were estimated using the Roadway Construction Noise Model, which is the Federal Highway Administration (FHWA) national model for the prediction of construction noise and includes sound levels for the most common types of construction equipment and the estimated usage for each type of equipment.

a) Less Than Significant Impact

During construction, sensitive receptors in the area may be impacted by noise generated from construction activities. The nearest receptors to the Project site are the Hawthorn Suites by Wyndham Napa Valley (approximately 50 feet) and Cambria Hotel Napa Valley (approximately 100 feet). The Caltrans 2018 Standard Specifications 14-8.02 states noise should not exceed 86 A-weighted decibels (dBA)

at 50 feet from the job site between the hours of 9 p.m. and 6 a.m. Based on the results from the Roadway Construction Noise Model, noise levels are anticipated to exceed 86 dBA during bridge demolition, impact pile driving, and bridge building construction activities. The Project would have a less than significant impact due to an increase in temporary ambient noise levels during construction, and AMM-NOI-1 and AMM-NOI-2 would further reduce the impact.

In addition, as the Project would not increase capacity, it would not create a permanent increase in ambient noise levels above existing conditions and construction noise would be temporary, therefore resulting in a less than significant impact.

b) Less Than Significant Impact

Pile driving installation equipment is anticipated to be used during the installation of sheet piles during construction that would generate noise and vibration to nearby receptors (Caltrans 2022h). For both alternatives, there are two locations at the abutments where the footing is lower than the current elevation. At these locations, the contractor would use sheet piles for temporary shoring and staging which would require the use of vibratory or impact hammers to be used. Nearby commercial receptors would experience vibration peak particle velocity greater than the Vibration Damage potential threshold criteria during impact pile driving (Caltrans 2022h). A vibration monitoring plan would be required that would ensure vibration damage is minimized to nearby receptors (see AMM-NOI-3). During construction of the abutments, CIDH piles would be used. The use of CIDH piles in construction would reduce significant vibration impacts. In addition, implementation of AMM-NOI-1 through AMM-NOI-3 would reduce noise and vibration impacts during construction. Following construction, as the Project would not increase highway capacity, it would not increase groundborne vibration or groundborne noise levels compared to existing conditions; therefore, impacts would be less than significant.

c) No Impact

The Project is not located in the vicinity of a private airstrip or within 2 miles of a public airport. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels during construction or during the operation phase. There would be no impact.

AVOIDANCE AND MINIMIZATION MEASURES

AMM-NOI-1: Specifications for Controlling Noise and Vibration. Any operation exceeding 86 dBA shall not be allowed at nighttime from 9 p.m. to 6 a.m.

AMM-NOI-2: Noise Levels During Construction. The following measures would be implemented during construction to reduce noise:

- Schedule noisy operations within the same time frame. The total noise level will not be substantially greater than the level produced if operations are performed separately.
- Construct temporary noise barriers between noisy activities and noise sensitive receptors or around activities with high noise levels or groups of noisy equipment.
- Avoid unnecessary idling of internal combustion engines within 100 feet of sensitive receptors.
- Locate all stationary noise-generating construction equipment as far as practical from noise-sensitive receptors or provide baffled housing or sound aprons to equipment when sensitive receptors adjoin or are near a construction project area.
- Equip all internal combustion engine driven equipment with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Use quiet air compressors and other quiet equipment where such technology exists.
- No construction equipment will be delivered and dropped off before 6 a.m.
- Maintain all internal combustion engine properly to minimize noise generation.

AMM-NOI-3: Implement Construction Vibration Monitoring Plan. To mitigate vibration impacts during construction, a construction vibration monitoring plan will be implemented. Implementation of the monitoring plan will start prior to construction activities and will continue through post-construction. The construction vibration monitoring plan will require a survey of nearby structures before, during, and after construction; vibration monitoring during construction; contingency plans if vibration levels approach sensitivity standards; and procedures for investigating claims of excessive vibration. With the permission of property owners, surveys of nearby structures will document the condition of foundations, walls and other structural elements in the interior and exterior of the nearby residences. The contractor will identify and implement construction vibration measures if vibration levels approach sensitivity standards. Measures may include using smaller equipment to minimize vibration levels, suspending construction, and/or bracing the affected structures. A

post-construction survey of structures will be completed where monitoring indicated high levels of vibration and where complaints of vibratory damage are reported. Caltrans will work with the property owners to repair damage from vibration.

2.2.14 Population and Housing

Would the Project:

Question	CEQA Determination
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	No Impact

a, b) No Impact

The Project would replace the existing two-span concrete bridge with a similar bridge. Bridge and vehicular capacity would not increase. Therefore, the Project would not induce unplanned population growth and would not result in any relocations or the displacement of residents or businesses. There would be no impact.

2.2.15 Public Services

Question	CEQA Determination
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	N/A
Fire protection?	Less Than Significant Impact
Police protection?	Less Than Significant Impact
Schools?	No Impact
Parks?	No Impact
Other public facilities?	No Impact

The Project site is located on SR 121 within the city of Napa. The closest fire station is City of Napa Fire Station No. 4, 251 Gasser Drive, which is approximately 0.4 mile from the Project area (firedepartment.net 2021).

The closest police department to the Project area is the Napa City Police Department, with offices at 1539 First Street, which is approximately 1.7 miles from the Project area (City of Napa 2021b).

The nearest parks to the Project area are Camille Park, which is approximately 1 mile east of the Project area, and Skyline Wilderness Park, which is approximately 2.5 miles southeast of the Project area.

Phillips Magnet Elementary, approximately 1.5 miles southeast of the Project area, and Silverado Middle School, approximately 1.5 miles northeast of the Project area, are the nearest schools to the Project area.

Other public facilities in the Project area are the American Legion, the Napa County Veteran Services, and the First Presbyterian Church, approximately 1.5 miles northwest of the Project site, 1.6 miles northwest of the Project site, and 1.2 miles northwest of the Project site, respectively.

Public services and facilities are provided and maintained by local and County entities, including fire, police, emergency response, and public works.

a) Less Than Significant Impact

The Project would not result in a use that would directly or indirectly induce population and employment growth in Napa County. Therefore, the Project would have no impact on schools, parks, or other public facilities. During construction, the Project would implement a TMP (PF-TRA-1) ensuring that two lanes of traffic would remain open during construction to maintain access for police, fire, medical services and the traveling motorist. Emergency response would receive priority through the Project area in the event of a medical emergency, wildfire, earthquake, or other evacuation effort. Impacts on fire and police protection services would be less than significant.

2.2.16 Recreation

Question	CEQA Determination
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	No Impact
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	No Impact

The nearest park to the Project site is Camille Park, which is approximately 1 mile east of the Project site. The Napa Valley Vine Trail is the closest walking and biking trail to the Project site. The trailhead is located at Hartle Court in Napa, across the street from In-Shape Health Clubs, located at 925 Hartle Court. The Napa Valley Vine Trail begins south of the Project area and proceeds north of the Project area along the Napa River. The trail does not run parallel to Tulucay Creek and therefore the trail does not intersect with the Project area (Napa Valley Vine Trail Coalition 2021).

Lake Marie Trailhead is approximately 2.5 miles southeast of the Project area and is associated with Skyline Wilderness Park, which provides recreational activities and camping on 850 acres of parkland. The Lake Marie Loop via Skyline Trail and Manzanita Trail is a 6.6-mile loop trail that is primarily used for hiking, running, equestrian, and mountain biking and is accessible year-round (AllTrails 2021).

a, b) No Impact

The Project would not increase the current highway capacity or induce population and employment growth in Napa County. In addition, the Project does not include recreational facilities or require the construction or expansion of recreational facilities. Therefore, the Project would not increase demand or use of existing neighborhood and regional parks or other recreational facilities. There would be no impact.

2.2.17 Transportation

Would the Project:

Question	CEQA Determination
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact
b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less Than Significant Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact
d) Result in inadequate emergency access?	Less Than Significant Impact

Soscol Avenue (designated SR 121) is a major four-lane highway that runs through the wine country region of both Napa and Sonoma counties. The northern terminus is at SR 128 near Lake Berryessa and its southern terminus is at SR 37 at Sears Point in Sonoma County. Dedicated Class II bike lanes are provided on SR 121/Soscol Avenue, which includes the Tulucay Creek Bridge and the Project area. Under current existing conditions, there are no sidewalks that continue over the existing Tulucay Creek Bridge for pedestrian use; however, there is a concrete edge attached to the southbound concrete barrier of the bridge that is approximately 1 foot high by 1 foot wide with a 4-inch sloping face, which some pedestrians may currently use to cross the bridge.

The Metropolitan Transportation Commission (MTC), which functions as both the State-designated Regional Transportation Planning Agency and federally designated metropolitan planning organization, is responsible for regional transportation planning. The Metropolitan Transportation Commission and Association of Bay Area Governments (ABAG) jointly adopted the Plan Bay Area 2050 (ABAG and MTC 2021a) in October 2021, which serves as the Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) for the San Francisco Bay Area.

Local transportation planning includes the NVTA, which operates the Valley Intercity Neighborhood Express (Vine) bus service as well as VineGo, which provides paratransit for eligible individuals with physical and/or cognitive limitations that prevent them from riding the Vine bus (NVTA 2021). The closest stop to the Project area is 0.2 mile north at Soscol Avenue and Silverado Trail South.

Through joint efforts, the NVTA and Napa County created the *Napa Countywide Bicycle Plan* to aid in the improvement of the bicycling environment through key infrastructure, programs, and policies (NVTA 2019). The plan also aims to serve NVTA goals for reducing growth in vehicle miles traveled, shifting from single occupancy vehicle travel to other modes, and reducing energy use and GHG emissions from vehicle congestion. Chapter 9 of the *Napa Countywide Bicycle Plan* specifically includes the *City of Napa Bicycle Plan*, which addresses the Project limits. The *Napa Countywide Bicycle Plan* will help the City work towards the adopted goals of connectivity, equity, safety, and education and encouragement, for bicycling in Napa County. The proposed Project does not conflict with any plans, ordinances, or policies related to circulation systems, including the *Napa Countywide Bicycle Plan* (NVTA 2019).

a, c) No Impact

The Project would not conflict with the Napa County General Plan (Napa County 2008) or any ordinance, policy, or congestion management program. The new bridge would be similar to the existing bridge and would not incorporate design features that would substantially increase hazards or introduce incompatible uses on SR 121. There would be no impact.

b) Less Than Significant Impact

During construction, worker commutes and equipment hauling vehicles would be traveling to and from the Project site, causing an increase in localized traffic; however, this would be temporary and would cease once construction is complete. Lane closures are anticipated; however, through implementation of PF-TRA-1, two lanes of traffic would remain open during construction. The majority of construction activities would occur during daytime hours of 6 a.m. to 9 p.m. Nighttime construction activities would occur after 9 p.m. for up to 12 nonconsecutive nights between February 2025 and December 2027. These activities would include preparing a lane closure at night, due to a more favorable temperature for concrete setting, and a lower impact on traffic. Operation of the Project would not result in any changes to vehicle miles traveled as the traffic capacity of SR 121 would not increase. No impact would occur.

To minimize potential effects to motorists, bicyclist, or pedestrians using local streets or SR 121 during construction, a TMP would be developed by Caltrans using PF-TRA-1, as summarized in Appendix B. The TMP would include public information, motorist information, incident management, construction, and impacts to local residents, as feasible, and would maintain access for police, fire, emergency response, and medical services in the local area. In addition, Caltrans would

implement *Manual on Uniform Traffic Control Devices* guidelines such as posting signage alerting motorists that bicyclists are permitted to use the full traffic lane, and reducing vehicle speed limit to 35 mph throughout the duration of construction. Prior to construction, Caltrans would also notify adjacent property owners, businesses, NVTA, Napa County, the Chamber of Commerce and Visitors Bureau, and the Napa County Regional Park and Open Space District regarding construction activities and access changes. Therefore, the impact would be less than significant.

d) Less Than Significant Impact

The Project would not result in inadequate emergency access. The Project would implement a TMP (PF-TRA-1) to minimize and prevent delays and inconvenience to the traveling public and to maintain emergency access. The impact would be less than significant.

2.2.18 Tribal Cultural Resources

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

Question	CEQA Determination
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Less Than Significant Impact with Mitigation Incorporated
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 I of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision I of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant Impact with Mitigation Incorporated

Caltrans contacted the Native American Heritage Commission on April 12, 2021, and the Commission responded on April 26, 2021, with a contact list and a negative Sacred Land File search result. Native American consultation letters for Section 106 and AB 52 were sent electronically to the following contacts for tribes traditionally associated with the Project area on May 18, 2021:

- Leland Kinter (Tribal Historic Preservation Officer), Anthony Roberts (Chairperson), and Isaac Bojorquez (Director of Cultural Resources), Yocha Dehe Wintun Nation
- Scott Gabaldon (Chairperson) and Christie Tektekh Gabaldon, Mishewal-Wappo Tribe of Alexander Valley
- Daniel Gomez (Chairperson) and Clifford Mota (Tribal Preservation Liaison), Cachil Dehe Band of Wintun Indians of the Colusa Indian Community
- Charlie Wright (Chairperson), Cortina Rancheria-Kletsel Dehe Band of Wintun Indians
- Donald Duncan (Chairperson), Guidiville Indian Rancheria
- Jose Simon (Chairperson) and Michael Rivera (Tribal Historic Preservation Officer), Middletown Rancheria of Pomo Indians

- Leona Williams (Chairperson) and Erica Carson (Tribal Historic Preservation Officer), Pinoleville Pomo Nation

Ms. Christie Tektekh Gabaldon, Mishewal-Wappo Tribe of Alexander Valley, responded on May 20, 2021, acknowledging the notification of the proposed Project at Tulucay Creek, the presence of sensitive archaeological resources in the area. She requested that Caltrans continue consultation on the Project with the Mishewal-Wappo. On June 3, 2021, Caltrans received a letter from Mr. Laverne Bill, Interim Director of Cultural Resources for the Yocha Dehe Wintun Nation at the time, stating that the Project is located within their aboriginal territory and provided early recommendations for treatment of archaeological resources. Mr. Bill asked to continue consulting on the Project. Phone calls were made to the remaining individuals the week of June 21 through 24, 2021. Consultation with Native American Tribes remains ongoing.

a, b) Less Than Significant Impact with Mitigation Incorporated

Results of the record search indicated that the Project area has been previously studied. There is one historic property within the Project area: a prehistoric archaeological resource, likely the ethnographic village of *Tulucay.* The archaeological site was determined eligible for the National Register of Historic Places, and SHPO concurred with that determination on March 8, 2000. All other properties in the APE are exempt from evaluation pursuant to Stipulation VIII.C.1 and Attachment 4 of the PA. Caltrans would consult with the SHPO on an Adverse Effect determination for the identified archaeological resource and to develop a memorandum of agreement for the treatment of the site. Consultation is ongoing between Caltrans and Native American tribes in the area regarding the treatment of the archaeological site. The Project would have a significant impact to cultural resources without implementation of mitigation measures. However, with implementation of mitigation measures as outlined in Section 2.2.5 and in Appendix B, the impact would be reduced to less than significant.

MITIGATION MEASURES

Refer to MM-CULT-1 through MM-CULT-3 found in Section 2.2.5 and Appendix B.

2.2.19 Utilities and Service Systems

Would the Project:

Question	CEQA Determination
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Less Than Significant Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	No Impact
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact

The Project area is within an urbanized environment within the city of Napa where existing utility infrastructure is already in place. As described in Section 1.5.1, existing utilities include a PG&E underground gas line and overhead electrical line, AT&T overhead telephone line, and a City of Napa underground water line, water meter, and fire hydrant. The existing fiber optic cables under the existing bridge would either be relocated or would be protected in place. A sewer line located in the concrete apron is anticipated to be protected in place. Work in the creek bed would be needed during the temporary utility relocation and protection of in-place utilities.

For Alternative 2, a manhole approximately 10 feet away from the proposed new bridge would be protected in place. For Alternative 3, the manhole would be closer in proximity (at approximately 2.5 to 3 feet) to the proposed new bridge and may need to be relocated. The potential relocation of the manhole would be determined during future coordination with the utility owner.

a) Less Than Significant Impact

Construction of the build alternatives would generate minor amounts of wastewater, but they would not exceed wastewater treatment requirements of the RWQCB due to requirements set forth in waste discharge requirements and in the Section 401 Water Quality Certification Permit. Utilities would be temporarily relocated or protected in place during construction. Caltrans would notify utility owners of the Project construction schedule (PF-UTIL-2). The relocation of utilities in the Project site would not result in access limitations. The Project would not directly increase the number of residents in the area because residential land uses are not proposed; therefore, no new or expanded utility entitlements would be needed to serve the local community near the Project. The impact would be less than significant.

b, c) No Impact

The Project would not directly increase the number of residents in the area because residential land uses are not proposed. The Project would not increase the demand for additional water supplies or wastewater treatment facilities. There would be no impact.

d, e) No Impact

The proposed Project would not generate excessive demand for potable water supplies or services of a wastewater treatment provider. Further, solid waste created from the Project would be removed from the construction work areas and recycled or properly disposed of offsite. Where possible, materials from the site would be reused on the Project site or elsewhere. The Project would comply with local management and reduction statutes and regulations related to solid waste. The Project would not result in any substantial demands for solid waste disposal and would comply with federal, state, and local statutes regarding the disposal of solid waste. Implementation of PF-UTIL-1 and PF-UTIL-2 would require the proper disposal of construction trash. Therefore, there would be no impact.

2.2.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

Question	CEQA Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	No Impact

The Project is located on SR 121/Soscol Avenue in the city of Napa, located in the southern portion of Napa County. Napa County has an active wildfire history, with one fifth of the 20 most destructive wildfires in the state located in Napa County (CAL FIRE 2021a). The county is characterized by long narrow valleys surrounded by steep, hilly terrain. With its long, dry summers and rugged topography, Napa County has a high wildfire susceptibility. The interface in the county between wildland areas and development exposes residents, businesses, and community facilities to wildland fire risks (Napa County 2014).

The Project is located in an urbanized area mostly consisting of commercial and residential uses. The topography of the Project site is mostly flat and adjacent to the Tulucay Creek and is located in the Napa Valley. The forested hillsides framing the valley east and south of the Project footprint are identified as moderate fire hazard severity zone; however, the Project footprint itself is within a Local Responsibility Area and not located within a very high fire hazard severity zone (CAL FIRE 2021b). Additionally, the Project is outside of a State Responsibility Area and is approximately 0.9 mile from the nearest State Responsibility Area and approximately 3.25 miles from the nearest very high fire hazard severity zone.

a) Less Than Significant Impact

The Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. The incorporation of fire prevention practices during construction (AMM-WF-1) would reduce wildfire impacts. In addition, a TMP (see PF-TRA-1) would be developed during the Project design phase and would identify traffic diversion, staging, and alternative routes. Emergency response times are not anticipated to change during construction because the TMP would provide measures to ensure priority for emergency vehicles during one-way traffic control. The TMP would provide instructions for response and evacuation to take high priority in an emergency. In addition, the Project would not conflict with any other emergency response or evacuation plan. Therefore, the impact would be less than significant.

b, c, d) No Impact

The Project would not exacerbate wildfire risks, require the installation or maintenance of infrastructure that may exacerbate wildfire risk, or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. The Project proposes to replace the existing bridge on SR 121; therefore, it does not involve the occupation of habitable structures and does not include the installation of associated infrastructure that would exacerbate wildfire risk. Once construction of the Project is completed, the new bridge would serve in the same capacity as the existing bridge and would not increase the existing wildfire potential. Therefore, there would be no impact.

AVOIDANCE AND MINIMIZATION MEASURES

AMM-WF-1: Implement Fire Prevention Practices During Construction. Caltrans would implement the following fire prevention practices into the Project construction specifications:

- Internal combustion engines (stationary and mobile) would be equipped with spark arrestors. Spark arrestors would be in good working order.
- The contractor would keep all construction sites and staging areas free of grass, brush, and other flammable materials.
- Personnel would be trained in the practices of the fire safety plan relevant to their duties.
- Construction and maintenance personnel would be trained and equipped to extinguish small fires.

- Work crews would have fire-extinguishing equipment on hand, as well as emergency numbers and cell phone or other means of contacting the fire department.

- Smoking would be prohibited while operating equipment and would be limited to paved or graveled areas or areas cleared of all vegetation. Smoking would be prohibited within 30 feet of any combustible material storage area (including fuels, gases, and solvents). Smoking would be prohibited in any location during a Red Flag Warning issued by the National Weather Service for the Project area.

2.2.21 Mandatory Findings of Significance

Question	CEQA Determination
a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	Less Than Significant Impact with Mitigation Incorporated
b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	Less Than Significant Impact
c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	Less Than Significant Impact

a) Less Than Significant Impact with Mitigation Incorporated

As discussed in Section 2.2.5, the Project would have the potential to result in adverse effects on cultural resources. The Project would implement AMMs and project features to reduce potential impacts on cultural resources. In addition, MM-CULT-1 through MM-CULT-3 would be required to mitigate potential impacts to known cultural resources in the Project area in addition to the memorandum of agreement developed with the SHPO. Impacts would therefore be reduced to a less than significant level with mitigation incorporated.

b) Less Than Significant Impact

The Project would not increase roadway capacity, induce growth, or change land use patterns. All potential impacts would be minimized through the implementation of project features, AMMs, and mitigation measures. The Project would not have a cumulatively significant impact on any impacted resources; therefore, the impact would be less than significant.

Table 2-3 lists current and foreseeable projects in Napa County. These projects are considered along with past projects, the Build Alternatives, and the No-Build Alternative in the cumulative impact analysis.

Table 2-3. Current and Foreseeable Projects

Name	Location	Project Proponent	Proposed Uses	Status
Replace Conn Creek Bridge and Plant Establishment	SR 128 at junction with Silverado Trail	Napa County	Replace the Conn Creek Bridge with a new bridge and establish plants at the same location	Plant establishment in design. Bridge replacement in construction.
Vine Trail	Calistoga to St. Helena - SR 29 (PM 33.5-37.4)	NVTA, Caltrans	NVTA and Caltrans plan to construct a bike/pedestrian trail between Calistoga and St. Helena. Most of the work will be off the highway in the shoulder or on county roads.	Construction Date: Fall 2021 to spring 2023
Pavement Preservation Capital Preventive Maintenance (CAPM)	St. Helena to Calistoga – SR 29 (PM 29.3-36.9)	Napa County, Caltrans	A CAPM project that would cold-plane the asphalt and replace it, fix any culverts, and make other minor fixes to the roadway such as fixing the striping and the rumble strips.	Construction Date: Spring 2022 to fall 2024
Soscol Junction Project	Junction of State Route 221, SR 29 and Soscol Ferry Road	NVTA, Caltrans	Alleviate congestion and improve traffic operations at the Soscol Junction (SR 29/SR 221/Soscol Ferry Road)	Construction Date: Fall 2021 to Summer 2023
Ritchie Creek Bridge Replacement for Fish Passage Improvement	St. Helena to Calistoga – SR 29 (PM 33.13)	Caltrans	Replace the Ritchie Creek Bridge with a new bridge to remove fish passage barriers and allow Caltrans to obtain 50 total maximum daily load compliance unit credits.	Construction Date: Winter 2023 to fall 2023
State Route 128 Hopper Slough Bridge Replacement Project	SR 128 (PM 5.1)	Caltrans	Replace the Hopper Slough Bridge with a new bridge that meets current Caltrans geometric and structural design standards.	Construction Date: February 2025 to December 2026

Name	Location	Project Proponent	Proposed Uses	Status
State Parks – Fish Passage Barrier Improvement	Bothe-Napa Valley State Park	State Parks	Project consists of removal of two 54-foot-long steel culverts. In its current condition, stream flow overtops the Day Use Road, eroding the road edge and causing downstream scour and erosive conditions. Project proposes grading and restoring the channel and replacing the road crossing with a natural bottom crossing structure.	In planning phase
Project ID 63	Larkmead Lane from SR 29 to Silverado Trail	NVTA	Class II bike lane	In planning phase
Project ID 62	Silverado Trail from Larkmead Lane to Dunaweal	Caltrans	Project consists of a bridge replacement of the Napa River Bridge in the City of Calistoga	Post construction monitoring

ID = identification

c) <u>Less Than Significant Impact</u>

Fee acquisition of parcels adjacent to the bridge as well as additional roadway approaching the bridge to taper the roadway approaches would be required for the Project. Potential impacts from the Project are anticipated to be minor and result mostly from construction activities and construction related delays. Construction activities would temporarily increase criteria pollutant emissions and ambient noise levels. Daytime work would occur within the proposed Project footprint with potential to impact nearby businesses and residences in proximity to the Project. Additionally, intermittent nighttime construction activities would occur between February 2025 and December 2027. The Project would incorporate project features and AMMs throughout construction to minimize potential adverse effects to the human environment resulting from the construction of the Project. The Project would not have a substantial direct or indirect impact on the human environment, and impacts would be less than significant.

2.3 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to GHG emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

2.3.1 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.

NEPA (42 U.S.C. Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

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.

The federal government has taken steps 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 U.S.C. Section 6201) as amended by the Energy Independence and Security Act (of 2007; and Corporate Average Fuel Economy (CAFE) Standards. This act established fuel economy standards for on-road motor vehicles sold in the United States. The U.S. DOT's (USDOT) National Highway Traffic and Safety Administration sets and enforces the CAFE standards based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States. USEPA calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation's energy security, saves consumers money at the pump, and reduces GHG emissions (USDOT 2014).

USEPA published a final rulemaking on December 30, 2021, that raised federal GHG emissions standards for passenger cars and light trucks for model years 2023 through 2026, increasing in stringency each year. This rulemaking revised lower emissions standards that had been previously established for model years 2021 through 2026 in the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part Two in June 2020. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050 (USEPA 2021a).

STATE

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate Bills (SBs), ABs, 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 year 2000 levels by 2010, year 1990 levels by 2020, and 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of AB 32 in 2006 and 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 (CARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of GHGs. 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 Section 38551(b)). The law requires CARB 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 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. CARB re-adopted the low carbon fuel standard 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 CARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization for each region must then develop an 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 CARB, 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 CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). GHGs differ in how much heat each traps in the atmosphere, called global warming potential. CO2 is the most important GHG, so amounts of other gases are expressed relative to CO2, using a metric called "carbon dioxide equivalent," or CO2e. The global warming potential of CO2 is assigned a value of 1, and the global warming potential of other gases is assessed as multiples of CO_2. 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 GHG 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."

- SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing GHG emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

- SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires CARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional GHG emission reduction targets.

- EO B-55-18 (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

- EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs CARB 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.

2.3.2 Environmental Setting

The proposed Project is in an urban area of Napa County with a well-developed road and street network. The Project would be conducted within Caltrans ROW, and is surrounded by commercial, open space, and recreational uses. SR 121 is a major four-lane highway that runs through the wine country region of both Napa and Sonoma Counties. The Circulation Element of the Napa County General Plan and the Metropolitan Transportation Commission and Association of Bay Area Governments Plan Bay Area 2050 guides transportation development and addresses GHGs in the Project area. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

GHG INVENTORIES

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. USEPA is responsible for documenting GHG emissions nationwide, and the CARB does so for the state, as required by Health and Safety Code Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

NATIONAL GHG INVENTORY

The annual GHG inventory submitted by the USEPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. The 1990-2019 inventory found that overall GHG emissions were 6,558 million metric tons (MMT) in 2019, down 1.7 percent from 2018 but up 1.8 percent from 1990 levels. Of these, 80 percent were CO_2, 10 percent were CH_4, and 7 percent were N_2O; the balance consisted of fluorinated gases. CO_2 emissions in 2019 were 2.2 percent less than in 2018 but 2.8 percent more than in 1990. The transportation sector accounted for 29 percent of U.S. GHG emissions in 2019 (USEPA 2021b, 2021c) (Figure 2-1).

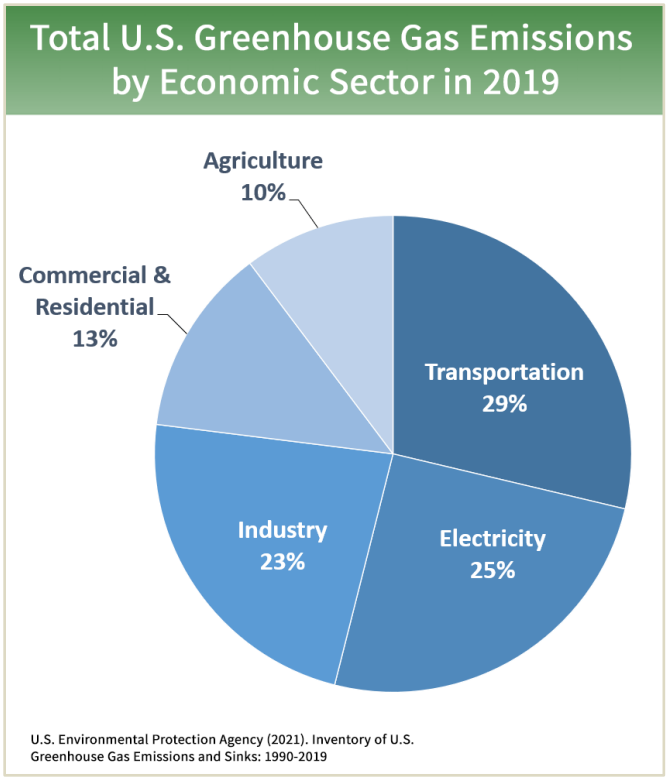

Figure 2-1. U.S. 2019 Greenhouse Gas Emissions

Source: USEPA 2021d

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 2021 edition of the GHG emissions inventory reported emissions trends from 2000 to 2019. It found total California emissions were 418.2 MMTCO2e in 2019, a reduction of 7.2 MMTCO2e since 2018 and almost 13 MMTCO2e below the statewide 2020 limit of 431 MMTCO2e. The transportation sector (including intrastate aviation and off road sources) was responsible for about 40 percent of direct GHG emissions, a 3.5 MMTCO2e decrease from 2018 (Figure 2-2). Overall statewide GHG emissions declined from 2000 to 2019 despite growth in population and state economic output (Figure 2-3) (CARB 2021a).

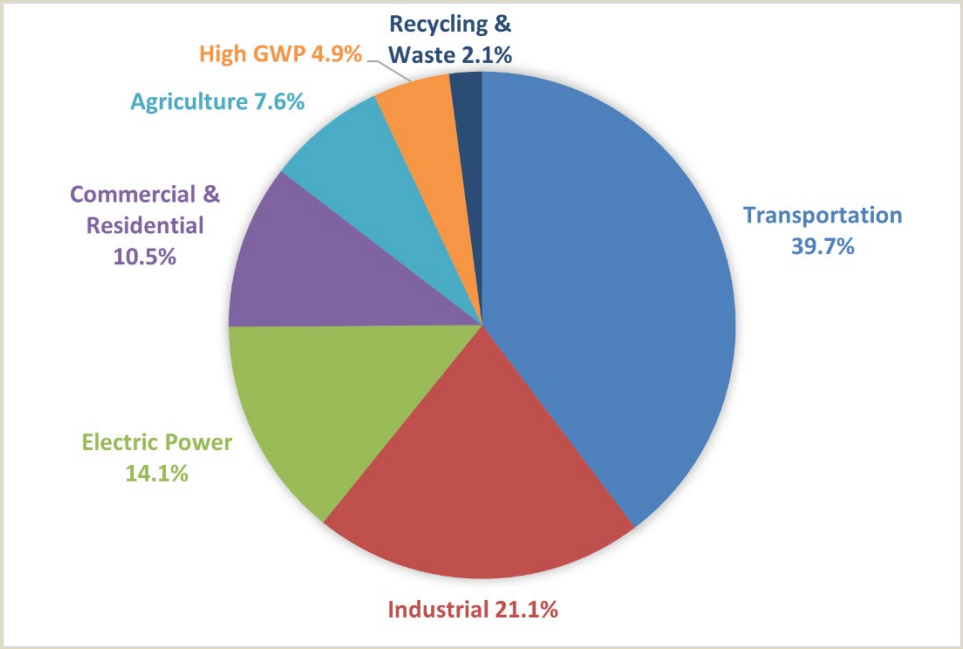

Figure 2-2. California 2019 Greenhouse Gas Emissions by Economic Sector

Source: CARB 2021a

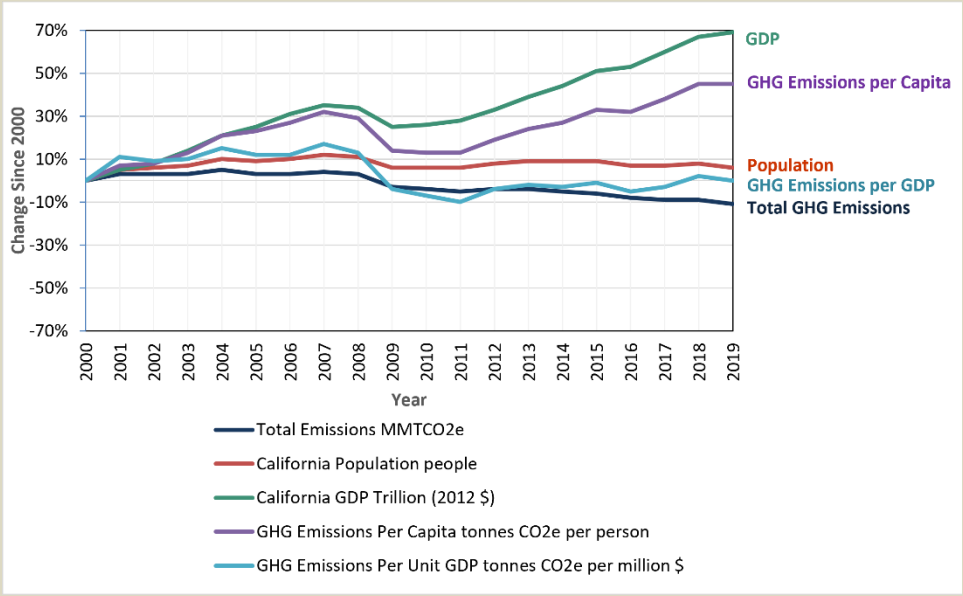

Figure 2-3. Change in California Gross Domestic Product, Population, and GHG Emissions since 2000

Source: CARB 2021a

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 5 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

CARB sets regional GHG reduction targets for California's 18 metropolitan planning organizations to achieve through planning future projects that will cumulatively achieve those goals and reporting how they will be met in the RTP/SCS. The Project is captured in the Plan Bay Area 2050 Transportation Project List (RTPID 21-TO1-004) (ABAG and MTC 2021b); as the RTP/SCS for MTC/ABAG, this program includes funding to operate and maintain the Bay Area's local bridges and highways. Improvements include bridge rehabilitation, replacement or retrofitting with no new capacity. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The regional reduction target for MTC/ABAG is 19 percent by 2035 (CARB 2021b). The RTP/SCS aims to reduce per-capita delay and CO_2 emissions.

2.3.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector.

The CEQA Guidelines generally address GHG emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation v. San Diego Assn. of Governments [2017] 3 Cal.5th 497, 512). In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130).

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

OPERATIONAL EMISSIONS

The Project proposes to build a new bridge that would be approximately 77 feet long and 100 feet wide (Alternative 2) or 96 feet wide (Alternative 3), including the bridge railing. The new bridge would have four 12-foot lanes (two lanes in each direction), two outside shoulders between 8 to 10 feet, two sidewalks between 6 to 10 feet, a 14-foot median, and crash cushions fixated at the end of the bridge rails. The shoulders would be signed and striped as Class II bike lanes. The Project would not increase the vehicular 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 121, no increase in vehicle miles traveled (VMT) would occur. While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected.

CONSTRUCTION EMISSIONS

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

Use of long-life pavement, improved traffic management plans, and changes in materials, can also help offset emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Construction-related GHG emissions were calculated using CAL-CET 2020, version 1.0. It was estimated that for a construction duration of 12 months, the total amount of CO_2 produced due to construction would be 667 tons (Caltrans 2022d).

PF-GHG-1, PF-GHG-2, PF-AQ-2, and PF-AQ-3 would be implemented to reduce or eliminate construction-related GHG emissions where practicable.

PF-GHG-1: Waste Reduction. If practicable, nonhazardous waste and excess material would be recycled. If recycling is not practicable, the material would be disposed of appropriately.

PF-GHG-2: Energy Reduction. Solar energy would be used to reduce the use of non-renewable energy during construction.

PF-AQ-2: Idling and Access Points. Idling times would be minimized either by shutting off equipment when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure [Title 13,

Section 2485 of California Code of Regulations]). Clear signage would be provided for construction workers at all access points. Construction activities involving the extended idling of diesel equipment or vehicles would be prohibited, to the extent feasible.

PF-AQ-3: Maintaining Construction Equipment and Vehicles. All construction equipment and vehicles would be maintained and properly tuned in accordance with manufacturer's specifications. All equipment would be checked by a certified mechanic and determined to be running in proper condition prior to operation.

All construction contracts include Caltrans Standard Specifications related to air quality. Section 7-1.02A and 7-1.02C, Emissions Reduction, requires contractors to comply with all laws applicable to the Project and to certify they are aware of and will comply with all CARB emission reduction regulations. Section 14-9.02, Air Pollution Control, requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

CEQA Conclusion

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 GHGs. With implementation of construction GHG reduction measures, the impact would be less than significant. Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

2.3.4 Greenhouse Gas Reduction Strategies

Statewide Efforts

In response to AB 32, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors, to take California into a sustainable, low-carbon and cleaner future, while maintaining a robust economy (CARB 2022).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research identified five sustainability pillars in a 2015 report (OPR 2015):

- Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030
- Reducing petroleum use by up to 50 percent by 2030
- Increasing the energy efficiency of existing buildings by 50 percent by 2030
- Reducing emissions of short-lived climate pollutants
- Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits

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. Reducing today's petroleum use in cars and trucks is a key state goal for reducing GHG emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released the *Natural and Working Lands Climate Smart Strategy* draft for public comment in October 2021.

CALTRANS ACTIVITIES

Caltrans continues to be involved on the Governor's Climate Action Team as 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.

CLIMATE ACTION PLAN FOR TRANSPORTATION INVESTMENTS

The California Action Plan for Transportation Infrastructure (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40 percent of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

CALIFORNIA TRANSPORTATION PLAN

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The CTP 2050 presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021d).

CALTRANS STRATEGIC PLAN

The Caltrans 2020–2024 Strategic Plan includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021e).

CALTRANS POLICY DIRECTIVES AND OTHER INITIATIVES

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Caltrans policy to ensure coordinated efforts to incorporate climate change into Caltrans decisions and activities. Caltrans Greenhouse Gas Emissions and Mitigation Report (Caltrans 2020a) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce GHG emissions and identifies additional opportunities

for further reducing GHG emissions from Caltrans-controlled emission sources, in support of Caltrans and State goals.

PROJECT-LEVEL GHG REDUCTION STRATEGIES

The Project would also implement the following measures to reduce GHG emissions and potential climate change impacts from this Project:

PF-AES-1: Vegetation Protection. Existing trees and vegetation will be preserved to the extent feasible. Trees and vegetation outside of the clearing and grubbing limits would be protected from the contractor's operations, equipment, and materials storage. Tree trimming and pruning, where required, would be under the direction of a qualified biologist.

PF-BIO-13: Vegetation and Tree Removal. Vegetation would be cleared only where necessary and cut above soil level, except in areas that would be permanently affected or excavated. This would allow plants that reproduce vegetatively to resprout after construction.

PF-BIO-14: Restore Disturbed Areas. Temporarily disturbed areas would be restored to the maximum extent practicable. Exposed slopes and bare ground would be reseeded with native grasses to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, native species will be replanted, based on the local species composition.

PF-TRA-1: Traffic Management Plan. A Traffic Management Plan (TMP) will be developed by Caltrans during the design (PS&E) phase. The TMP will include public information, motorist information, incident management, construction, and alternate routes. In addition, one-way traffic control, lane closures, flaggers and phasing, portable changeable message signs, flaggers and the California Highway Patrol's Construction Zone Enhanced Enforcement Program will be incorporated into the TMP to minimize delays to local residents and highway users, as feasible. The TMP will also provide access for police and emergency service providers. Lane closures will be planned in coordination with Caltrans and Solano County and will include notices to emergency services providers, and the public in advance.

2.3.5 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash

out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

FEDERAL EFFORTS

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The 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."

The USDOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (USDOT 2011).

In 2014, FHWA Order 5520, *Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* 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. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment) (State of California 2018) is the state's effort to "translate the state of climate science into useful information for action." It provides information that will help decision makers across sectors and at state, regional, and local scales protect and build the resilience

of the state's people, infrastructure, natural systems, working lands, and waters. The State's approach recognizes that the consequences of climate change occur at the intersections of people, nature, and infrastructure. The Fourth Assessment reports that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience a 2.7- to 8.8-degree Fahrenheit increase in average annual maximum daily temperatures, with impacts on agriculture, energy demand, natural systems, and public health; a two-thirds decline in water supply from snowpack and water shortages that will impact agricultural production; a 77 percent increase in average area burned by wildfire, with consequences for forest health and communities; and large-scale erosion of up to 67 percent of Southern California beaches and inundation of billions of dollars' worth of residential and commercial buildings due to sea level rise (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the coastal zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

In 2008, then-governor Arnold Schwarzenegger recognized the need when he issued EO S-13-08, focused on sea level rise. Technical reports on the latest sea level rise science were first published in 2010 and updated in 2013 and 2017. The 2017 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. This EO also gave rise to the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan), which addressed the full range of climate change impacts and recommended adaptation strategies. The Safeguarding California Plan was updated in 2018 and again in 2021 as the *California Climate Adaptation Strategy* (California Natural Resources Agency 2021a), incorporating key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy* (California Natural Resources Agency 2021b), *Wildfire and Forest Resilience Action Plan* (State of California 2021), *Water Resilience Portfolio* (State of California 2020), and the *Climate Action Plan for Transportation Infrastructure* (California State Transportation Agency 2021).Priorities in the 2021 California Climate Adaptation Strategy include acting in partnership with California Native American tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, nature-based climate solutions, use of best

available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2021a).

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 in addition to sea level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Governor's Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2018 to encourage a uniform and systematic approach.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group to help actors throughout the state address the findings of California's Fourth Climate Change Assessment. It released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*, in 2018. 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 (Climate Change Infrastructure Working Group 2018).

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

PROJECT ADAPTATION ANALYSIS

Sea-Level Rise

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

Precipitation and Flooding

As noted in Section 2.2.10, this Project is located within Zone AE base floodplain. Zone AE denotes a base floodplain with known flood elevations. Near the bridge, the base flood elevation is approximately 21 feet. Per the flood insurance map, SR 121

is within the Tulucay base floodplain from just north of the bridge on the northern end to Shelter Avenue on the southern end. Per Federal Emergency Management Agency Flood Insurance Study 06088CV000C dated August 2016, the channel is not classified as a Regulatory Floodway (Caltrans 2022e).

Caltrans District 4 Climate Change Vulnerability Assessment indicates the potential for a 0.6 to 4.9 percent increase in 100-year storm precipitation depth in the Project vicinity by 2025 and a 10 to 14.9 percent increase in the Project vicinity by 2085 (Caltrans 2017b, 2020b). A number of local geomorphic variables affect how a given precipitation event would affect streamflow, making it difficult to assess potential impacts at a particular location. However, as discussed in Section 2.2.10, the Project would not change the 100-year water surface elevation within the Project area. Stormwater runoff from the roadway would continue to sheet flow off the pavement similar to existing conditions. The Project would also implement temporary construction site BMPs to reduce the amount of pollutants being discharged into the receiving waterbodies and avoid storing hazardous and non-hazardous materials within the Zone AE floodplain.

Wildfire

The Project is not surrounded by areas identified as high fire hazard severity zones, and the Project itself is not within a high fire hazard severity zone area (CAL FIRE 2008, 2021b). The Caltrans Climate Change Vulnerability Assessment for District 4 evaluated roads at risk for future wildfire and determined that the Project is not in an area of wildfire risk nor characterized as within or along exposed roadway (Caltrans 2017b). The Project would serve the same use and vehicular capacity as the existing facility and would not increase wildfire risks. Caltrans would implement AMM-WF-1 to reduce the potential wildfire risks during construction. The Project is not likely to be subject to effects of wildfire that could occur under climate change.

AMM-WF-1: Implement Fire Prevention Practices During Construction. Caltrans would implement the following fire prevention practices into the Project construction specifications:

- Internal combustion engines, stationary and mobile, would be equipped with spark arrestors. Spark arrestors would be in good working order.
- The contractor would keep all construction sites and staging areas free of grass, brush, and other flammable materials.
- Personnel would be trained in the practices of the fire safety plan relevant to their duties.

- Construction and maintenance personnel would be trained and equipped to extinguish small fires.
- Work crews would have fire extinguishing equipment on hand, as well as emergency numbers and cell phone or other means of contacting the fire department.
- Smoking would be prohibited while operating equipment and would be limited to paved or graveled areas or areas cleared of all vegetation. Smoking would be prohibited within 30 feet of any combustible material storage area (including fuels, gases, and solvents). Smoking would be prohibited in any location during a Red Flag Warning issued by the National Weather Service for the Project area.

Chapter 3 List of Preparers

The primary persons responsible for contributing to, preparing, and reviewing this report are listed in Table 3-1.

Table 3-1. List of Preparers and Reviewers

Organization	Name	Role
Caltrans	Daniel Y. Chang	Project Manager
Caltrans	Katie Chounramany	Project Engineer
Caltrans	Roger Duan	Utilities
Caltrans	Setareh Elikaei	Transportation Engineer (Design)
Caltrans	Christopher Else	Landscape Architecture
Caltrans	Tom Jiang	Hydraulics Engineer
Caltrans	Sophie Kolding	Biologist
Caltrans	Maxwell Lammert	Senior Planner, Solano and Napa, Environmental Analysis
Caltrans	Scott M. Williams	Acting Office Chief, Environmental Analysis
Caltrans	Clifford Law	Construction
Caltrans	Shilpa Mareddy	Air Quality/Noise
Caltrans	Kristina Montgomery	Archeology (Cultural)
Caltrans	JC Moore	Geotechnical Engineer
Caltrans	Tony Nedwick	Structure Hydraulics
Caltrans	Diana Pink	Landscape Architect
Caltrans	Ghulam Popal	Design Senior
Caltrans	Kathleen Reiley	Senior Transportation Engineer (Hydraulics)
Caltrans	Chris Risden	Senior Transportation Engineer (Geotech)
Caltrans	Sergio Ruiz	Supervising Transportation Planner
Caltrans	Alicia Sanhueza	Architectural Historian
Caltrans	Henry Seto	Structure Design
Caltrans	Ping Tsai	Right of Way Project Coordinator
Caltrans	Chris Wilson	Hazardous Waste
Caltrans	Isaias Yalan	Structure Design
Jacobs	Morgan Angulo	Environmental Planner

Organization	Name	Role
Jacobs	Bryan Bell	Senior Technical Editor
Jacobs	Clarice Ericsson	Publications Technician
Jacobs	Natalie Escoffier	Environmental Planner
Jacobs	Jasmin Mejia	Senior Environmental Planner/Project Manager
Jacobs	Loretta Meyer	Senior Environmental Planner/Project Manager
Jacobs	Hannah Minderhout	Environmental Planner
Jacobs	Leslie O'Connor	Technical Editor
Jacobs	Yassaman Sarvian	Environmental Planner
Jacobs	Hong Zhuang	Senior Air Quality Specialist

Chapter 4 Distribution List

The IS/MND will be circulated on July 1, 2022, to the following agencies and government officials:

Agencies

Federal Agencies

U.S. Fish and Wildlife Service
2800 Cottage Way W-2605
Sacramento, CA 95825

U.S. Army Corps of Engineers
Sacramento District
ATTN: Regulatory Branch
1325 J Street, Room 1480
Sacramento, CA 95825

National Marine Fisheries Services
777 Sonoma Avenue Room 325
Santa Rosa, CA 95404

Environmental Protection Agency, Region IX Federal Activities Office, CMD-2
75 Hathorne Street
San Francisco, CA 94105-3901

State Agencies

State Clearinghouse, Executive Officer
1400 Tenth Street, Room 156
P.O. Box 3044
Sacramento, CA 95812-3044

California Department of Fish and Wildlife
Region 3
7329 Silverado Trail
Napa, CA 94558

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

San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Bay Area Air Quality Management District
Chief Executive Officer
939 Ellis Street
San Francisco, CA 94109

California Air Resources Board
1001 I Street
P.O. Box 2815
Sacramento, CA 9812

Regional and Local Agencies

Association of Bay Area Governments
375 Beale Street
San Francisco, CA 94105

Metropolitan Transportation Commission
375 Beale Street
San Francisco, CA 94105

Napa County Fire Department
3535 St. Helena Highway
Calistoga, CA 94515

Napa Valley Transportation Authority
625 Burnell St
Napa, CA 94559

Elected Officials

Federal Officials

UNITED STATES SENATE

The Honorable Dianne Feinstein
United States Senate
One Post Street, Suite 2450
San Francisco, CA 94104

The Honorable Alex Padilla
United States Senate
333 Bush Street, Suite 3225
San Francisco, CA 94101

UNITED STATES HOUSE OF REPRESENTATIVES

The Honorable Mike Thompson
United States House of Representatives (CA-5)
2721 Napa Valley Corporate Drive
Napa, CA 94558

State Officials

CALIFORNIA STATE SENATE

The Honorable Bill Dodd
California State Senate, District 3
2721 Napa Valley Corporate Drive
Napa, CA 94558

CALIFORNIA STATE ASSEMBLY

The Honorable Cecilia Aguiar-Curry
California State Assembly, District 4
2721 Napa Valley Corporate Drive
Napa, CA 94558

County Officials

COUNTY BOARD OF SUPERVISORS

The Honorable Brad Wagenknecht
Napa County Board of Supervisors, District 1
County Administration Building
1195 Third Street
Napa, CA 94559

City Officials

CITY OF NAPA

Mayor Scott Sedgley
Napa City Council
City Hall
955 School Street
Napa, CA 94559

Vice Mayor Mary Luros
Napa City Council

City Hall
955 School Street
Napa, CA 94559

Mr. Bernie Narvaez
Napa City Councilmember, District 4
City Hall
955 School Street
Napa, CA 94559

Appendix A Project Area Photos

Appendix A Project Area Photos

(Note: Figures have an outdated background due to the availability of data on the software used to create the figures. There has been additional commercial development around the project area that has not been captured on current readily available aerial photography, this Appendix A contains photos up-to-date photos of the current existing urban and environmental setting.)

Photo 1. Taken from 320 Soscol Avenue from the northeast corner of the bridge; shows the newly developed Cambria Hotel Napa Valley

Photo 2. Taken from 320 Soscol Avenue from the sidewalk looking north, with the newly developed Cambria hotel on the right

Appendix B Project Features, Avoidance and Minimization Measures, and Mitigation Measures

Appendix B Project Features, Avoidance and Minimization Measures, and Mitigation Measures

Table B-1 Project Features

Resource Area	Project Feature Reference	Project Feature Title and Description
Aesthetics	**PF-AES-1**	**Vegetation Protection.** Existing trees and vegetation would be preserved to the extent feasible. Trees and vegetation outside of the clearing and grubbing limits would be protected from the contractor's operations, equipment, and materials storage. Tree trimming and pruning, where required, would be under the direction of a certified arborist.
Aesthetics	**PF-AES-2**	**Erosion Control.** After construction, all areas cleared within the Project limits for uses such as contractor access, staging, and trenching operations would be treated with appropriate erosion control measures where required.
Aesthetics	**PF-AES-3**	**Construction Staging.** Except as detailed in the Contract Plans, staging areas would not affect existing landscaped areas resulting in death and/or removal of trees and shrubs, or disruption and destruction of existing irrigation facilities.
Aesthetics	**PF-AES-4**	**Construction Waste.** During construction operations, unsightly material and equipment in staging areas would be placed where they are less visible and/or covered where possible.
Aesthetics	**PF-AES-5**	**Construction Lighting.** Construction lighting would be directed toward the immediate vicinity of active work and would avoid light trespass through directional lighting, shielding, and other measures as needed.
Air Quality	**PF-AQ-1**	**Dust Control.** Dust control measures would be included in the Storm Water Pollution Prevention Plan and implemented to minimize construction impacts to existing communities. The plan would incorporate measures such as sprinkling, speed limits, covering transported material loads, and timely revegetation of disturbed areas as needed, as well as posting a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints and at the Bay Area Air Quality Management District regarding compliance with applicable regulations. Water trucks or dust palliatives would be applied to the site, including unvegetated areas, and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emissions or at the ROW line, depending on air pollution control district and air quality management district regulations and local ordinances.

Resource Area	Project Feature Reference	Project Feature Title and Description
Air Quality	**PF-AQ-2**	**Idling and Access Points**. Idling times would be minimized either by shutting off equipment when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure [Title 13, Section 2485 of California Code of Regulations]). Clear signage would be provided for construction workers at all access points. Construction activities involving the extended idling of diesel equipment or vehicles would be prohibited, to the extent feasible.
Air Quality	**PF-AQ-3**	**Maintaining Construction Equipment and Vehicles.** All construction equipment and vehicles would be maintained and properly tuned in accordance with manufacturer's specifications. All equipment would be checked by a certified mechanic and determined to be running in proper condition prior to operation.
Biology	**PF-BIO-1**	**Documentation at Project Site.** A Permit Compliance Binder would be maintained at the construction site at all times and presented to resource agency (USACE, NOAA Fisheries, USFWS, CDFW, and/or RWQCB) personnel upon request. The Permit Compliance Binder would include a copy of all original permits and agreements, and any extensions and amendments to the permits and agreements.
Biology	**PF-BIO-2**	**Work According to Documents.** Except as they are contradicted by measures within the permits and agreements, all work would be conducted in conformance with the Project description in the permits and agreements, and the AMMs provided in the permits and agreements.
Biology	**PF-BIO-3**	**In-channel Work Period.** With the exception of non-ground disturbing vegetation removal (to avoid impacts to nesting birds), in-channel work and any dewatering necessary would be scheduled between June 1 and October 31. The in-channel work window may be extended via email request and written resource agency approval. Extension requests must be submitted a minimum of two weeks prior to the October 31 work cessation period for in-channel work.
Biology	**PF-BIO-4**	**Water Diversion Plan.** Caltrans would submit a water diversion plan to the appropriate agencies for review prior to construction. The approved temporary water diversion system would be used during construction so there is no flowing water in the river bed during in-stream construction activity.

Resource Area	Project Feature Reference	Project Feature Title and Description
Biology	**PF-BIO-5**	**Work Period in Dry Weather Only.** Work in the bed, bank, channel, and any associated riparian habitat would only be conducted during periods of dry weather. Forecasted precipitation would be monitored. When 0.25 inch or more of precipitation is forecasted to occur, work would stop before precipitation commences. No Project activities would be started if its associated erosion control measures cannot be completed prior to the onset of precipitation. After any storm event, all sites currently under construction and all sites scheduled to begin construction within the next 72 hours would be inspected for erosion and sediment problems and corrective action would be taken as needed; 72 hour weather forecasts from National Weather Service would be consulted and work would not start back up until runoff ceases and there is less than a 50 percent forecast for precipitation for the following 24-hour period.
Biology	**PF-BIO-6**	**Environmental Training.** Prior to the start of construction, a biologist would provide a training session for all work personnel to identify any sensitive species that may be in the area, their basic habits, how they may be encountered in their work area, and procedures to follow when they are encountered. Any personnel joining the work crew later would receive the same training before beginning work. Upon completion of the education program, employees would sign a form stating they attended the program and understand all protection measures. A pamphlet that contains images of sensitive species that may occur within the Project, environmentally sensitive areas (ESAs) within the Project site, and notes key avoidance measures, as well as employee guidance would be given to each person who completes the training program. These forms would be made available to the resource agencies upon request.
Biology	**PF-BIO-7**	**Mark Environmentally Sensitive Areas.** Before construction begins, ESAs would be clearly delineated using high visibility orange fencing, flagging, or similar marking to delineate sensitive habitats. The ESA marking would remain in place throughout construction. It may be removed during the wet season (and subsequently re-installed), if needed to prevent materials from being washed away. The final Project plans would depict all locations where ESA markings would be installed and how it would be installed. The bid solicitation package special provisions would clearly describe acceptable marking material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs. ESA markings would be maintained in good repair throughout the Project as needed.

Resource Area	Project Feature Reference	Project Feature Title and Description
Biology	**PF-BIO-8**	**Nesting Bird Surveys.** If Project activities occur between February 1 and September 30, then a pre-construction survey(s) would be conducted for nesting birds no more than 3 days before construction. If active nests are found, then an appropriate buffer would be established and the nest would be monitored for compliance with the Migratory Bird Treaty Act (MBTA) and Fish and Game Code (FGC) § 3503.
Biology	**PF-BIO-9**	**Active Nest Buffers.** If an active bird nest is found during construction activities, then the following ESA buffers would be established: If an active raptor nest is observed, a 300-foot ESA buffer would be implemented to avoid impacting the young until they have fledged; if an active nest of non-raptor migratory birds is observed, a 50-foot ESA buffer would be implemented to protect the young until they have fledged, or as otherwise determined by consultation with USFWS and CDFW regarding appropriate action to comply with the MBTA and FGC § 3503.
Biology	**PF-BIO-10**	**Stormwater Best Management Practices.** Water pollution control and erosion control BMPs would be developed and implemented to minimize wind- or water-related erosion. They would follow the requirements of the RWQCB and standards outlined in Construction site BMPs manual.
Biology	**PF-BIO-11**	**Construction Site Management Practices.** The following site restrictions would be implemented to avoid or minimize potential impacts on sensitive biological resources: a. Enforce a speed limit of 15 miles per hour for Project vehicles in unpaved portions of the site to reduce dust and excessive soil disturbance. b. Locate construction access, staging, storage, and parking areas within the Caltrans ROW and outside of any designated ESA to the extent practicable. Access routes, staging and storage areas, and contractor parking would be limited to the minimum necessary to construct the proposed Project. Routes and boundaries of roadwork would be clearly marked before initiating construction. c. Certify, to the maximum extent practicable, borrow material is nontoxic and weed free. d. Enclose food and food-related trash items in sealed trash containers and remove them from the site at the end of each day. e. Prohibit pets from entering the Project area during construction. f. Prohibit firearms within the Project site, except for those carried by authorized security personnel or local, state, or federal law enforcement officials.

Resource Area	Project Feature Reference	Project Feature Title and Description
Biology	**PF-BIO-12**	**Invasive Weed Control.** To reduce the spread of invasive, nonnative plant species and minimize the potential decrease of palatable vegetation for wildlife species, Caltrans would comply with Executive Order 13112. This order is to prevent the introduction of invasive species and provide for their control to minimize the economic, ecological, and human health effects. If noxious weeds are disturbed or removed during construction-related activities, the contractor would be required to contain the plant material associated with these noxious weeds and dispose of them in a manner that would not promote the spread of the species. The contractor would be responsible for obtaining all permits, licenses, and environmental clearances for properly disposing of materials. Areas subject to noxious weed removal or disturbance would be replanted with fast growing native grasses or a native erosion control seed mixture. Where seeding is not practical, the target areas within the Project area will be covered to the extent practicable with heavy black plastic solarization material until the end of the Project. If work occurs in sensitive habitat, vehicles and equipment would be thoroughly cleaned before arriving on the site to prevent the spread of noxious weeds from other locations.
Biology	**PF-BIO-13**	**Vegetation and Tree Removal.** Vegetation would be cleared only where necessary and cut above soil level, except in areas that would be permanently affected or excavated. This would allow plants that reproduce vegetatively to resprout after construction.
Biology	**PF-BIO-14**	**Restore Disturbed Areas.** Temporarily disturbed areas would be restored to the maximum extent practicable. Exposed slopes and bare ground would be reseeded with native grasses to stabilize and prevent erosion. Where disturbance includes the removal of trees and woody shrubs, native species will be replanted, based on the local species composition.
Biology	**PF-BIO-15**	**Bat Protection.** A habitat assessment would be conducted for potentially suitable bat roosting habitat prior to construction activities. If the habitat assessment reveals any structures are suitable roosting habitat for bats, then the appropriate exclusionary measures would be implemented prior to construction, during the period between March 1 to April 15 or August 31 to October 15. Potential avoidance may include exclusionary blocking or filling potential cavities with foam, visual monitoring and/or staging Project work to avoid bats. If bats are known to use the structures, then exclusion netting would not be used. If the habitat assessment reveals suitable bat habitat in trees and tree removal is scheduled from April 16 through August 30 and/or October 16 through February 28, then presence/absence surveys would be conducted 2 to 3 days prior to any tree removal or trimming. If presence/absence

Resource Area	Project Feature Reference	Project Feature Title and Description
		surveys are negative, then tree removal would proceed following a two-phased tree removal system. If presence/absence surveys indicate bat occupancy, then the occupied trees would only be removed from March 1 through April 15 and/or August 31 through October 15 by following the two-phased tree removal system. The two-phased system would be conducted over 2 consecutive days. On the first day, (in the afternoon) limbs and branches would be removed by a tree cutter using chainsaws or other hand tools. Limbs with cavities, crevices, or deep bark fissures would be avoided and only branches or limbs without those features would be removed. On the second day, the entire tree would be removed. Bats would not be disturbed without specific notice to and consultation with CDFW.
Biology	**PF-BIO-16**	**Prevent Inadvertent Entrapment.** To prevent inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches more than 1 foot deep would be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earthen fill or wooden planks at an angle no greater than 30 degrees. Before such holes or trenches are filled, they would be thoroughly inspected for trapped animals. Pipes, culverts, or similar structures stored in the Project area overnight would be inspected before they are subsequently moved, capped, or buried.
Biology	**PF-BIO-17**	**Night Lighting.** Nighttime work would be avoided to the maximum extent practicable. For unavoidable nighttime work, all lighting would be shielded and directed downward, toward the active construction area to avoid exposing nocturnal wildlife to excessive glare**.**
Cultural	**PF-CULT-1**	**Discovery of Human Remains.** Stop potentially damaging work if human remains are uncovered during construction, assess the significance of the find, and pursue appropriate management. California law recognizes the need to protect interred human remains, particularly Native American burials and associated items of patrimony, from vandalism and inadvertent destruction. The procedures for the treatment of discovered human remains are contained in California Health and Safety Code Sections 7050.5 and 7052, and California Public Resources Code Section 5097. If remains are discovered during excavation, all work within 60 feet of the discovery will halt and Caltrans' Office of Cultural Resource Studies (OCRS) will be called. Caltrans OCRS stall will assess the remains and, if determined human, will contact the County Coroner as per Public Resources Code (PRC) Sections 5097.98, 5097.99, and 7050.5 of the California Health and Safety Code. If the Coroner determines the remains to be Native American, the

Resource Area	Project Feature Reference	Project Feature Title and Description
		Coroner will contact the Native American Heritage Commission who will assign a Most Likely Descendant. Caltrans will consult with the Most Likely Descendant on treatment and reburial of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.
Greenhouse Gas Emissions	**PF-GHG-1**	**Waste Reduction.** If practicable, nonhazardous waste and excess material would be recycled. If recycling is not practicable, the material would be disposed of appropriately.
Greenhouse Gas Emissions	**PF-GHG-2**	**Energy Reduction.** Solar energy would be used to reduce the use of non-renewable energy during construction.
Hazards and Hazardous Materials	**PF-HAZ-1**	**Caltrans Standard Specifications and Hazardous Waste Regulations.** Caltrans Standard Specifications latest section 13-4, "Job Site Management," would be implemented to prevent and control spills or leaks from construction equipment and from storage of fuels, paints, cleaners, solvents, and lubricants. All aspects of the Project associated with transport, storage, use, and disposal of hazardous materials would be done in accordance with the California Health and Safety Code and the appropriate local, state, and federal hazardous waste regulations. Handling and management of hazardous materials would comply with Caltrans latest Standard Specification section 14-11, “Hazardous Waste and Contamination,” which outlines handling, storing, and disposing of hazardous waste.
Hazards and Hazardous Materials	**PF-HAZ-2**	**Soil and Groundwater Investigation.** A soil and groundwater investigation for metals, primarily lead, and other contaminants of concern (e.g., petroleum hydrocarbons and volatile organic compounds) would be completed during the Project’s design phase to characterize and profile the soil and groundwater to be encountered by the construction of the proposed build alternatives. Depending upon the findings of the site investigation, appropriate hazardous waste management special provisions would be prepared and included in the Project specifications**.**
Transportation and Traffic	**PF-TRA-1**	**Traffic Management Plan.** A Traffic Management Plan (TMP) would be developed by Caltrans during the design (PS&E) phase. The TMP would include elements such as haul routes and phasing to reduce impacts to local residents, as feasible, and maintain access for police, fire, and medical services in the local area. The TMP would also include public information, motorist information, incident management, construction detours to local residents and tourist, as feasible, as well as implementation of Construction Zone Enhanced Enforcement Program (COZEEP) features. Prior to construction, Caltrans would notify adjacent property owners, businesses, the Napa County Transportation Authority (NVTA), Napa County, the Chamber of Commerce and Visitors Bureau, and the Napa County Regional Park and

Resource Area	Project Feature Reference	Project Feature Title and Description
		Open Space District regarding construction activities and access changes. In addition, Caltrans would coordinate with the local fire department and emergency response services prior to construction to minimize potential disruption to emergency services.
Utilities and Service Systems	**PF-UTIL-1**	**Trash Management.** All food-related trash items, such as wrappers, cans, bottles, and food scraps, would be disposed of in closed containers and removed by the contractor at least once daily from the Project limits. A trash reduction system would also be developed by the contractor, approved by Caltrans, and implemented per Caltrans Statewide National Pollution Discharge Elimination System Permit and San Francisco RWQCB Cease and Desist Order.
Utilities and Service Systems	**PF-UTIL-2**	**Notify Utility Owners of Construction Schedule to Protect Utilities.** Caltrans would notify all affected utility companies, such as PG&E and AT&T, of construction schedules for proposed Project work so that they can relocate the gas, telephone, cable, and overhead distribution lines prior to construction and minimize disruption of utility service.

Table B-2 Avoidance and Minimization Measures

Resource Area	AMM Reference	AMM Title and Description
Aesthetics	**AMM-AES-1**	**Minimize Construction Appearance:** During construction, Caltrans would minimize the appearance of construction equipment and staging areas on SR 121, and would locate construction equipment beyond direct view of the motoring public and residential properties to the extent feasible
Aesthetics	**AMM-AES-2**	**Bridge Rail Design:** During the design phase, Caltrans would design the bridge to incorporate see-through bridge rails that allow views of the creek and adjacent vegetation as directed by Caltrans Landscape Architecture staff.
Aesthetics	**AMM-AES-3**	**Glare Effects:** During the design phase, Caltrans would design the concrete portions of the bridge including the concrete anchor blocks, wing walls, and abutments. The design would be treated with a combination of roughening surface texture and coloring concrete to reduce glare, as directed by the Caltrans Office of Landscape Architecture.
Aesthetics	**AMM-AES-4**	**Post-Construction Site Grading and Contours:** Prior to completion of construction activities, Caltrans would use contour grading and slope rounding to produce smooth, flowing contours consistent with site topography, to increase context sensitivity and reduce engineered appearance of slopes.
Aesthetics	**AMM-AES-5**	**Aggregate Material Color and Scale:** Prior to completion of construction activities, if creek work requires the import of aggregate or creek bed materials, Caltrans would select materials that are similar in color to the native creek materials.
Biology	**AMM-BIO-1**	**Rare Plant Surveys.** Prior to construction, botanical surveys will be conducted in areas of suitable habitat for rare plant species during the appropriate blooming season(s).
Biology	**AMM-BIO-2**	**Avoid Rare Plants.** The Project footprint may be adjusted, if practicable, to completely or partially avoid affecting special-status plant species.

Resource Area	AMM Reference	AMM Title and Description
Biology	**AMM-BIO-3**	**Minimize Disturbance to Rare Plants.** If complete or partial avoidance is not practicable, other minimization measures may be implemented to reduce the severity of the impact to the special-status plant species. These actions may include one or a combination of the following: (1) collection of special-status plants seeds, bulbs, other propagules, or topsoil prior to construction for use in future onsite restoration or enhancement actions; (2) restoration of enhancement of suitable special-status plant habitat onsite; or (3) restoration or enhancement of suitable special-status plant habitat offsite.
Biology	**AMM-BIO-4**	**California Red-Legged Frog and Western Pond Turtle Entanglement and Trapping**. To prevent wildlife from becoming entangled or trapped in erosion control materials, plastic monofilament netting (that is, erosion control matting) or similar material will not be used. Acceptable substitutes will include coconut coir matting or tackifying hydroseeding compounds
Biology	**AMM-BIO-5**	**Protocol for Species Observation.** If California red-legged frog or western pond turtle are encountered in the Project footprint, work within 50 feet of the animal will cease immediately and the Resident Engineer and approved biological monitor will be notified. Based on the professional judgment of the biological monitor, if Project activities can be conducted without harming or injuring the animal, it may be left at the location of discovery and monitored by the biological monitor. Project personnel will be notified of the finding, and at no time will work occur within 50 feet of the animal without a biological monitor present.
Biology	**AMM-BIO-6**	**Pre-construction Surveys.** An approved biologist will conduct pre-construction surveys for California red-legged frog / western pond turtle as needed. A visual encounter survey will be conducted immediately before ground-disturbing activities. Suitable habitat within the Project footprint will be visually inspected. If California red-legged frog / western pond turtle is found within the Project footprint and at risk of harm, then it will be relocated outside of the Project footprint by the approved biologist.
Biology	**AMM-BIO-7**	**Biological Monitoring**. A biological monitor will be present during construction activities where take of a listed species could occur. Through communication with the Resident Engineer or designee, the biological monitor may stop work if deemed necessary for any reason to protect listed species; the biological monitor will advise the Resident Engineer or designee on how to proceed accordingly.

Resource Area	AMM Reference	AMM Title and Description
Biology	**AMM-BIO-8**	**Handling of Listed Species**. If, at any time, a listed species is discovered, the Resident Engineer and the agency-approved biologist will be immediately informed. The agency-approved biologist will determine whether relocating the species is necessary and will work with the corresponding agency (USFWS or CDFW) prior to handling or relocating, unless otherwise authorized.
Biology	**AMM-BIO-9**	**Wildlife Exclusion Fencing.** Before starting construction, at the discretion of the Caltrans biologist, wildlife exclusion fencing will be installed along the Project footprint perimeter in the areas where wildlife could enter the Project footprint. Wildlife exclusion fencing will be removed following completion of construction activities. At the discretion of the Caltrans biologist, wildlife exclusion fencing may be removed at times when construction is no longer active in the area.
Noise	**AMM-NOI-1**	**Specifications for Controlling Noise and Vibration.** Any operation exceeding 86 dBA shall not be allowed at nighttime from 9:00 p.m. to 6 a.m.
Noise	**AMM-NOI-2**	**Noise Levels During Construction.** The following measures would be implemented during construction to reduce noise: • Schedule noisy operations within the same time frame. The total noise level will not be significantly greater than the level produced if operations are performed separately. • Construct temporary noise barriers between noisy activities and noise sensitive receptors or around activities with high noise levels or groups of noisy equipment. • Avoid unnecessary idling of internal combustion engines within 100 feet of sensitive receptors. • Locate all stationary noise-generating construction equipment as far as practical from noise-sensitive receptors or provide baffled housing or sound aprons to equipment when sensitive receptors adjoin or are near a construction project area. • Equip all internal combustion engine driven equipment with manufacturer recommended intake and exhaust mufflers that are in good condition and appropriate for the equipment. • Utilize “quiet” air compressors and other “quiet” equipment where such technology exists. • No construction equipment will be delivered and dropped off before 6:00 a.m. • Maintain all internal combustion engine properly to minimize noise generation.

Resource Area	AMM Reference	AMM Title and Description
Noise	**AMM-NOI-3**	**Implement Construction Vibration Monitoring Plan.** To mitigate vibration impacts during construction, a construction vibration monitoring plan will be implemented. Implementation of the monitoring plan will start prior to construction activities and will continue through post-construction. The construction vibration monitoring plan will require a survey of nearby structures before, during, and after construction; vibration monitoring during construction; contingency plans if vibration levels approach sensitivity standards; and procedures for investigating claims of excessive vibration. With the permission of property owners, surveys of nearby structures will document the condition of foundations, walls and other structural elements in the interior and exterior of the nearby residences. The contractor will identify and implement construction vibration measures if vibration levels approach sensitivity standards. Measures may include using smaller equipment to minimize vibration levels, suspending construction, and/or bracing the affected structures. A post-construction survey of structures will be completed where monitoring indicated high levels of vibration and where complaints of vibratory damage are reported. Caltrans will work with the property owners to repair damage from vibration.
Transportation	**AMM-TRA-1**	**Traffic Management Plan.** A Traffic Management Plan (TMP) will be developed by Caltrans during the design (PS&E) phase. The TMP will include public information, motorist information, incident management, construction, and alternate routes. In addition, one-way traffic control, lane closures, flaggers and phasing, portable changeable message signs, flaggers and the California Highway Patrol's Construction Zone Enhanced Enforcement Program will be incorporated into the TMP to minimize delays to local residents and highway users, as feasible. The TMP will also provide access for police and emergency service providers. Lane closures will be planned in coordination with Caltrans and Solano County and will include notices to emergency services providers, and the public in advance.
Wildfire	**AMM-WF-1**	**Implement Fire Prevention Practices During Construction.** Caltrans would implement the following fire prevention practices into the Project construction specifications: • Internal combustion engines (stationary and mobile) would be equipped with spark arrestors. Spark arrestors would be in good working order. • The contractor would keep all construction sites and staging areas free of grass, brush, and other flammable materials.

Resource Area	AMM Reference	AMM Title and Description
		• Personnel would be trained in the practices of the fire safety plan relevant to their duties. • Construction and maintenance personnel would be trained and equipped to extinguish small fires. • Work crews would have fire-extinguishing equipment on hand, as well as emergency numbers and cell phone or other means of contacting the fire department. • Smoking would be prohibited while operating equipment and would be limited to paved or gaveled areas or areas cleared of all vegetation. Smoking would be prohibited within 30 feet of any combustible material storage area (including fuels, gases, and solvents). Smoking would be prohibited in any location during a Red Flag Warning issues by the National Weather Service for the Project area.

Table B-3 Mitigation Measures

Resource Area	Mitigation Measure Reference	Mitigation Measure Title and Description
Cultural	**MM-CULT-1**	• **Worker Environmental Awareness Training.** All construction personnel will attend a mandatory environmental education program delivered by an agency-approved archaeologist prior to working on the Project.
Cultural	**MM-CULT-2**	• **Phase III Data Recovery Plan.** If archaeological resources cannot be avoided, a Phase III Data Recovery Plan will be implemented by a qualified archaeologist for the significant archaeological site that is directly affected. Data Recovery will only occur in the portions of the site being directly affected by the Project.
Cultural	**MM-CULT-3**	• **Archaeological Monitoring Plan.** An Archaeological Monitoring Plan will be implemented during construction. This would include establishing an Archaeological Monitoring Area (AMA) and having an archaeologist and Tribal representative monitor job site activities within the archaeological monitoring area to reduce the Project's impacts to the resource within the Project limits. No work can be conducted within the AMA unless the archaeological monitor is present. Reference Caltrans Standard Specification 14-2.03.

Appendix C Title VI Policy Statement

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September 2021

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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; PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

Appendix D List of Abbreviations

Acronym	Description
AB	Assembly Bill
ABAG	Association of Bay Area Governments
AMA	Archaeological Monitoring Area
AMM	avoidance and minimization measure
APE	area of potential effects
AT&T	American Telephone and Telegraph
BMP	best management practice
BSA	biological study area
CA	California
CAFE	Corporate Average Fuel Economy
CAL-CET 2020	Caltrans Construction Emissions Tool 2020
CAL FIRE	California Department of Forestry and Fire
Caltrans	California Department of Transportation
CAPM	Capital Preventive Maintenance
CAPTI	California Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CCC	Central California Coast
CDFW	California Department of Fish and Wildlife
CDTFA	California Department of Tax and Fee Administration
CEQA	California Environmental Quality Act
CFR	*Code of Federal Regulations*
CGP	Construction General Permit
CH_4	methane
CIDH	cast-in-drilled hole
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society

CO_2	carbon dioxide
COZEEP	Construction Zone Enhanced Enforcement Program
CTP	California Transportation Plan
dBA	A-weighted decibel(s)
DP	Director's Policy
EA	Expenditure Authorization
EIR	environmental impact report
EO	Executive Order
ESA	environmentally sensitive area
FHWA	Federal Highway Administration
GHG	greenhouse gas
HFC	hydrofluorocarbon
ID	identification
IS	Initial Study
MM	mitigation measure
MMT	million metric tons
MMTCO2e	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
mph	mile(s) per hour
MTC	Metropolitan Transportation Commission
NCRCD	Napa County Resource Conservation District
NEPA	National Environmental Policy Act
N_2O	nitrous oxide
NOAA Fisheries	National Oceanographic and Atmospheric Administration National Marine Fisheries Service
NVTA	Napa Valley Transportation Authority
OCRS	Office of Cultural Resource Studies
OPR	Office of Planning and Research

PA	*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*
PF	project feature
PG&E	Pacific Gas and Electric Company
PM	post mile
Project	State Route 121 Tulucay Creek Bridge Replacement Project
PS&E	Plans, Specifications, and Estimate
ROW	right of way
RTP	Regional Transportation Plan
RWQCB	San Francisco Bay Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SHOPP	State Highway Operation and Protection Program
SHPO	State Historic Preservation Officer
SON	Sonoma
SR	State Route
SWRCB	State Water Resources Control Board
TCE	temporary construction easement
TMP	Traffic Management Plan
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

USGS	United States Geological Survey
VMT	vehicle miles traveled

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Appendix F Species Lists

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Napa (3812233) OR Mt. George (3812232) OR Cordelia (3812222) OR Capell Valley (3812242) OR Sonoma (3812234) OR Yountville (3812243) OR Rutherford (3812244) OR Cuttings Wharf (3812223) OR Sears Point (3812224))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Adela oplerella Opler's longhorn moth	IILEE0G040	None	None	G2	S2	
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Agrostis hendersonii Henderson's bent grass	PMPOA040K0	None	None	G2Q	S2	3.2
Allium peninsulare var. franciscanum Franciscan onion	PMLIL021R1	None	None	G5T2	S2	1B.2
Amorpha californica var. napensis Napa false indigo	PDFAB08012	None	None	G4T2	S2	1B.2
Amsinckia lunaris bent-flowered fiddleneck	PDBOR01070	None	None	G3	S3	1B.2
Andrena blennospermatis Blennosperma vernal pool andrenid bee	IIHYM35030	None	None	G2	S2	
Antrozous pallidus pallid bat	AMACC10010	None	None	G4	S3	SSC
Aquila chrysaetos golden eagle	ABNKC22010	None	None	G5	S3	FP
Arctostaphylos stanfordiana ssp. decumbens Rincon Ridge manzanita	PDERI041G4	None	None	G3T1	S1	1B.1
Ardea alba great egret	ABNGA04040	None	None	G5	S4	
Ardea herodias great blue heron	ABNGA04010	None	None	G5	S4	
Astragalus claranus Clara Hunt's milk-vetch	PDFAB0F240	Endangered	Threatened	G1	S1	1B.1
Astragalus tener var. tener alkali milk-vetch	PDFAB0F8R1	None	None	G2T1	S1	1B.2
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Balsamorhiza macrolepis big-scale balsamroot	PDAST11061	None	None	G2	S2	1B.2
Blennosperma bakeri Sonoma sunshine	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
Bombus caliginosus obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus occidentalis western bumble bee	IIHYM24250	None	None	G2G3	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Branchinecta lynchi vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Brodiaea leptandra narrow-anthered brodiaea	PMLIL0C022	None	None	G3?	S3?	1B.2
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Calasellus californicus An isopod	ICMAL34010	None	None	G2	S2	
Carex lyngbyei Lyngbye's sedge	PMCYP037Y0	None	None	G5	S3	2B.2
Castilleja affinis var. neglecta Tiburon paintbrush	PDSCR0D013	Endangered	Threatened	G4G5T1T2	S1S2	1B.2
Castilleja ambigua var. meadii Mead's owls-clover	PDSCR0D404	None	None	G4T1	S1	1B.1
Ceanothus confusus Rincon Ridge ceanothus	PDRHA04220	None	None	G1	S1	1B.1
Ceanothus divergens Calistoga ceanothus	PDRHA04240	None	None	G2	S2	1B.2
Ceanothus purpureus holly-leaved ceanothus	PDRHA04160	None	None	G2	S2	1B.2
Ceanothus sonomensis Sonoma ceanothus	PDRHA04420	None	None	G2	S2	1B.2
Centromadia parryi ssp. parryi pappose tarplant	PDAST4R0P2	None	None	G3T2	S2	1B.2
Charadrius nivosus nivosus western snowy plover	ABNNB03031	Threatened	None	G3T3	S2	SSC
Chloropyron molle ssp. molle soft salty bird's-beak	PDSCR0J0D2	Endangered	Rare	G2T1	S1	1B.2
Circus hudsonius northern harrier	ABNKC11011	None	None	G5	S3	SSC
Coastal Brackish Marsh Coastal Brackish Marsh	CTT52200CA	None	None	G2	S2.1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cypseloides niger black swift	ABNUA01010	None	None	G4	S2	SSC
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	Candidate	None	G4T2T3	S2S3	
Desmocerus californicus dimorphus valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Dicamptodon ensatus California giant salamander	AAAAH01020	None	None	G3	S2S3	SSC
Downingia pusilla dwarf downingia	PDCAM060C0	None	None	GU	S2	2B.2
Elanus leucurus white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Erethizon dorsatum North American porcupine	AMAFJ01010	None	None	G5	S3	
Erigeron greenei Greene's narrow-leaved daisy	PDAST3M5G0	None	None	G3	S3	1B.2
Eryngium jepsonii Jepson's coyote-thistle	PDAPI0Z130	None	None	G2	S2	1B.2
Extriplex joaquinana San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
Falco peregrinus anatum American peregrine falcon	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
Geothlypis trichas sinuosa saltmarsh common yellowthroat	ABPBX1201A	None	None	G5T3	S3	SSC
Gonidea angulata western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Haliaeetus leucocephalus bald eagle	ABNKC10010	Delisted	Endangered	G5	S3	FP
Hemizonia congesta ssp. congesta congested-headed hayfield tarplant	PDAST4R065	None	None	G5T2	S2	1B.2
Hesperolinon breweri Brewer's western flax	PDLIN01030	None	None	G2	S2	1B.2
Hesperolinon sharsmithiae Sharsmith's western flax	PDLIN010E0	None	None	G2Q	S2	1B.2
Horkelia tenuiloba thin-lobed horkelia	PDROS0W0E0	None	None	G2	S2	1B.2
Hydroprogne caspia Caspian tern	ABNNM08020	None	None	G5	S4	
Hypomesus transpacificus Delta smelt	AFCHB01040	Threatened	Endangered	G1	S1	
Isocoma arguta Carquinez goldenbush	PDAST57050	None	None	G1	S1	1B.1
Lasiurus blossevillii western red bat	AMACC05060	None	None	G4	S3	SSC
Lasthenia conjugens Contra Costa goldfields	PDAST5L040	Endangered	None	G1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Laterallus jamaicensis coturniculus California black rail	ABNME03041	None	Threatened	G3G4T1	S1	FP
Lathyrus jepsonii var. jepsonii Delta tule pea	PDFAB250D2	None	None	G5T2	S2	1B.2
Legenere limosa legenere	PDCAM0C010	None	None	G2	S2	1B.1
Leptosiphon jepsonii Jepson's leptosiphon	PDPLM09140	None	None	G2G3	S2S3	1B.2
Lilaeopsis masonii Mason's lilaeopsis	PDAPI19030	None	Rare	G2	S2	1B.1
Limnanthes vinculans Sebastopol meadowfoam	PDLIM02090	Endangered	Endangered	G1	S1	1B.1
Lupinus sericatus Cobb Mountain lupine	PDFAB2B3J0	None	None	G2?	S2?	1B.2
Melospiza melodia maxillaris Suisun song sparrow	ABPBXA301K	None	None	G5T3	S3	SSC
Melospiza melodia samuelis San Pablo song sparrow	ABPBXA301W	None	None	G5T2	S2	SSC
Navarretia leucocephala ssp. pauciflora few-flowered navarretia	PDPLM0C0E4	Endangered	Threatened	G4T1	S1	1B.1
Northern Coastal Salt Marsh Northern Coastal Salt Marsh	CTT52110CA	None	None	G3	S3.2	
Northern Vernal Pool Northern Vernal Pool	CTT44100CA	None	None	G2	S2.1	
Nycticorax nycticorax black-crowned night heron	ABNGA11010	None	None	G5	S4	
Oncorhynchus mykiss irideus pop. 8 steelhead - central California coast DPS	AFCHA0209G	Threatened	None	G5T2T3Q	S2S3	
Penstemon newberryi var. sonomensis Sonoma beardtongue	PDSCR1L483	None	None	G4T3	S3	1B.3
Phalacrocorax auritus double-crested cormorant	ABNFD01020	None	None	G5	S4	WL
Pogonichthys macrolepidotus Sacramento splittail	AFCJB34020	None	None	GNR	S3	SSC
Polygonum marinense Marin knotweed	PDPGN0L1C0	None	None	G2Q	S2	3.1
Rallus obsoletus obsoletus California Ridgway's rail	ABNME05011	Endangered	Endangered	G3T1	S1	FP
Rana boylii foothill yellow-legged frog	AAABH01050	None	Endangered	G3	S3	SSC
Rana draytonii California red-legged frog	AAABH01022	Threatened	None	G2G3	S2S3	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Reithrodontomys raviventris salt-marsh harvest mouse	AMAFF02040	Endangered	Endangered	G1G2	S1S2	FP
Rhynchospora californica California beaked-rush	PMCYP0N060	None	None	G1	S1	1B.1
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Sagittaria sanfordii Sanford's arrowhead	PMALI040Q0	None	None	G3	S3	1B.2
Serpentine Bunchgrass Serpentine Bunchgrass	CTT42130CA	None	None	G2	S2.2	
Sidalcea hickmanii ssp. napensis Napa checkerbloom	PDMAL110A6	None	None	G3T1	S1	1B.1
Sidalcea keckii Keck's checkerbloom	PDMAL110D0	Endangered	None	G2	S2	1B.1
Sorex ornatus sinuosus Suisun shrew	AMABA01103	None	None	G5T1T2Q	S1S2	SSC
Speyeria callippe callippe callippe silverspot butterfly	IILEPJ6091	Endangered	None	G5T1	S1	
Speyeria zerene sonomensis Sonoma zerene fritillary	IILEPJ6083	None	None	G5T1	S1	
Spirinchus thaleichthys longfin smelt	AFCHB03010	Candidate	Threatened	G5	S1	
Streptanthus hesperidis green jewelflower	PDBRA2G510	None	None	G2G3	S2S3	1B.2
Stygobromus cowani Cowan's amphipod	ICMAL05D70	None	None	G1	S1	
Symphyotrichum lentum Suisun Marsh aster	PDASTE8470	None	None	G2	S2	1B.2
Syncaris pacifica California freshwater shrimp	ICMAL27010	Endangered	Endangered	G2	S2	
Taricha rivularis red-bellied newt	AAAAF02020	None	None	G2	S2	SSC
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Trachusa gummifera San Francisco Bay Area leaf-cutter bee	IIHYM80010	None	None	G1	S1	
Trichostema ruygtii Napa bluecurls	PDLAM220H0	None	None	G1G2	S1S2	1B.2
Trifolium amoenum two-fork clover	PDFAB40040	Endangered	None	G1	S1	1B.1
Trifolium hydrophilum saline clover	PDFAB400R5	None	None	G2	S2	1B.2

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Viburnum ellipticum	PDCPR07080	None	None	G4G5	S3?	2B.3
oval-leaved viburnum						

Record Count: 104

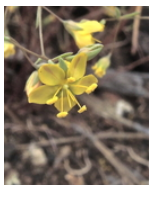
California Native Plant Society

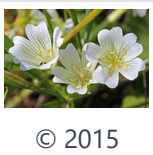
Search Results

49 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [**1A:1B:2A:2B**] Fed List is one of [**FE:FT:FC:None**] **or** State List is one of [**CE:CT:CR:CE:CT:None**] , 9-Quad include [**3812232:3812222:3812242:3812234:3812243:3812244:3812233:3812223:3812224**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	PHOTO
Allium peninsulare var. *franciscanum*	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G5T2	S2	1B.2	No Photo Available
Amorpha californica var. *napensis*	Napa false indigo	Fabaceae	perennial deciduous shrub	Apr-Jul	None	None	G4T2	S2	1B.2	No Photo Available
Amsinckia lunaris	bent-flowered fiddleneck	Boraginaceae	annual herb	Mar-Jun	None	None	G3	S3	1B.2	No Photo Available
Arctostaphylos stanfordiana ssp. *decumbens*	Rincon Ridge manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr(May)	None	None	G3T1	S1	1B.1	No Photo Available
Astragalus claranus	Clara Hunt's milk-vetch	Fabaceae	annual herb	Mar-May	FE	CT	G1	S1	1B.1	No Photo Available
Astragalus tener var. *tener*	alkali milk-vetch	Fabaceae	annual herb	Mar-Jun	None	None	G2T1	S1	1B.2	No Photo Available
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	 ©1998 Dean Wm. Taylor
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	No Photo Available
Brodiaea leptandra	narrow-anthered brodiaea	Themidaceae	perennial bulbiferous herb	May-Jul	None	None	G3?	S3?	1B.2	 © 2018 Zoya Akulova
Carex lyngbyei	Lyngbye's sedge	Cyperaceae	perennial rhizomatous herb	Apr-Aug	None	None	G5	S3	2B.2	No Photo Available
Castilleja affinis var. *neglecta*	Tiburon paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	Apr-Jun	FE	CT	G4G5T1T2	S1S2	1B.2	No Photo Available
Castilleja ambigua var. *meadii*	Mead's owls-clover	Orobanchaceae	annual herb (hemiparasitic)	Apr-May	None	None	G4T1	S1	1B.1	No Photo

var. *meadii*	clover		(hemiparasitic)							No Photo Available
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	None	None	G1	S1	1B.1	No Photo Available
Ceanothus divergens	Calistoga ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	None	None	G2	S2	1B.2	No Photo Available
Ceanothus purpureus	holly-leaved ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	None	None	G2	S2	1B.2	 © 2012 Jake Ruygt
Ceanothus sonomensis	Sonoma ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Apr	None	None	G2	S2	1B.2	No Photo Available
Centromadia parryi ssp. *parryi*	pappose tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.2	No Photo Available
Chloropyron molle ssp. *molle*	soft salty bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jun-Nov	FE	CR	G2T1	S1	1B.2	No Photo Available
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2	No Photo Available
Erigeron greenei	Greene's narrow-leaved daisy	Asteraceae	perennial herb	May-Sep	None	None	G3	S3	1B.2	No Photo Available
Eryngium jepsonii	Jepson's coyote-thistle	Apiaceae	perennial herb	Apr-Aug	None	None	G2	S2	1B.2	No Photo Available
Extriplex joaquinana	San Joaquin spearscale	Chenopodiaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.2	No Photo Available
Helianthella castanea	Diablo helianthella	Asteraceae	perennial herb	Mar-Jun	None	None	G2	S2	1B.2	 © 2013 Christopher Bronny
Hemizonia congesta ssp. *congesta*	congested-headed hayfield tarplant	Asteraceae	annual herb	Apr-Nov	None	None	G5T2	S2	1B.2	 © 2015 Vernon Smith
Hesperolinon bicarpellatum	two-carpellate western flax	Linaceae	annual herb	(Apr)May-Jul	None	None	G2	S2	1B.2	 © 2016 John Doyen
Hesperolinon	Brewer's	Linaceae	annual herb	May-Jul	None	None	G2	S2	1B 2	

Hesperolinon breweri	Brewer s western flax	Linaceae	annual herb	May-Jul	None	None	G2	S2	1B.2	 © 2014 Neal Kramer
Hesperolinon sharsmithiae	Sharsmith's western flax	Linaceae	annual herb	May-Jul	None	None	G2Q	S2	1B.2	 © 2017 Aaron Arthur
Horkelia tenuiloba	thin-lobed horkelia	Rosaceae	perennial herb	May-Jul(Aug)	None	None	G2	S2	1B.2	 © 1994 Doreen L. Smith
Isocoma arguta	Carquinez goldenbush	Asteraceae	perennial shrub	Aug-Dec	None	None	G1	S1	1B.1	No Photo Available
Lasthenia conjugens	Contra Costa goldfields	Asteraceae	annual herb	Mar-Jun	FE	None	G1	S1	1B.1	 © 2013 Neal Kramer
Lathyrus jepsonii var. *jepsonii*	Delta tule pea	Fabaceae	perennial herb	May-Jul(Aug-Sep)	None	None	G5T2	S2	1B.2	 © 2003 Mark Fogiel
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	No Photo Available
Leptosiphon jepsonii	Jepson's leptosiphon	Polemoniaceae	annual herb	Mar-May	None	None	G2G3	S2S3	1B.2	No Photo Available
Lilaeopsis masonii	Mason's lilaeopsis	Apiaceae	perennial rhizomatous herb	Apr-Nov	None	CR	G2	S2	1B.1	No Photo Available
Limnanthes vinculans	Sebastopol meadowfoam	Limnanthaceae	annual herb	Apr-May	FE	CE	G1	S1	1B.1	 © 2015 Vernon Smith
Lomatium repostum	Napa lomatium	Apiaceae	perennial herb	Mar-Jun	None	None	G2G3	S2S3	1B.2	No Photo Available
Lupinus sericatus	Cobb Mountain lupine	Fabaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2	No Photo Available
Navarretia leucocephala ssp. *pauciflora*	few-flowered navarretia	Polemoniaceae	annual herb	May-Jun	FE	CT	G4T1	S1	1B.1	No Photo Available
Penstemon newberryi var. *sonomensis*	Sonoma beardtongue	Plantaginaceae	perennial herb	Apr-Aug	None	None	G4T3	S3	1B.3	 Jason Matthias

										Mills 2020
Rhynchospora californica	California beaked-rush	Cyperaceae	perennial rhizomatous herb	May-Jul	None	None	G1	S1	1B.1	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	No Photo Available
Sidalcea hickmanii ssp. *napensis*	Napa checkerbloom	Malvaceae	perennial herb	Apr-Jun	None	None	G3T1	S1	1B.1	No Photo Available
Sidalcea keckii	Keck's checkerbloom	Malvaceae	annual herb	Apr-May(Jun)	FE	None	G2	S2	1B.1	No Photo Available
Streptanthus hesperidis	green jewelflower	Brassicaceae	annual herb	May-Jul	None	None	G2G3	S2S3	1B.2	No Photo Available
Symphyotrichum lentum	Suisun Marsh aster	Asteraceae	perennial rhizomatous herb	(Apr)May-Nov	None	None	G2	S2	1B.2	No Photo Available
Trichostema ruygtii	Napa bluecurls	Lamiaceae	annual herb	Jun-Oct	None	None	G1G2	S1S2	1B.2	No Photo Available
Trifolium amoenum	two-fork clover	Fabaceae	annual herb	Apr-Jun	FE	None	G1	S1	1B.1	No Photo Available
Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	No Photo Available
Viburnum ellipticum	oval-leaved viburnum	Adoxaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3?	2B.3	 © 2006 Tom Engstrom

Showing 1 to 49 of 49 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 1.0). Website https://www.rareplants.cnps.org [accessed 4 January 2022].

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
Phone: (916) 414-6600 Fax: (916) 414-6713

In Reply Refer To: January 03, 2022
Consultation Code: 08ESMF00-2022-SLI-0706
Event Code: 08ESMF00-2022-E-02140
Project Name: 4J820 Tulucay Bridge Replacement

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, under the jurisdiction of the U.S. Fish and Wildlife Service (Service) 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 Service under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Please follow the link below to see if your proposed project has the potential to affect other species or their habitats under the jurisdiction of the National Marine Fisheries Service:

http://www.nwr.noaa.gov/protected_species/species_list/species_lists.html

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

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

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

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

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

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

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

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office
Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846
(916) 414-6600

Project Summary

Consultation Code: 08ESMF00-2022-SLI-0706
Event Code: Some(08ESMF00-2022-E-02140)
Project Name: 4J820 Tulucay Bridge Replacement
Project Type: BRIDGE CONSTRUCTION / MAINTENANCE
Project Description: The proposed project is on State Route 121 PM 6.4-6.5 in Napa County. The Project proposed to replace Tulucay Creek Bridge.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@38.2866671,-122.27475064064983,14z

Counties: Napa County, California

Endangered Species Act Species

There is a total of 10 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], 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.

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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
Salt Marsh Harvest Mouse *Reithrodontomys raviventris* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/613	Endangered

Birds

NAME	STATUS
California Least Tern *Sterna antillarum browni* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8104	Endangered
Northern Spotted Owl *Strix occidentalis caurina* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/1123	Threatened

Amphibians

NAME	STATUS
California Red-legged Frog *Rana draytonii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened

Fishes

NAME	STATUS
Delta Smelt *Hypomesus transpacificus*	Threatened

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/321

Insects

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

Crustaceans

NAME	STATUS
California Freshwater Shrimp *Syncaris pacifica*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/7903

Conservancy Fairy Shrimp *Branchinecta conservatio*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/8246

Flowering Plants

NAME	STATUS
Contra Costa Goldfields *Lasthenia conjugens*	Endangered

There is **final** critical habitat for this species. The location of the critical habitat is not available.
Species profile: https://ecos.fws.gov/ecp/species/7058

Showy Indian Clover *Trifolium amoenum*	Endangered

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/6459

Critical habitats

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

From: O"Neil, Sean
To: nmfs.wcrca.specieslist@noaa.gov
Subject: NMFS species list 2J510 MRN1 Project
Date: Friday, January 21, 2022 3:38:00 PM

Hello,

I'm requesting concurrence with the official species list pasted below for the Caltrans 4J820, SR 121 Tulucay Creek Bridge Replacement Project which will involve bridge replacement and widening along State Route 121 at PM 6.4-6.5 (Bridge number 21-0003) in the city of Napa. The project is located within the Napa USGS 7.5 Quadrangle.

Federal Agency: DOT
Non-federal Agency: Caltrans, 111 Grand Ave, Oakland CA

Point-of-Contact:
Sean O'Neil
Jacobs | Biologist
+1.804.767.0995
Sean.ONeil1@jacobs.com
155 Grand Avenue Suite 800 | Oakland, CA 94612 | USA

Quad Name **Napa**
Quad Number **38122-C3**

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) - **X**
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 - X
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat - X

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 - X
Chinook Salmon EFH - X
Groundfish EFH - X
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 -