Ripon Bridge Rehabilitation

State Route 99 at the Stanislaus River Bridge
at the county line of San Joaquin and Stanislaus Counties
10-SJ-99-0/0.3
10-0L020
Project ID # 1013000053

Initial Study with Proposed Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

March 2016

Caltrans

General Information About This Document

Please read this Initial Study. Additional copies of this document are available for review at the Caltrans district office at 1976 East Charter Way/East Dr. Martin Luther King, Jr. Blvd., Stockton, CA 95205 and the Ripon Memorial Library, 333 W. Main Street, Ripon, CA 95366.

The document can also be accessed electronically at the following website: http://www.dot.ca.gov/dist10/d10projects/sjco.html

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

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Scott Smith, Central Sierra Environmental Analysis Branch, 855 M Street, Suite 200; (559) 445-6172,California Relay Service 1 (800) 735-2929 (TTY), or 711.

10-SJ-99-0/0.3
Project ID #1013000053
10-0L020

Replace the southbound Stanislaus River Bridge No. 29-0013 L
on State Route 99 at post mile 0.3 south of Ripon, California

INITIAL STUDY
with Proposed Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

3/17/16
Date of Approval

Scott Smith
Senior Environmental Planner
California Department of Transportation

- If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:

  Scott Smith, Senior Environmental Planner
  Central Sierra Environmental Analysis Branch
  California Department of Transportation
  855 M Street, Suite 200
  Fresno, CA 93721

- Submit comments via email to: scott.smith@dot.ca.gov.
- Submit comments by the deadline: June 5, 2016.

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to replace approximately 383 feet of the southern portion of the southbound Stanislaus River Bridge No. 29-0013 L on State Route 99 at post mile 0.3 south of Ripon, California.

Determination

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

Draft

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

The proposed project would have no effect on: Aesthetics, Agricultural Forest Resources, Air Quality, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Noise, Paleontology, Population and Housing, Public Services, Recreation, Transportation/Traffic, and Utilities and Service Systems.

In addition, the proposed project would have no significantly adverse effect on biology because the following mitigation measures would reduce potential effects to insignificance:

- Impacts to threatened or endangered species would be mitigated in accordance with the Biological Opinion issued by the U.S. Fish and Wildlife Service.
- Impacts to wetlands and waters of the United States would be mitigated by the terms and conditions provided in the California Department of Fish and Wildlife 1602 Streambed Alteration Agreement, U.S. Army Corps of Engineers Section 401 Permit, and U.S. Army Corps of Engineers 404 Permit. All construction activity would be limited to the project impact area and an Environmentally Sensitive Areas would be implemented.

_____ _____

Scott Smith
Senior Environmental Planner
California Department of Transportation

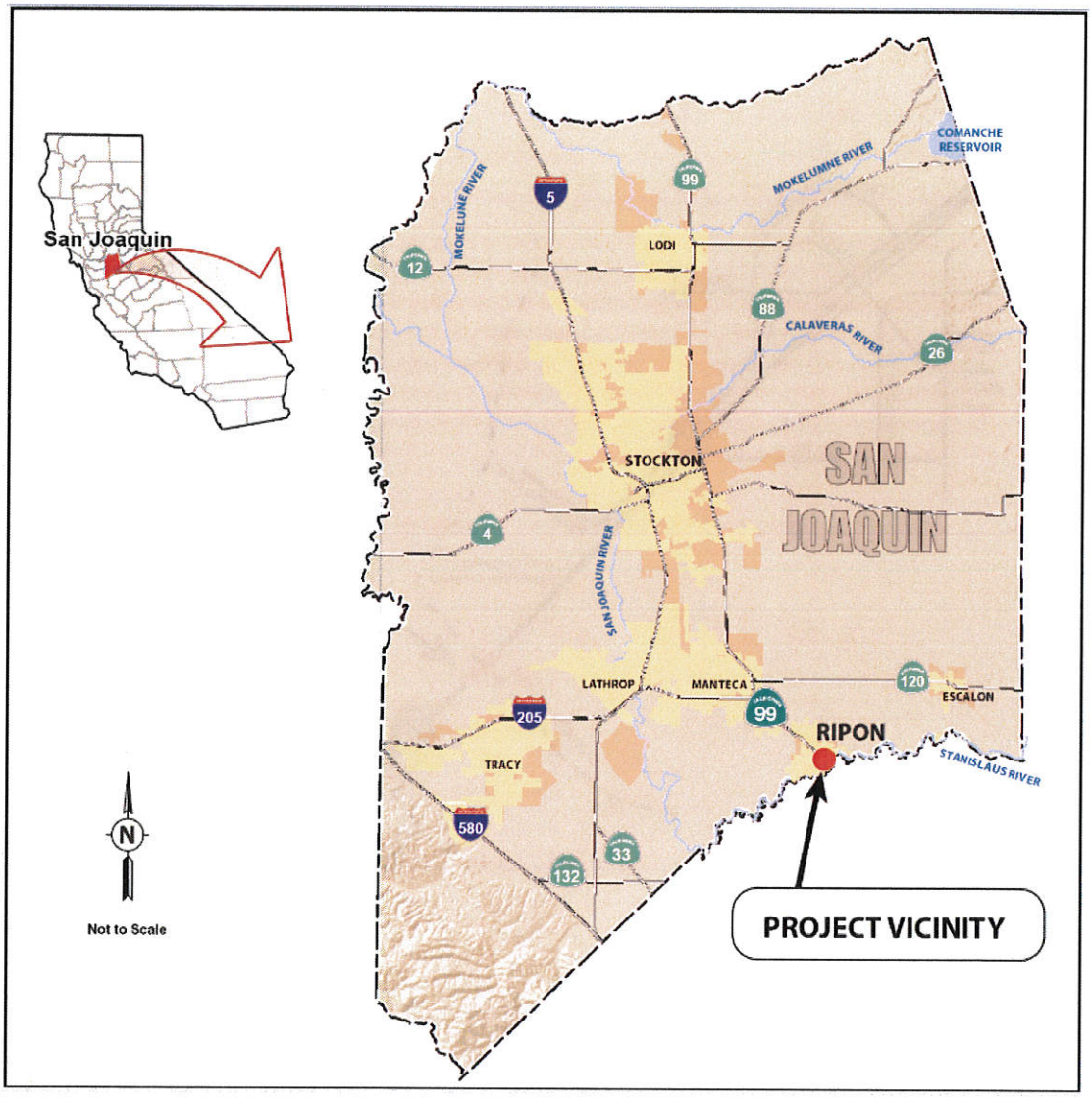
Date

Project Description and Background

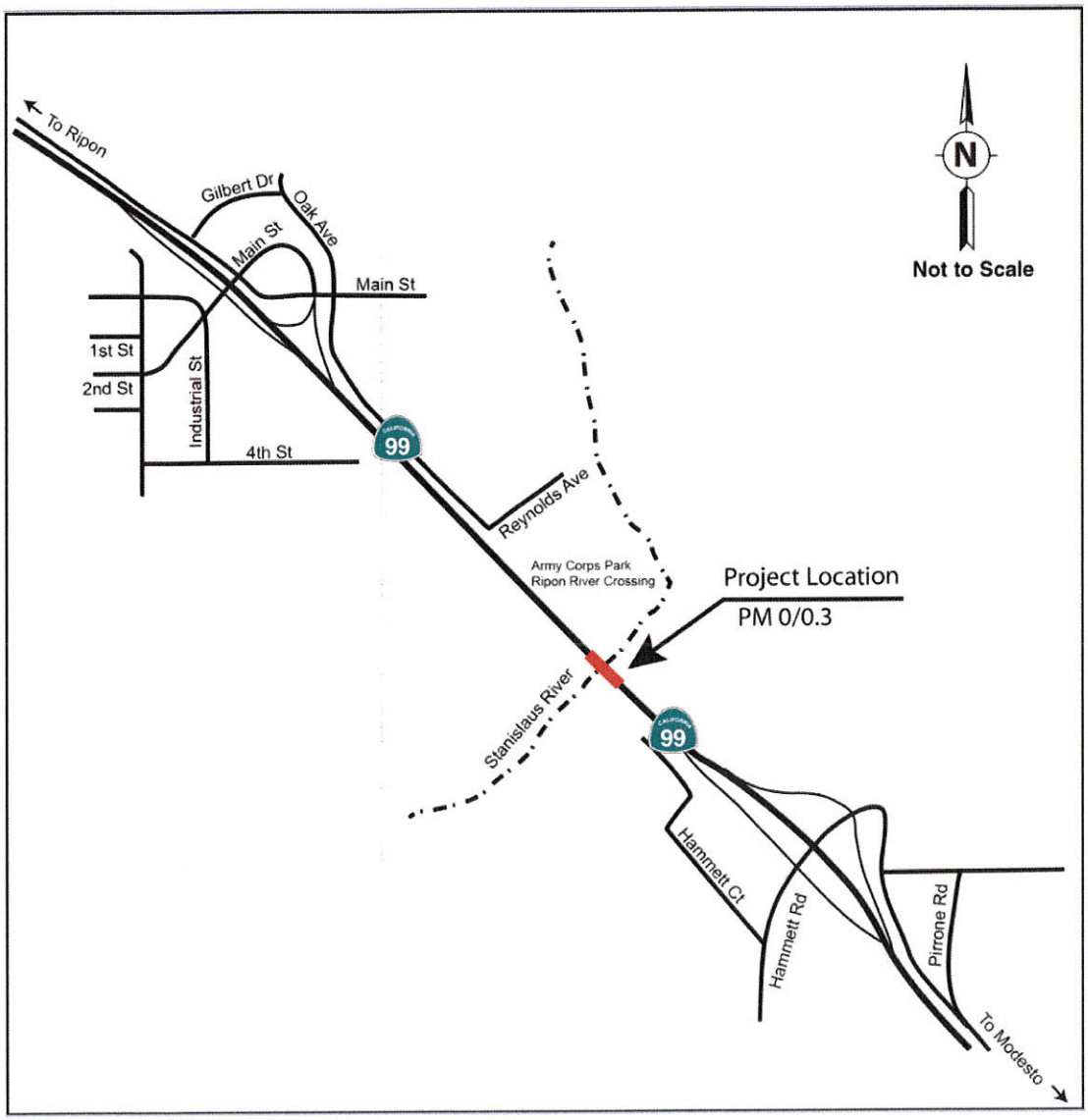
Project Title

Ripon Bridge Rehabilitation

Project Vicinity



Project Location



Description of Project

This project would replace approximately 383 feet of the southern portion of the southbound Stanislaus River Bridge (No. 29-0013 L) on State Route 99 at post mile 0.3 south of Ripon in San Joaquin County, California. The existing spans 1 through 6 would be removed and replaced. Cast-In-Drilled-Hole pile foundations are assumed at the new bents. An existing railroad access road would be used or modified along the western side of the bridge on the northern side of the river. A temporary access road would be constructed on the southern side of the river. A temporary trestle bridge would be required across the river for equipment access.

Surrounding Lands Uses and Setting

The project is on State Route 99, a six-lane freeway, on flat terrain in urbanized and rural areas next to the Stanislaus River, south of the city of Ripon. The Stanislaus River acts as a separation line between San Joaquin County and Stanislaus County. Surrounding land uses include residential, retail/commercial, warehousing, agricultural, and industrial. Next to the bridge, on the east and west sides, is naturally occurring vegetation, including a variety of mature trees, some oak trees, shrubby plant material and various naturalized slope grasses.

Other Public Agencies Whose Approval is Required

The following permits, reviews, and approvals would be required for the construction of the project:

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	Permit application would be submitted at the Plans, Specifications and Estimate phase of the project.
Regional Water Quality Control Board	Section 401 Permit	Permit application would be submitted after the final environmental document is approved.
U.S. Fish and Wildlife Service/National Marine Fisheries Service	Biological Opinion Section 7 Consultation for Threatened and Endangered Species	A Biological Assessment has been submitted to the U.S. Fish and Wildlife Service/National Marine Fisheries Service. A Biological Opinion would be received by the approval of the final environmental document.
U.S. Army Corps of Engineers	Section 404 Permit	Permit application would be submitted after the final environmental document is approved.
San Joaquin Valley Air Pollution Control District	National Emission Standards for Hazardous Air Pollutants Notification	10-day written notification to the district would be required before demolition of any bridges or structures.

CEQA Environmental Checklist

This checklist identifies physical, biological, social and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicated no impacts. A NO IMPACT answer in the last column reflects this determination. Where a clarifying discussion is needed, the discussion either follows the applicable section in the checklist or is placed within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA—not NEPA—impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
II. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project, Forest Legacy Assessment Project, and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
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?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
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))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
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?	☐	☐	☐	☒
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES: Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
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?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
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?	☐	☐	☐	☒
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
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?	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
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?	☐	☐	☐	☒

VII. GREENHOUSE GAS EMISSIONS: Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans' determination that in the absence of further regulatory or scientific information related to greenhouse gas emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project.

VIII. HAZARDS AND HAZARDOUS MATERIALS: Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
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?	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒
IX. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☒
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b)Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
XI. MINERAL RESOURCES: Would the project:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
XII. NOISE: Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No 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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
XIV. PUBLIC SERVICES:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☐	☒
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION:				
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
XVI. TRANSPORTATION/TRAFFIC: Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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)?	☐	☐	☐	☒
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Additional Explanations for Questions in the Impacts Checklist

IV. Biological Resources (checklist question a and b)

This section discusses plant and animal species that are either state or federally listed as threatened or endangered, or are currently proposed for such listing.

Threatened and Endangered Species

Affected Environment

Caltrans completed a Natural Environment Study for the project in October 2015. A Biological Assessment was prepared in September 2015 and submitted to the U.S. Fish and Wildlife Service on November 6, 2015. A copy of the Fish and Wildlife Service Official Species List for this project is in Appendix B.

The proposed project is located on State Route 99 along the border of San Joaquin and Stanislaus counties, on the southbound, west side of the Stanislaus River Bridge near Ripon, California. The elevation is approximately 55 feet above mean sea level. The Stanislaus River runs through the project area.

The project area contains riparian forest habitat, surrounded mostly by residential, light industrial, and agricultural land. The project runs parallel to the Union Pacific Railroad tracks southwest of the bridge. The Biological Study Area (BSA) consists of the existing Caltrans right-of-way that surrounds the project impact area. A portion of the impact area will be outside of the right-of-way, requiring temporary construction easements. The BSA contains riparian vegetation on the banks of the Stanislaus River. A small open stand of salix (willows) dominates the northwest portion of the BSA. Annual grassland habitat sits mostly between the adjacent railroad and the highway portion of the BSA. Ruderal (weedy) vegetation that grows along the shoulders of State Route 99 is periodically cleared and maintained.

The following species could potentially occur within or near the project area:

Valley elderberry longhorn beetle

The federally endangered Valley Elderberry longhorn beetle is a subspecies of the longhorn beetle native to the riparian forests of the Central Valley of California from Redding to Bakersfield. The beetle prefers riparian areas and reproduces in the stems of the blue elderberry. Elderberries grow in a variety of upland sites. The female beetles lay their eggs on the bark, and after hatching, the larvae burrow into the stems of the blue elderberry where they may live and feed up to two years before entering the pupal stage and transforming into adults. Frequently, the only exterior evidence of the species is the presence of the exit holes created by the larvae.

Central Valley steelhead trout

The federally threatened Central Valley steelhead trout belongs to the family Salmonidae, which includes all salmon, trout, and chars. They are born in freshwater streams, where they spend their first one to three years of life. They swim to the ocean where most of their growth occurs. They return to their native freshwater

stream to spawn (lay eggs and fertilize). Critical habitat for the Central Valley steelhead trout has been designated by the National Oceanic and Atmospheric Administration, and the project area is within its habitat. Although migrating salmonids may travel through the project area while traveling to their spawning areas, there is limited suitable spawning habitat for this species in the project area because of human recreational activities that occur in and around the Stanislaus River.

Giant garter snake

The giant garter snake is common to the Central Valley wetlands of California. Destruction of wetland and habitat has been so widespread that this species is listed as threatened by state and federal governments. It is active when water temperatures are at 68° Fahrenheit or warmer, and is dormant underground when its aquatic habitat is below this temperature.

Least Bell's vireo

The federally endangered Bell's vireo is a small North American songbird. The least Bell's vireo was a common to locally abundant species in lowland riparian habitat, ranging from coastal Southern California through the Sacramento and San Joaquin valleys as far north as Red Bluff in Tehama County.

Riparian woodrat

The federally threatened riparian woodrat, also known as the San Joaquin woodrat, is a medium-sized rodent. The riparian woodrat can be distinguished from other subspecies by its white rather than dusky hind feet; it is also larger, lighter and more grayish with a bi-colored tail.

Riparian brush rabbit

The federally and state endangered brush rabbits are small, brownish rabbits that can be distinguished from their relative, the desert cottontail, by a smaller, inconspicuous tail and uniformly colored ears (no black tip). The riparian brush rabbit is believed, based on the presence of suitable habitat, to have been found associated with riparian forests along portions of the San Joaquin River and its tributaries on the valley floor, from at least Stanislaus County to the Delta.

Western yellow-billed cuckoo

The federally threatened western yellow-billed cuckoo prefers dense riparian thickets with dense low-level foliage near sources of slow water. Western yellow-billed cuckoos eat mostly caterpillars, supplementing with beetles, ants, and spiders. Their nests are constructed in willows on horizontal branches in trees, shrubs, and vines.

Environmental Consequences

Impacts to habitat resulting from project-related activity would, with mitigation, result in the following determinations for the listed species potentially occurring within or near the project area:

Valley elderberry longhorn beetle

Three blue elderberry shrubs, the host plants of the Valley elderberry longhorn beetle, were identified within or next to the project area. No larval exit holes were observed onsite during the 2014 and 2015 surveys. Construction activities would encroach within 20 feet of the dripline. Impacts to the Valley elderberry longhorn beetle and its habitat resulting from project-related activity would, with mitigation, result in a *may affect, likely to adversely affect* determination.

Central Valley steelhead trout

Construction activities would temporarily impact 0.11 acre of suitable aquatic habitat for this species. A temporary trestle bridge would be built over the river for equipment access. Impacts to the Central Valley steelhead trout and its habitat resulting from project-related activity would, with mitigation, result in a *may affect, likely to adversely affect* determination.

Giant garter snake

No giant garter snakes were observed onsite during the 2014 and 2015 surveys. However, project activities have the potential to impact 0.4 acre of giant garter snake habitat. Any impacts to land within 200 feet of the waterway would be considered upland habitat. Impacts to the giant garter snake and its habitat resulting from project-related activity would, with mitigation, result in a *may affect, likely to adversely affect* determination.

Least Bell's vireo

No least Bell's vireos were observed onsite during the 2014 and 2015 surveys. Suitable nesting and foraging habitat for the least Bell's vireo is present within the riparian scrub habitat along the river bank. The project site contains some riparian vegetation, but human impacts like trash dumping and off-highway recreation have occurred around the channel banks. This species is not expected to occur within the proposed limits of construction because of the degraded and disturbed nature of the project site. Impacts to the least Bell's vireo and its habitat resulting from project-related activity would, with mitigation, result in a *may affect, not likely to adversely affect* determination.

Riparian woodrat

No riparian woodrats were observed onsite during the 2014 and 2015 surveys. The project site contains potentially suitable habitat for the riparian woodrat, and the project has the potential to temporarily impact 0.4 acre of riparian woodrat habitat. Impacts to the riparian woodrat and its habitat resulting from project-related activity would, with mitigation, result in a *may affect, likely to adversely affect* determination.

Riparian brush rabbit

The project site contains suitable habitat for the riparian brush rabbit, but no riparian brush rabbits were observed onsite during the 2014 and 2015 surveys. Impacts to habitat would be temporary in nature. Impacts to the riparian brush rabbit and its

habitat resulting from project-related activity would, with mitigation, result in a *may affect, likely to adversely affect* determination.

Western yellow-billed cuckoo

No western yellow-billed cuckoos were observed onsite during the 2014 and 2015 surveys. Suitable nesting and foraging habitat for the yellow-billed cuckoo is present within the riparian scrub habitat along the river bank. It is unlikely that the species nests in the project area because of the human impacts like trash dumping and off-highway recreation concentrated around the channel banks. The western yellow-billed cuckoo is not expected to occur within the project's limits of construction due to the degraded and disturbed nature of the project site. The project has the potential to temporarily impact 0.4 acre of yellow-billed cuckoo habitat. Impacts to the western yellow-billed cuckoo and its habitat resulting from project-related activity would, with mitigation, result in a *may affect, not likely to adversely affect* determination.

Avoidance, Minimization, and/or Mitigation Measures

Valley elderberry longhorn beetle

Avoidance and minimization efforts for the Valley elderberry longhorn beetle are as follows:

- Elderberry shrubs would be designated as an Environmentally Sensitive Area and avoided by a minimum of 20 feet from the edge of the shrub canopy dripline.
- Before the start of construction, a Caltrans biologist or other qualified biologist would conduct an employee education program for all contractors, subcontractors, and work crews on the 1) status of the beetle, 2) need to protect the elderberry host plant, and 3) need to avoid damaging the elderberry shrubs. The crew would be informed of the possible penalties for not complying with the requirements.
- The three elderberry shrubs would be mitigated by transplanting and purchasing bank credits at an approved U.S. Fish and Wildlife Service bank.

  Transplanting of elderberry plants would be conducted when the shrubs are dormant from November 1 – February 15 and in accordance with the procedure outlined in the Valley elderberry longhorn beetle Conservation Guidelines.

Central Valley steelhead trout

Impacts to Central Valley steelhead trout habitat would be temporary. Once construction is complete, the water diversions that would be placed in the river would be removed. The fish would be able to use this area again. No permanent impacts to this species are expected, and no compensatory mitigation is proposed.

Avoidance and minimization efforts for the Central Valley steelhead trout are as follows:

- All in-stream work would be completed between June 15 and October 15.
- Once the water diversion is in place, a qualified fisheries biologist would capture and relocate any fish present prior to installation of culverts and temporary work platforms.
- Culverts shall be maintained and kept open while in place. Any ponding shall be corrected immediately.
- Equipment and materials shall be stockpiled outside of the riparian habitat.
- Unless authorized by the California Department of Fish and Wildlife and National Marine Fisheries Service, prior to October 31, the temporary culverts, pipe, and work platforms shall be removed from the stream corridor. At no time shall any structure or fill become a barrier to the free passage of water, or the movement of fish and aquatic animals.
- Any new or previously excavated gravel material placed in the channel shall meet Caltrans' Gravel Cleanliness Specification #227 having a value of 85 or higher (excluding such materials as soil in the Rock Slope Protection to allow for riparian planting).
- Impacts to herbaceous cover would be offset by reseeding any unvegetated and impacted areas with a suitable seed mixture after construction.
- The Rock Slope Protection would be placed outside the low-flow channel of the Stanislaus River, and Rock Slope Protection above the ordinary high water mark would be filled with well-graded soil to allow for revegetation.
- Any construction equipment operating upon work pads or adjacent to the Stanislaus River shall be inspected daily for leaks. External oil, grease, and mud shall be removed from equipment and disposed of properly. Spill containment booms shall be maintained onsite at all times during construction operations and/or staging of equipment or fueling supplies. Fueling trucks shall maintain adequate spill containment materials at all times.
- The contractor shall develop and implement site-specific Best Management Practices, a water pollution control plan, and emergency spill control plan. The contractor shall be responsible for immediate containment and removal of any toxins released.

Giant garter snake

Avoidance and minimization efforts for the giant garter snake are as follows:

- Construction would occur during the active season of May 1 through October 1.
- To determine any presence or signs of the species, pre-construction surveys would be conducted. If the species is found within the action area, the U.S. Fish and Wildlife Service would be contacted to discuss ways to proceed with the project and avoid take to the maximum extent possible.

- A biological onsite monitor would be present during initial ground-disturbing activities.
- Construction vehicles would require low-speed limits within the construction site to lessen the probability that the species could be run over by vehicles and equipment.

Least Bell's vireo

Avoidance and minimization efforts for the least Bell's vireo are as follows:

- Protocol nesting surveys would be conducted during the season prior to the start of construction to determine if any least Bell's vireos are nesting in proximity to the project area.
- If nesting least Bell's vireos are observed onsite, then the nest site would be designated an Environmentally Sensitive Area, with a 250-foot-radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged (Bay Delta Conservation Plan, 2013).
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Though no tree removal is proposed, any removal of trees within the project impact area would be done outside of the nesting season (February 15-September 1).

Riparian woodrat

Avoidance and minimization efforts for the riparian woodrat are as follows:

- Pre-construction surveys would be performed within 30 days prior to construction to determine if the species occurs onsite. If occupied suitable habitat is observed during the surveys, avoidance measures, such as Environmentally Sensitive Area fencing, would be implemented where feasible.
- A qualified biological monitor with a current riparian woodrat handling permit would be present at the construction site during initial ground-disturbing activities. The monitor would have the authority to relocate riparian woodrats onsite if necessary.

No impacts to the riparian woodrat are expected, and no compensatory mitigation is proposed.

Riparian brush rabbit

The proposed project would result in the temporary impact of 0.4 acre of potential riparian habitat. Although riparian brush rabbits have not been found at the project site, there is a direct corridor from where they have been documented 4.8 miles

downstream of the proposed project site. Impacts to habitat would be temporary in nature. The riparian area would be revegetated once construction is completed and would be able to function as potential habitat for riparian brush rabbits. No compensatory mitigation is proposed.

Avoidance and minimization efforts for the riparian brush rabbit are as follows:

- Caltrans would manually remove vegetation at the project site using hand tools (e.g., chainsaws, weed wackers, brush hogs) with a Service-approved biologist present at the site during vegetation removal to ensure riparian brush rabbits are not killed and are able to leave the site and enter adjacent habitat. After the vegetation is removed, Caltrans would allow the site to remain undisturbed for at least a day to allow any remaining riparian brush rabbits to vacate the site prior to the state of construction.
- Pre-construction surveys would occur.
- Once the project site has been cleared of riparian brush rabbits, then exclusionary fencing would be placed to prevent riparian brush rabbits from re-entering the project site during construction.
- Lighting would be directed to shine directly toward work areas, avoiding adjacent riparian areas.

Western yellow-billed cuckoo

Avoidance and minimization efforts for the western yellow-billed cuckoo are as follows:

- Protocol nesting surveys would be conducted during the season prior to the start of construction to determine if any yellow-billed cuckoos are nesting in proximity to the project area.
- If nesting yellow-billed cuckoos are observed onsite, then the nest site would be designated an Environmentally Sensitive Area, with a 500-foot-radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged.
- A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Though no tree removal is proposed, any removal of trees within the project impact area would be done outside of the nesting season (February 15-September 1).

Wetlands and Other Waters of the U.S.

Jurisdictional wetlands are areas that are inundated or saturated by surface water or

groundwater at a frequency an duration sufficient to support – and that under normal circumstances do support – vegetation typically adapted for life in saturated soil conditions. Jurisdictional wetlands generally include swamps, bogs, fens, natural drainage features, and seasonal wetlands.

Waters of the U.S. are defined as those waters that are currently used, were used in the past, or may be subject to use in interstate and foreign commerce, including all waters subject to the ebb (receding) and flow of the tide and all interstate waters including interstate wetlands. This definition also includes intrastate lakes, rivers, streams (including intermittent, ephemeral and perennial streams), mudflats, sand flats, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds where the use, degradation or destruction of which could affect interstate or foreign commerce.

Affected Environment

The biological study area was surveyed by Caltrans biologists on May 5, 2015 to determine the potential presence of U.S. Army Corps of Engineers jurisdictional wetlands and Waters of the U.S. A Natural Environmental Study was completed in October 2015. A Biological Assessment was completed in September 2015.

Within the biological study area, riparian forest habitat is limited to the margins of the river channel. The understory (bushes) is poorly developed with tamerix (flowering plants), saltbrush, Russian thistle, and weedy grasses dominating. A small open stand of salix (willows) dominates the northwest portion of the area with yellow starthistle and annual grasses. Human impacts include trash dumping and off-highway recreation around the channel banks.

Environmental Consequences

The project would impact approximately 0.4 acre of temporary riparian impacts and 0.11 acre of temporary aquatic impacts to potential waters of the U.S. A map of riparian impacts to potential waters of the U.S. is in Appendix C. It is anticipated that impacts would occur within the waterway that may be considered jurisdictional under authority of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and the California Department of Fish and Wildlife. There are no permanent impacts anticipated.

Avoidance, Minimization, and/or Mitigation Measures

Impacts to potential waters of the U.S. are anticipated and would require a U.S. Army Corps of Engineers 404 permit, a Regional Water Quality Control Board 401 permit, and a California Department of Fish and Wildlife 1600 Streambed Alteration Agreement. A Jurisdictional Determination would be prepared to confirm the presence, boundaries, and impacts to any waters of the U.S. on the project site.

Temporary impacts areas would be restored to original grade and planted with native vegetation, where appropriate, after construction.

Plant Species

The plants listed are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring onsite.

Affected Environment

The delta button-celery is an annual or perennial herb that is part of the carrot family. This plant blooms from July to early October. The project site contains potentially suitable habitat for this species. The closest recorded occurrences is from 1935 and is approximately 4.9 miles southwest of the project site near the Caswell Memorial State Park.

Environmental Consequences

No delta button celery was found in the biological study area during summer 2014 floristic surveys. No impacts to the delta button celery are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

A qualified biologist would conduct preconstruction surveys with the project area before groundbreaking activities. If this species is observed with the project impact area, Caltrans would salvage the top soil, including the top 4 inches, which will be stockpiled and used for re-vegetation in disturbed areas once construction is complete.

Animal Species

Animals are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status animals occurring onsite.

The following animal species have been discussed in the Endangered and Threatened Species section of this document: Valley elderberry longhorn beetle, central valley steelhead trout, giant garter snake, least Bell's vireo, western yellow-billed cuckoo, riparian woodrat, and the riparian brush rabbit. In addition to the threatened and endangered species, the Swainson's Hawk and three bat species are discussed below.

Affected Environment

Swainson's Hawk

The Swainson's hawk is a state threatened species. It migrates north to California in March through May and returns to South America in September through October. They nest in tall trees such as oaks, cottonwoods, walnuts, and willows, usually near rivers or streams.

Environmental Consequences

No Swainson's hawk were observed onsite during the 2014 and 2015 surveys. The Swainson's hawk habitat consists of riparian forest. The closest recorded occurrence is from 2002 and is approximately .75 mile southwest of the project site near the San Joaquin River National Wildlife Refuge. The species is not expected to occur with the project's proposed limits of construction. If Swainson's hawk is present within 600 feet of the project site, construction noise could indirectly disrupt their onsite foraging and breeding activities during nesting season February 15 through August 31. Direct impacts are not expected. The project has the potential to impact 0.4 acre of Swainson's hawk habitat.

Avoidance, Minimization, and/or Mitigation Measures

- Protocol nesting surveys would be conducted during the season prior to the start of construction to determine if any Swainson's hawks are nesting in proximity to the project area.
- If nesting Swainson's hawks are observed onsite, then the nest site would be designated an Environmentally Sensitive Area, with a 600-foot radius no-work area around the nest until it has been determined by a qualified biologist that the young have fledged. A qualified biologist would monitor active nests during construction activities.
- A special provision for migratory birds would be included to ensure that no potential nesting migratory birds are affected during construction.
- Removal of trees within the project impact area would be done outside of the nesting season, or if they are surveyed and no nests are found to be present (at this time, no tree removal is proposed).

Affected Environment

Bat Species – Mexican free-tailed bat, Yuma myotis, Big brown bat

Bridges and the surrounding habitat provides foraging and roosting habitat for multiple bat species. There were three types of bats identified: the Mexican free-tailed bat, the Yuma myotis, and the big brown bat. Visual observations identified the Mexican free-tailed bat and the big brown bat night roosting along the joint of the steel framing and under the surface of the bridge deck. The Yuma myotis was

identified emerging from day roosting in the hollow of the wall dividing the south and middle sections of the bridge. Evidence of bat staining around the roost habitat and guano (feces) were on the ground, and on raised and vertical surfaces. Bats were detected through their audible vocalizations and visual observation.

Environmental Consequences

The project site contains potentially suitable habitat for bat species, and the project's construction has the potential to temporarily impact bat roosting habitat.

Avoidance, Minimization, and/or Mitigation Measures

- Preconstruction surveys would be conducted.
- Bat exclusion would be performed before construction. Bats would be prevented from relocating into crevices after eviction.
- A qualified monitor would be present during bat exclusion.

Appendix A List of Technical Studies Available Separately

Paleontological Identification Report (February 2015)

Visual Impact Assessment (May 2015)

Hazardous Waste Preliminary Site Investigation (October 2015)

Biological Assessment (September 2015)

Natural Environment Study (October 2015)

Air Quality, Noise Analysis, and Water Quality (June 2014)

Water Quality Assessment Report (September 2015)

Floodplain Evaluation (March 2016)

The following technical study has been removed due to confidentiality:

Historic Property Survey Report (December 2015)

Legal authority to restrict cultural resource information can be found in California Government Code Sections 254.10 and 6254(r); California Code of Regulations Section 15120(d); and Section 304 of the National Historic Preservation Act of 1966.

Appendix B Fish and Wildlife Service Official Species List

United States Department of Interior
Fish and Wildlife Service

Project name: 10-0L020

Official Species List

Provided by:

Sacramento Fish and Wildlife Office
FEDERAL BUILDING
2800 COTTAGE WAY, ROOM W-2605
SACRAMENTO, CA 95825
(916) 414-6600

Consultation Code: 08ESMF00-2015-SLI-1037
Event Code: 08ESMF00-2016-E-00232

Project Type: TRANSPORTATION

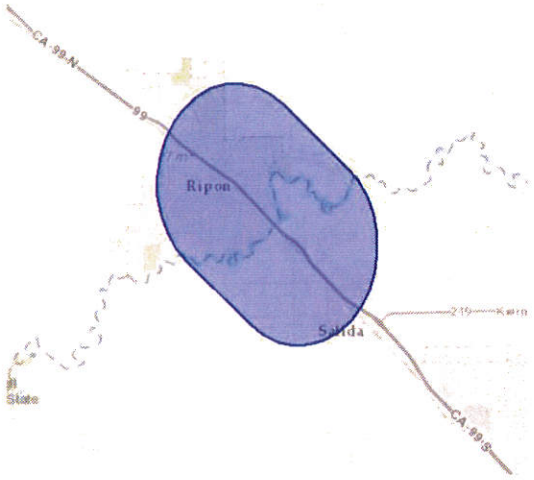
Project Name: 10-0L020
Project Description: This project will replace approximately 383 feet of the southern portion of the southbound Stanislaus River Bridge (No. 29-0013 L). The Structures Maintenance and Investigations Branch has recommended that this arch-span portion of the southbound Stanislaus River Bridge be replaced. The existing spans 1 to 6 will be removed and replaced.

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.

United States Department of Interior
Fish and Wildlife Service

Project name: 10-0L020

Project Location Map:



Project Coordinates: The coordinates are too numerous to display here.

Project Counties: San Joaquin, CA

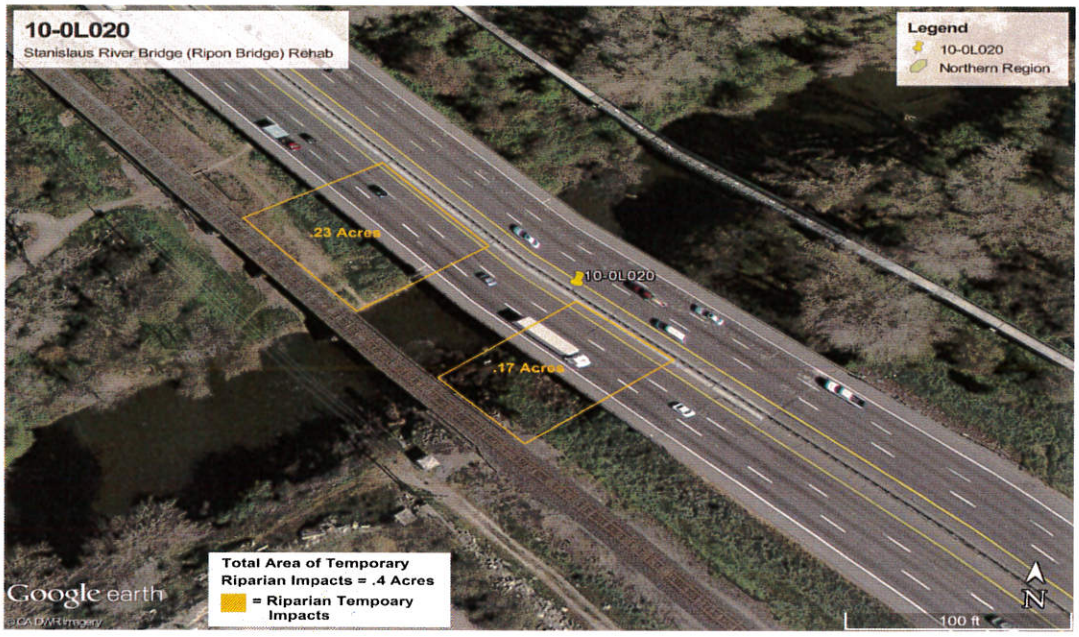
United States Department of Interior
Fish and Wildlife Service

Project name: 10-0L020

Endangered Species Act Species List

There are a total of 13 threatened or endangered species on your 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. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
California red-legged frog *(Rana draytonii)* Population: Entire	Threatened	Final designated	
California tiger Salamander *(Ambystoma californiense)* Population: U.S.A. (Central CA DPS)	Threatened	Final designated	
Birds			
Least Bell's vireo *(Vireo bellii pusillus)* Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo *(Coccyzus americanus)* Population: Western U.S. DPS	Threatened	Proposed	
Crustaceans			
Conservancy fairy shrimp *(Branchinecta conservatio)* Population: Entire	Endangered	Final designated	
Vernal Pool fairy shrimp	Threatened	Final designated	

(Branchinecta lynchi) Population: Entire			
Vernal Pool tadpole shrimp *(Lepidurus packardi)* Population: Entire	Endangered	Final designated	
Fishes			
Delta smelt *(Hypomesus transpacificus)* Population: Entire	Threatened	Final designated	
steelhead *(Oncorhynchus (=salmo) mykiss)* Population: Northern California DPS	Threatened	Final designated	
Insects			
Valley Elderberry Longhorn beetle *(Desmocerus californicus dimorphus)* Population: Entire	Threatened	Final designated	
Mammals			
Riparian Brush rabbit *(Sylvilagus bachmani riparius)* Population: Entire	Endangered		
Riparian woodrat *(Neotoma fuscipes riparia)* Population: Entire	Endangered		
Reptiles			
Giant Garter snake *(Thamnophis gigas)* Population: Entire	Threatened		

Appendix C Map of Temporary Riparian Impacts to Waters of the U.S.