Stratford Kings River Bridge Replacement

State Route 41 southwest of Stratford in Kings County
06-KIN-041-PM 30.6/33.0
EA 06-0V110 and Project ID 0616000208
SCH Number 2020049051

Initial Study
with Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

August 2020

Caltrans

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SCH Number 2020049051
06-KIN-041-PM 30.6/33.0
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Replace the existing Kings River Bridge (Number 45-0007) with a new bridge on State Route 41 southwest of Stratford from post mile 30.6 to post mile 33.0 in Kings County

INITIAL STUDY
with Mitigated Negative Declaration

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

THE STATE OF CALIFORNIA
Department of Transportation
and
Responsible Agencies: California Transportation Commission

Juergen Vespermann

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California Department of Transportation
CEQA and NEPA Lead Agency

08-10-2020
Date

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Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to replace the Kings River Bridge (Number 45-0007) on State Route 41 southwest of Stratford in Kings County. The project limits run from post mile 30.6 to post mile 33.0.

Determination

Caltrans has prepared an Initial Study for this project and, following public review, has determined from this study that the project would not have a significant effect on the environment for the following reasons:

- The project would have no effect on agriculture and forest resources, air quality, cultural resources, energy, land use and planning, aesthetics, mineral resources, noise, population and housing, paleontological resources, public services, recreation, tribal cultural resources, and wildfires.
- The project would have no significant effect on utilities and service systems, transportation, greenhouse gases, hazardous waste and materials, water quality, and hydrology.
- The project would have no significantly adverse effect on biological resources because the following mitigation measures would reduce potential effects to insignificance:
    - Threatened and Endangered Species: Mitigation for the take of nesting Swainson's hawks and tricolored blackbirds would occur either through purchasing conservation credits, creating nesting habitat, or purchasing and protecting land and conservation easements containing nesting habitat.
    - Wetlands and Other Waters: Purchasing conservation credits through the National Fish and Wildlife Foundation would be required to mitigate for permanent impacts to waters of the U.S.
    - Natural Communities: Any trees removed within the valley-foothill riparian habitat would be replaced. The replacement ratio would be based on their diameter at breast height.

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Central Region Environmental Division
California Department of Transportation
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Chapter 1 Proposed Project

1.1 Introduction

The California Department of Transportation (Caltrans) will replace the Kings River Bridge (Number 45-0007, post mile 32.3) with a new bridge. The project is on State Route 41, from post miles 30.6 to 33.0, at the South Fork Kings River. The South Fork Kings River is one of several tributaries of the 133-mile-long Kings River, which originates in the Sierra Nevada mountain range. The Kings River Bridge is about 0.7 mile southwest of Stratford. The surrounding land use is mainly agricultural, with a mix of rural residential and commercial. Within the project area, State Route 41 is a two-lane rural highway that runs south to north. State Route 41 is in the National Highway Network—a network of roadways that are important to the nation's economy, defense, and mobility.

A Build Alternative and a No-Build (No-Action) Alternative were considered. The Build Alternative will replace the existing bridge with a new one. During construction, traffic on State Route 41 will be redirected onto a 32-mile detour. The No-Build (No-Action) Alternative would keep the existing Kings River Bridge.

The project's construction cost was estimated in 2019 at $15,550,000. The project was programmed in the 2018 State Highway Operation and Protection Program with funding from the Bridge Rehabilitation Program.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the project is to address the superstructure, substructure, and seismic deficiencies of the existing bridge to ensure the safety and reliability of State Route 41.

1.2.2 Need

The existing Kings River Bridge (Number 45-0007) was built in 1942 and widened in 1987. The bridge continues to deteriorate, and the columns that support the bridge continue to corrode. The bottom of the bridge's widened portions shows signs of cracks about 5 feet long and spaced as close as 3 feet in the center. Further studies found that replacing the bridge was required to address the structural and seismic deficiencies. The columns would continue to corrode and deteriorate until they could no longer support the bridge.

1.3 Project Description

Caltrans proposes to replace the Stratford Kings River Bridge (Number 45-0007) on State Route 41, southwest of Stratford in Kings County, with a new bridge. The project limits run from post mile 30.6 to post mile 33.0 (see the vicinity map in Figure 1-1).

The project will replace the Stratford Kings River Bridge (Number 45-0007) on State Route 41 with an incremental precast slab bridge. Precast elements are fabricated offsite and then transported and erected into place at the project site. The alignment and centerline of the new bridge will match the existing bridge. The bridge will be about 330 feet long, 44 feet wide, with a depth of 4.5 feet. The new bridge will have eight spans with 2 feet diameter cast-in-steel-shell piles.

A temporary 50-foot-wide wooden trestle bridge will be built on the east side of the existing bridge. The wooden trestle bridge will be used to dismantle the old bridge and install the new bridge. The wooden trestle bridge will be built from the northeast bank of the Kings River and stop just before the southeast bank.

During construction, State Route 41 will be temporarily closed; traffic will be directed onto an estimated 32-mile-long detour as shown in the location map in Figure 1-2. Traffic heading south from Fresno would turn onto State Route 198 heading west, then south onto Avenal Cutoff Road. From Avenal Cutoff Road, traffic will head west onto State Route 269, south onto Interstate 5, then back onto State Route 41 at Kettleman City. Traffic heading north from Paso Robles will take the reverse course to get back onto State Route 41.

Construction, including the detour, is estimated to take 200 working days to complete.

Figure 1-1 Vicinity Map

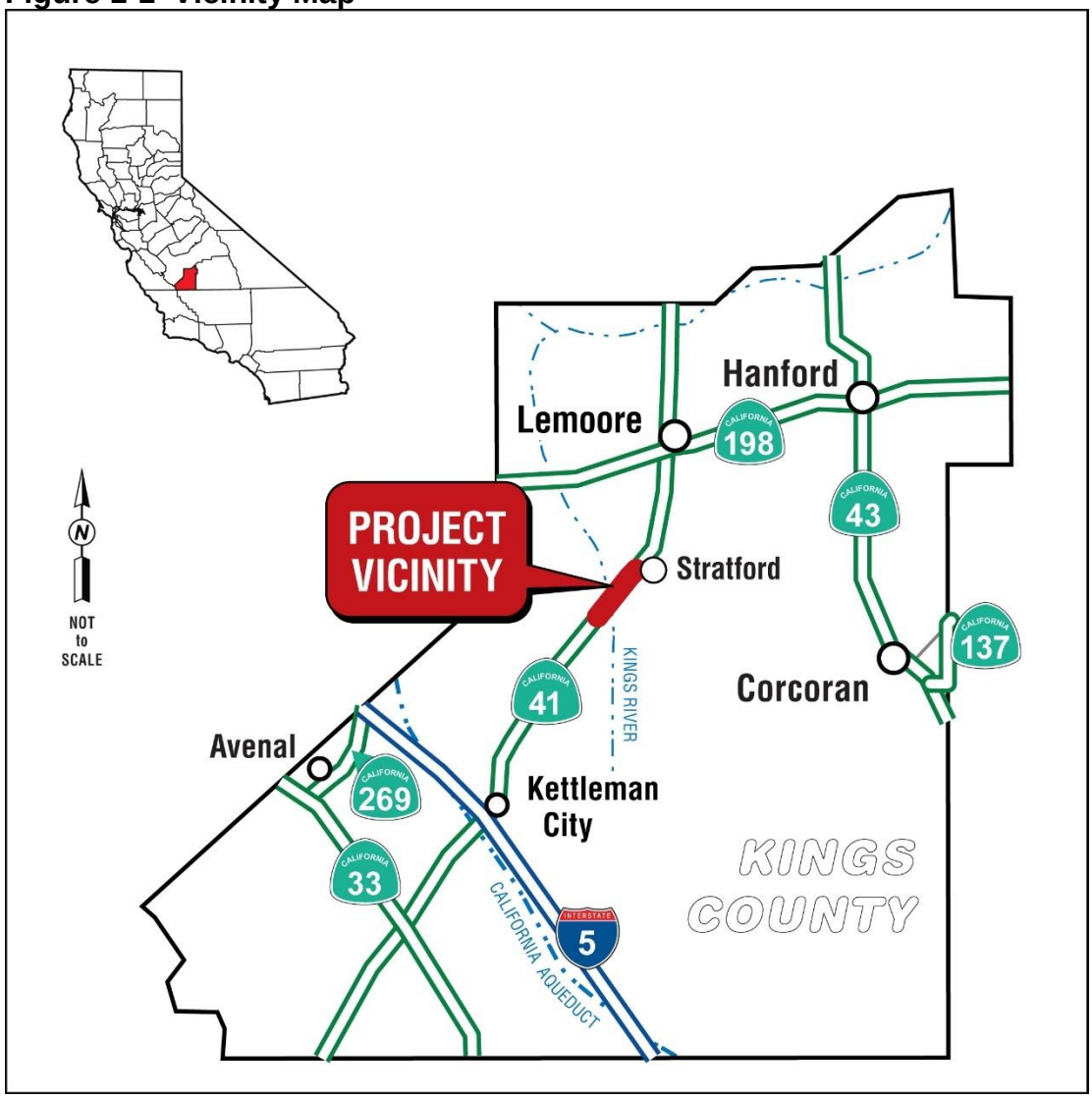


Figure 1-2 Location Map

1.4 Project Alternatives

A Build Alternative and a No-Build (No-Action) Alternative were considered.

1.4.1 Build Alternative

The Build Alternative will replace the Kings River Bridge with a new incremental precast slab bridge. Precast elements are fabricated offsite and then transported and erected into place at the project site. The alignment and centerline of the new bridge will match the existing bridge. The bridge will be about 330 feet long, 44 feet wide, with a depth of 4.5 feet. The new bridge will have eight spans with 2 feet diameter cast-in-steel-shell piles.

A temporary 50-foot-wide wooden trestle bridge will be built on the east side of the existing bridge. The wooden trestle bridge will be used to dismantle the old bridge and install the new bridge. The wooden trestle bridge will be built on the northeastern bank of the Kings River and end just before the southeastern bank to avoid impacting wetlands. Clean rocks will be placed on the eastern bank of the Kings River to support the start of the wooden trestle bridge, and piles would support the remaining portion of the wooden trestle bridge. Piles will be driven deep into the ground; no dewatering or water diversion will be required during construction. All piles and rocks associated with the wooden trestle bridge will be removed at the end of construction.

During construction, State Route 41 will be temporarily closed, and traffic will be redirected onto an estimated 32-mile-long detour. Traffic heading south from Fresno will turn onto State Route 198 heading west, then south onto Avenal Cutoff Road. From Avenal Cutoff Road, traffic will head north on State Route 269, then south on Interstate 5 back to State Route 41 at Kettleman City. Traffic heading north from Paso Robles will take the reverse course to get back onto State Route 41 north of Stratford.

To manage traffic flows, portable traffic signals will be required at the intersections of State Route 269 and Avenal Cutoff Road, and the intersection at the northbound off-ramp of Interstate 5. Staging will occur on the east side of the Kings River Bridge and the northeastern and southeastern corners of State Route 41.

No new right-of-way will be required, but temporary construction easements for the wooden trestle bridge and staging will be required.

Project construction is estimated to take 200 working days and is expected to cost $15,550,000.

This Build Alternative was proposed after a value analysis study was conducted in April 2019. The purpose of the value analysis study was to identify further cost-saving alternatives for the project. This Build Alternative was selected for study due to several factors, including cost, construction time, public safety, and environmental concerns.

The Build Alternative before the value analysis study would have redirected traffic onto two county roads: Laurel Avenue and 22nd Avenue. Those county roads would have been repaved and widened to 12 feet from the centerline. Intersections entering and exiting the detour would have been widened to accommodate truck turning movement. This Build Alternative also proposed to build two temporary wooden trestle bridges to dismantle and build the new bridge.

This alternative was rejected after the value analysis study determined that construction along the Kings River would impact wetlands, which would

require long-term mitigation. The value analysis study also identified safety concerns that were not previously identified in the detour. Construction was estimated to cost $20,200,000.

The project contains several standardized project measures that are used on most, if not all, Caltrans projects. The measures were not developed in response to any specific environmental impact resulting from the project. These measures are addressed in more detail in the Environmental Consequences section in Chapter 2.

1.4.2 No-Build (No-Action) Alternative

The No-Build (No-Action) Alternative would not meet the purpose and need of the project because it would not address the continued deterioration and corrosion of the columns that support the bridge, or the bottom of the bridge's widened portions, which show signs of cracks.

1.5 Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Initial Study

Alternative 1A: This alternative would have removed the old bridge and built a new bridge at the same location. Traffic would have been detoured onto a temporary bridge that would have been built upstream of State Route 41. State Route 41 would have been temporarily realigned during construction.

Alternative 1A was eliminated from further discussion because of environmental impacts to riparian, wetland, and streambed alterations. This alternative would have required buying properties for temporary realignment of State Route 41 and the temporary bridge. This alternative was expected to cost $17,750,000 when it was in development in 2017.

Alternative 2A: This alternative would have removed the old bridge and built a new bridge at the same location. Traffic would have been detoured onto a temporary bridge that would have been built downstream of State Route 41. State Route 41 would have been temporarily realigned during construction.

Alternative 2A was eliminated from further discussion because of environmental impacts to riparian, wetland, and streambed alterations. Alternative 1B would have required buying properties for temporary realignment of State Route 41 and the temporary bridge. This alternative was expected to cost $17,750,000 when it was in development in 2017.

1.6 Permits and Approvals Needed

Table 1.1 lists the following permits, licenses, agreements, and certifications required for project construction.

Table 1.1 Permits, Licenses, Agreements, and Certifications

Agency	Permit/Approval	Status
California Regional Water Quality Control Boards	Clean Water Act Section 401 Water Quality Certification	To be obtained during the project's final design phase.
U.S. Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the U.S.	To be obtained during the project's final design phase.
U.S. Army Corps of Engineers	Section 408—Permit for alteration of U.S. Army Corps of Engineers Civil Works Project	To be obtained during the project's final design phase.
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	To be obtained during the project's final design phase.
California Department of Fish and Wildlife	Section 2081 Incidental Take Permit (Swainson's hawk)	To be obtained during the project's final design phase.
California Department of Fish and Wildlife	Section 2081 Incidental Take Permit (tricolored blackbird)	To be obtained during the project's final design phase.
Central Valley Flood Protection Board	Encroachment Permit	To be obtained during the project's final design phase.

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

As part of the scoping and environmental analysis done for the project, the following environmental issues were considered, but no adverse impacts were identified. There is no further discussion of these issues in the document.

- Existing and Future Land Use—The project will replace an outdated bridge and will not cause any future land use changes. Existing land use in the surrounding area is mainly agricultural, with some mixed rural residential and commercial. The project is consistent with land use plans. According to the 2035 Kings County General Plan, land use at the project area and detour is categorized as agricultural open space. Stratford is just north of the project area and is categorized as a community district. (https://www.countyofkings.com/home/showdocument?id=15995)
- Consistency with State, Regional, and Local Plans and Programs—The project is consistent with state, regional, and local land use plans, and is referenced in the Kings County Association of Governments' 2018 Regional Transportation Plan.
- Coastal Zone—The project is not near the coastal zone.
- Wild and Scenic Rivers—This portion of the Kings River within and near the project area is not designated as a wild and scenic river. (National Wild and Scenic Rivers System website http://www.rivers.gov/california.php)
- Parks and Recreational Facilities—There are no parks or recreational facilities near or within the project area. (Field Visit, October 8, 2018)
- Farmlands/Timberland—No farmlands will be impacted during construction or on the detour. No timberlands are in the project area.
- Growth—The project will not cause growth because the new bridge will have the same number of lanes as the existing bridge and will not increase capacity.
- Community Impacts—Caltrans' Relocation Assistance Program is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations Part 24. All relocation services and benefits are administered without regard to race, color, national origin, persons

with disabilities, religion, age, or sex. Please see Appendix A for a copy of Caltrans' Title VI Policy Statement. The project will not disrupt the community character or cohesion or cause any homes or businesses to relocate because the project will replace a bridge about 0.7 mile southwest from Stratford. According to the Stratford Community Plan, the community maintains a small rural town atmosphere with a centrally located commercial core along Main Street and Laurel Avenue. (https://www.countyofkings.com/home/showdocument?id=13511)

- Environmental Justice—No minority or low-income populations were identified in the project area. No minority or low-income populations will be adversely affected by the project. The project is not subject to provisions of Executive Order 12898.
- Visual/Aesthetics—The project limits are not within California's State Scenic Highway System. The new bridge will have a "see-through-type" barrier with steel railing to allow highway users to view the Kings River below. Any vegetation removed during construction will require revegetation. (Visual Impact Assessment, August 15, 2019)
- Cultural Resources—No locations of sensitivity for cultural resources were identified in the project area. The project would not affect cultural resources on the Kings River or the estimated 32-mile-long detour. If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be stopped in that area until a qualified archaeologist can assess the significance of the find. (Historic Property Survey Report, June 3, 2019, Supplemental Historic Property Survey Report, November 2019, State Office of Historic Preservation letter of concurrence July 2, 2019.
- Geology and Soils—No known faults exist within the project site, but the project site is in a region where relatively moderate seismic activity could occur. Most of the upper soils in the South Fork Kings River are mainly clay and will not be affected by seismic disturbances. The likelihood of soil liquefaction occurring in the project area is low, with little to no sign of seismically induced settlement. (Foundation Report, September 2015)
- Paleontology—Excavation during construction is unlikely to encounter scientifically significant paleontological resources. (Paleontological Identification Report, October 24, 2019)
- Air Quality—The project will not cause any operational effects on air pollutants. The project is free from conformity requirements under 40 Code of Federal Regulations Section 93.126 because no additional lanes will be built for the new bridge. (Air Quality Compliance Memorandum, November 12, 2019)
- Energy—The project will replace an existing bridge with a new bridge. The project will not add roadway capacity or change the flow of traffic after

construction. The level of service is currently rated A—free flow—on this portion of State Route 41, as shown in Section 2.1.2 of the document.

- Wildfire—The Stratford Kings River Bridge and the detour are not within a high fire hazard severity zone, according to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zones in State Responsibility Area mapping. (https://osfm.fire.ca.gov/media/6690/fhszs_map16.pdf)

2.1 Human Environment

2.1.1 Utilities and Emergency Services

Affected Environment

Utilities identified at the Stratford Kings River Bridge (Number 45-0007) are the Blakeley Canal and the Tulare Lake Canal. Both canals are owned and operated by the Kings River Conservation District. No other utilities were identified along the project area of the bridge.

The closest emergency services provider to the project area is the Kings County Fire Department Station 10, which is about 0.7 mile away in Stratford. The station provides emergency medical and fire response services to Stratford and the surrounding area.

The Kings County Sheriff's Office, which was notified of the project on October 15, 2019, patrols Stratford. The California Highway Patrol handles traffic enforcement on State Route 41. American Ambulance, which is about 15 miles northeast in the city of Hanford, is the main ambulance service provider for the project area.

The Kings County Fire Department, the Kings County Sheriff's Office, and the Kings County Office of Emergency Management were notified of the project, as described in Chapter 4 Comments and Coordination.

Environmental Consequences

During construction, the Kings River Conservation District will have access to both canals to conduct emergency repairs to the embankments.

Mainline traffic on State Route 41 will be redirected onto an estimated 32-mile detour during construction, as shown in the location map in Figure 1-2 in Section 1.3 of the document.

The project will temporarily impact emergency services, law enforcement, and public transportation during construction. Though the project will cause temporary traffic delays, emergency services and Stratford residents could drive around construction using local county roads.

Avoidance, Minimization, and/or Mitigation Measures

A traffic management plan will be developed to minimize delays and maximize safety for motorists. The traffic management plan will include, but will not be limited to, the following:

- The Caltrans Public Information Office will communicate information to the public.
- The Construction Zone Enhanced Enforcement Program will be used, and the California Highway Patrol will assist and manage traffic onto the detour.
- Local and emergency services will be able to drive around the Kings River Bridge using local county roads.

2.1.2 Traffic and Transportation/Pedestrian and Bicycle Facilities

Affected Environment

Caltrans reported traffic volume data for air quality analysis in September 2019. Traffic volume data were collected on State Route 41 near the Stratford Kings River Bridge (Number 45-0007) and each road segment of the detour. Segments of the detour include 3.9 miles on State Route 198, 18.6 miles on Avenal Cutoff Road, and about 10 miles on Interstate 5. Traffic count data were collected during the morning and evening peak periods of traffic for both directions of travel. Traffic counts were collected in 2018 and were used to calculate the average daily traffic count for the 2022 construction year and 20 years after the completion of the project in 2042. For the detour, traffic counts were collected in 2018 and were used to determine the average daily traffic count during construction in 2022.

In addition to traffic counts, Caltrans determined the level of service, which is used to determine roadway conditions. Letters classify each level, from “A” to “F.” Levels of service “A” and “B” are considered the best road conditions with no delays. Levels of service “C” and “D” are considered road conditions with minimal delays. Levels of service “E” and “F” are considered road conditions with significant delays.

No bicycle or pedestrian studies were conducted due to the rural location of the project.

Environmental Consequences

The average daily traffic count recorded on State Route 41 near the Stratford Kings River Bridge was estimated to be 9,800 in 2018. During construction in 2022, State Route 41 would be closed, but it was estimated that the average daily traffic count would be 10,800. The estimated average daily traffic count for the construction year 2022 was used to determine the average daily traffic count on the detour.

The average daily traffic count on the detour portion of State Route 198 was estimated to be 21,600 in 2018. The average daily traffic count on the detour portion of State Route 198 during construction is estimated to be 30,500 in 2022. The level of service on State Route 198 is rated “A” for morning and evening peak periods of travel and is estimated to be rated “A” during construction in 2022.

The average daily traffic count on Avenal Cutoff Road was estimated to be 7,900 in 2018 and is estimated to be 16,600 in 2022 during construction. The level of service on Avenal Cutoff Road is rated “A” for both morning and evening peak periods of travel. The level of service with the detour traffic during construction would be rated “F” for both morning and evening peak periods of travel.

The average daily traffic count on Interstate 5 was estimated to be 40,000 in 2018 and is estimated to increase to 50,100 in 2022. The level of service on Interstate 5 is currently rated “B” during morning peak periods of travel and rated “C” for evening peak periods of travel. The level of service in 2022 is estimated to be rated “C” during morning peak periods of travel and is estimated to be rated “D” during evening peak periods of travel.

The level of service on State Route 41 near the Stratford Kings River Bridge was rated “A” for both morning and evening peak periods of travel in 2018. In 20 years, the level of service is estimated to be rated “E” for morning peak periods of travel and “C” for evening peak periods of travel.

Avoidance, Minimization, and/or Mitigation Measures

A traffic management plan will be developed to minimize delays and maximize safety for motorists. The traffic management plan will include but will not be limited to the following:

- Information will be provided through brochures, mailers, and a website by the Caltrans Public Information Office.
- The Construction Zone Enhanced Enforcement Program will be used, and the California Highway Patrol will assist and manage traffic onto the detour.
- To manage traffic flows, temporary traffic signals will be required at the intersections of State Route 269, Avenal Cutoff Road, and the intersection at the northbound off-ramp of Interstate 5.

2.2 Physical Environment

2.2.1 Hydrology and Floodplain

Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only viable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 Code of Federal Regulations 650 Subpart A.

To comply, the following must be analyzed:

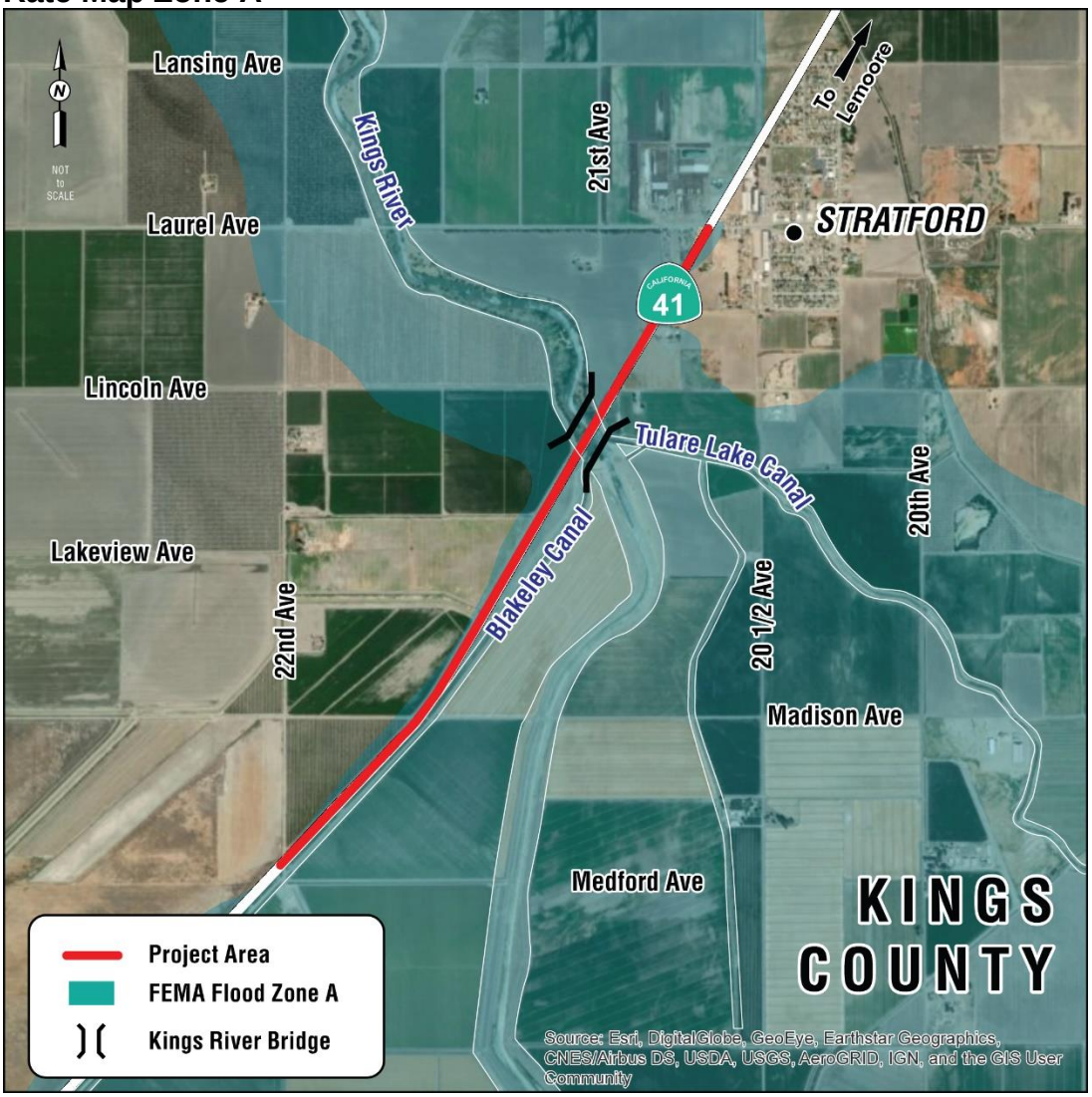
- The practicability of alternatives to any longitudinal encroachments.
- Risks of the action.
- Impacts on natural and beneficial floodplain values.
- Support of incompatible floodplain development.
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values affected by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a 1 percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

Affected Environment

A location hydraulic study was completed on October 30, 2019. The project area is within the 100-year floodplain and designated as Zone A. See the Federal Emergency Management Agency Flood Insurance Rate Map Zone A in Figure 2-1. This zone is expected to flood during the 100-year flood; no flood elevations have been determined. The Stratford Kings River Bridge is higher than the roadway and has no history of being overtopped—water rising over the top of a barrier built to hold it back.

Figure 2-1 Federal Emergency Management Agency Flood Insurance Rate Map Zone A



Environmental Consequences

The risk of the project being within the 100-year floodplain will be considered low after construction. The 100-year stormwater surface elevation is approximately 187.13 feet for the existing bridge and the proposed bridge. The elevation for the bottom of the existing bridge is 195.15 feet; the elevation for the bottom of the proposed bridge is 195.94 feet. During construction, a temporary wooden trestle bridge will be used to minimize the impact to water flow. The proposed bridge will not significantly impact the South Fork Kings River because it will have fewer piers in the water. The distance between the waterline and the bottom of the proposed bridge will be approximately 8.02 feet, which meets the minimum freeboard distance.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are expected for hydrology and floodplain.

2.2.2 Water Quality and Stormwater Runoff

Regulatory Setting

Federal Requirements: Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act to say that discharging pollutants to waters of the U.S. from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System permit. [A point source is any discrete conveyance such as a pipe or a human-made ditch.] This act and its changes are known today as the Clean Water Act. Congress has changed the act several times. In 1987, Congress changed the act again by stating that discharging stormwater from municipal and industrial/construction point sources must comply with the National Pollutant Discharge Elimination System permit system. The following are important Clean Water Act Sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant who is seeking a federal license or a permit to conduct an activity that may result in a discharge to waters of the U.S. to obtain certification from the state stating that the discharge would comply with other provisions of the act. This is most often required together with a Section 404 permit request.
- Section 402 establishes the National Pollutant Discharge Elimination System, a permitting system for the discharges—except for dredge or fill material—of any pollutant into waters of the U.S. The Regional Water Quality Control Boards manage this permitting program in California. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and municipal storm sewer systems.
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is managed by the U.S. Army Corps of Engineers.

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

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

Usually, projects that do not meet the criteria for a Regional or a Nationwide permit may be permitted under one of two U.S. Army Corps of Engineers' Individual permits: Standard and Letters of Permission. The U.S. Army Corps of Engineers' decision to approve an Individual permit is based on compliance with the U.S. Environmental Protection Agency's Section 404(b)(1) Guidelines (40 Code of Federal Regulations Part 230), and whether approving the permit is in the public's best interest. The Section 404(b)(1) Guidelines, which were developed by the U.S. Environmental Protection Agency with the U.S. Army Corps of Engineers, allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative that would have less adverse effects.

The guidelines state that the U.S. Army Corps of Engineers may not issue a permit if there is a least environmentally damaging practicable alternative to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the guidelines, documentation stating that a sequence of avoidance, minimization, and compensation measures has been followed, in that order, is needed. The guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. [The U.S. Environmental Protection Agency defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."]

Every permit from the U.S. Army Corps of Engineers—even if not subject to the Section 404(b)(1) Guidelines—must meet general requirements (see 33 Code of Federal Regulations 320.4). A discussion of the least environmentally damaging practicable alternative determination, if any for the document, is included in the Wetlands and Other Waters Section.

State Requirements: Porter-Cologne Water Quality Control Act

California's Porter-Cologne Water Quality Control Act, which became law in 1969, provides the legal basis for water quality regulation within California. The act requires a Report of Waste Discharge for any discharge of waste—liquid, solid, or gaseous—to land or surface waters that may impair beneficial uses for the state's surface and/or groundwater. The Porter-Cologne Water Quality Control Act, which became law before the Clean Water Act, regulates discharges to waters of the State. Waters of the State include more than just waters of the U.S. Groundwater and surface water are not considered waters of the U.S. Additionally, the Porter-Cologne Water Quality Control Act prohibits discharges of "waste." Discharges under the act are allowed by the Waste Discharge Requirements and may be required even when the discharge is already allowed or exempt under the Clean Water Act.

The State Water Resources Control Board and the Regional Water Quality Control Boards are responsible for establishing the water quality standards

(objectives and beneficial uses) required by the Clean Water Act. They are also responsible for regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the appropriate Regional Water Quality Control Board Basin Plan. California's Nine Regional Water Quality Control Boards classify beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. The water quality standards developed for water segments are based on their classified use.

The State Water Resources Control Board identifies waters that fail to meet standards for specific pollutants. These waters are then state listed in accordance with the Clean Water Act Section 303 (d). If a state determines that waters are impaired for one or more citizens and the standards cannot be met through point source or nonpoint source controls—National Pollutant Discharge Elimination System permits or Waste Discharge Requirements—the Clean Water Act requires the establishment of Total Maximum Daily Loads. Total Maximum Daily Loads specify allowable pollutant loads from all sources—point, nonpoint, and natural—for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The State Water Resources Control Board manages water rights, sets water pollution control policy, and issues water board orders on matters of statewide application. It also oversees water quality functions throughout the state by approving Basin Plans, Total Maximum Daily Loads, and National Pollutant Discharge Elimination System permits. Regional Water Quality Control Boards are responsible for protecting beneficial uses of water resources within their regional jurisdictions. They all use planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System Program

Municipal Separate Storm Sewer Systems

Section 402 (p) of the Clean Water Act requires the issuance of National Pollutant Discharge Elimination System permits for five categories of stormwater discharges, including Municipal Separate Storm Sewer Systems. A Municipal Separate Storm Sewer System is defined as "any conveyance or system of conveyances—roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains—owned or operated by a state, city, town, county, or other public body having jurisdiction over stormwater, that is designed or used for collecting or conveying stormwater."

The State Water Resources Control Board has found Caltrans as an owner and operator of Municipal Separate Storm Sewer Systems under federal regulations. Caltrans' Municipal Separate Storm Sewer Systems permit covers all of its rights-of-way, properties, facilities, and activities in the state.

The State Water Resources Control Board or the Regional Water Quality Control Boards issue National Pollutant Discharge Elimination System permits for 5 years. Permit requirements stay active until a new permit has been adopted.

Caltrans' Municipal Separate Storm Sewer Systems permit, Order Number 2012-0011-DWQ—(adopted on September 19, 2012, and effective on July 1, 2013), as amended by Order Number 2014-0006-EXEC (effective January 17, 2014), Order Number 2014-0077-DWQ (effective May 20, 2014), and Order Number 2015-0036-EXEC (conformed and effective April 7, 2015)—has three basic requirements:

- Caltrans must follow the requirements of the Construction General Permit;
- Caltrans must use a year-round program in all parts of the state to effectively control stormwater and non-stormwater discharges; and
- Caltrans' stormwater discharges must meet water quality standards by using permanent and temporary construction Best Management Practices to the maximum extent practicable. Caltrans' stormwater discharges must also meet other measures the State Water Resources Control Board considers necessary to meet the water quality standards.

Caltrans developed the Statewide Stormwater Management Plan to address stormwater pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The plan assigns responsibilities within Caltrans to use stormwater management procedures and practices as well as training, public education, participation, monitoring and research, program evaluation, and reporting activities.

The Statewide Stormwater Management Plan describes the minimum procedures and practices Caltrans uses to reduce pollutants in stormwater and non-stormwater discharges. It outlines procedures and responsibilities for protecting water quality, including selecting and using Caltrans' Best Management Practices. The project would be programmed to follow the guidelines and procedures outlined in the latest Statewide Stormwater Management Plan to address stormwater runoff.

Construction General Permit

Construction General Permit, Order Number 2009-0009-DWQ (adopted on September 2, 2009, and effective on July 1, 2010), as amended by Order Number 2010-0014-DWQ (effective February 14, 2011), and Order Number 2012-0006-DWQ (effective on July 17, 2012).

The Construction General Permit regulates stormwater discharges from construction sites that result in a disturbed soil area of 1 acre or greater. The permit also regulates stormwater discharges from smaller sites that are part of a larger common plan of development. By law, all stormwater discharges associated with construction activities where clearing, grading, and

excavating result in soil disturbance of at least 1 acre must follow the provisions of the Construction General Permit. Construction activities that cause soil disturbance of less than 1 acre are subject to the Construction General Permit if the Regional Water Quality Control Boards determine that the activity could significantly impair water quality.

Operators of regulated construction sites are required to develop Stormwater Pollution Prevention Plans, to use sediment, erosion, and pollution prevention control measures, and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into risk levels 1, 2, and 3. Risk levels are determined during the planning and designing phases of a project and are based on potential erosion and transport to receiving waters. Requirements apply according to the risk level determined. For example, a risk level 3 (highest risk) project would need mandatory stormwater runoff, potential hydrogen (also known as pH) and turbidity monitoring, and aquatic biological assessments before and after construction during specified seasonal windows. For projects subject to the Construction General Permit, applicants must develop and use an effective Stormwater Pollution Prevention Plan. Per Caltrans' Statewide Stormwater Management Plan and Standard Specifications, a Water Pollution Control Program is necessary for projects with a disturbed soil area less than 1 acre.

Section 401 Permitting

Under Section 401 of the Clean Water Act, projects that need a federal license or a permit that may result in a discharge to waters of the U.S. must obtain a 401 certification, which confirms that the project will follow state water quality standards. The most common federal permits that trigger a 401 certification are Clean Water Act Section 404 permits issued by the U.S. Army Corps of Engineers. The 401 permit certifications, which are obtained from Regional Water Quality Control Boards, are dependent on a project's location and are required before the U.S. Army Corps of Engineers issues a 404 permit.

In some cases, Regional Water Quality Control Boards may have specific concerns with discharges associated with a project. As a result, Regional Water Quality Control Boards may issue a set of requirements—known as Waste Discharge Requirements under the state water code (Porter-Cologne Water Quality Control Act)—that define activities. The requirements that must be used to protect or benefit water quality include setting effluent limitations, including specific features, and monitoring and planning submittals. Waste Discharge Requirements can be issued to address permanent and temporary discharges of a project.

Affected Environment

A water quality assessment report was completed on December 12, 2018. The Stratford Kings River Bridge (Number 45-0007) on State Route 41 was built on the South Fork Kings River about 0.7 mile southwest of Stratford. The project is near Tulare Lake, which was once the largest freshwater lake west of the Mississippi River.

The Kings River is divided into two sections. One section is the “upper river,” which runs from Pine Flat to State Route 99; the second section is the “lower river,” which runs from State Route 99 to the North Fork Kings River and the South Fork Kings River. Water is typically present in the upper river year-round; the lower river receives water during irrigation deliveries or flood releases.

The South Fork Kings River is one of the main tributaries to Tulare Lake. It flows south through Kings County, past Stratford, and approaches the Tulare Lake bed from the north. The Kings River is controlled by two flood control points—Empire Weir Numbers 1 and 2. Empire Weir Number 1 is west of Lemoore and forms a large pool for diversions into the area near Stratford. For about 4 miles below Empire Weir Number 1, the river curves southerly, with high groundwater ensuring that the pools are filled.

Empire Weir Number 2 pulls water and diverts it into Tulare Lake, South Fork Kings River, and the Blakeley Canal.

Environmental Consequences

Short-term water quality impacts are expected during construction activities over the South Fork Kings River. Installing bridge piles and the temporary wooden trestle bridge will contribute to short-term water quality impacts.

The project will be required to obtain regulatory permits as part of the project approval process. Potential impacts to the South Fork Kings River streambed and associated riparian habitat will require a Section 1600 Streambed Alteration Agreement before construction. In addition, a Water Quality Certification (Section 401) and a Nationwide permit for waters of the U.S. (404) will be obtained before construction. Coordination with the California Department of Fish and Wildlife, the Central Valley Regional Water Quality Control Board, and the U.S. Army Corps of Engineers will be necessary to secure these permits. The Caltrans Statewide National Pollution Discharge Elimination System Construction General Permit and a Stormwater Pollution Prevention Plan will be implemented as part of the General Construction Permit requirements. Lastly, mitigation measures and Caltrans’ Best Management Practices will be used to reduce short-term water quality impacts during construction.

Long-term water quality impacts are not expected after the project is completed. Changes in stormwater drainage usually cause long-term water quality impacts. The project will not change the stormwater drainage pattern.

Avoidance, Minimization, and/or Mitigation Measures

In addition to the measures listed in Section 2.3.2, Wetlands and Other Waters, the following measures will be required to minimize potential water quality impacts associated with construction and operation.

- Implement the Caltrans Statewide National Pollution Discharge Elimination System Stormwater permit and stormwater Best Management Practices to prevent and reduce impacts during construction.
- Prepare and use a Stormwater Pollution Prevention Plan before construction. The contractor will prepare the plan before Caltrans approves it.

2.2.3 Hazardous Waste and Materials

Regulatory Setting

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

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

- Community Environmental Response Facilitation Act
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

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

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

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

Affected Environment

An Initial Site Assessment was completed on September 6, 2019.

Preliminary site investigations were conducted to evaluate the potential presence of aerially deposited lead in February 2001. An additional survey for asbestos-containing materials and lead-containing paint was conducted at the Stratford Kings River Bridge (45-0007) in May 2019.

During the aerially deposited lead survey, an elevated concentration of lead was detected within the project area. Based on the concentration of lead, soils in the project area will be considered regulated waste and could pose a health risk to workers engaged in soil-disturbing activities.

Six bulk samples of concrete and asphalt around the project area were collected to evaluate for asbestos-containing material. All six samples tested negative for asbestos-containing material.

The sidewalls of the Stratford Kings River Bridge and parts of the bridge’s structure are coated in tan graffiti abatement paint. Lead was detected in one of four samples collected and tested for lead-containing paint.

Environmental Consequences

Aerially deposited lead has been detected in the soil throughout the project area. The concentration of lead found during the survey could pose a health

risk during soil-disturbing activities. To minimize exposure to construction workers, Caltrans' Standard Specifications and Standard Special Provisions will be used, and a lead compliance plan will be required during construction.

Aerially deposited lead that came from leaded gasoline exists along roadways throughout California. The aerially deposited lead agreement between Caltrans and the California Department of Toxic Substances Control will manage soil that has elevated concentrations of aerially deposited lead on the State Highway System right-of-way within the project limits. This aerially deposited lead agreement allows such soils to be safely reused within the project limits if all requirements of the aerially deposited lead agreement are met.

The concentration of lead in the tan graffiti abatement paint will not be classified as a California or federal hazardous waste. Because one of the samples of paint has lead, it will be subjected to the California Occupational Safety and Health Act. The act will require training for all workers who may be exposed during construction activities.

The National Emission Standards for Hazardous Air Pollutants (Environmental Protection Agency regulation) require that written notification be provided to the San Joaquin Valley Air Pollution Control District at least 10 days before any bridge demolition occurs whether asbestos is present or not.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are expected for hazardous waste and materials.

2.2.4 Noise

Regulatory Setting

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

California Environmental Quality Act

CEQA requires a strict baseline versus a build analysis to determine whether a proposed project would have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be included in the project unless those measures are not feasible.

The rest of this section will focus on the NEPA/23 Code of Federal Regulations Part 772 (23 Code of Federal Regulations 772) noise analysis;

see Chapter 3 of this document for further information on noise analysis under CEQA.

National Environmental Policy Act and 23 Code of Federal Regulations 772

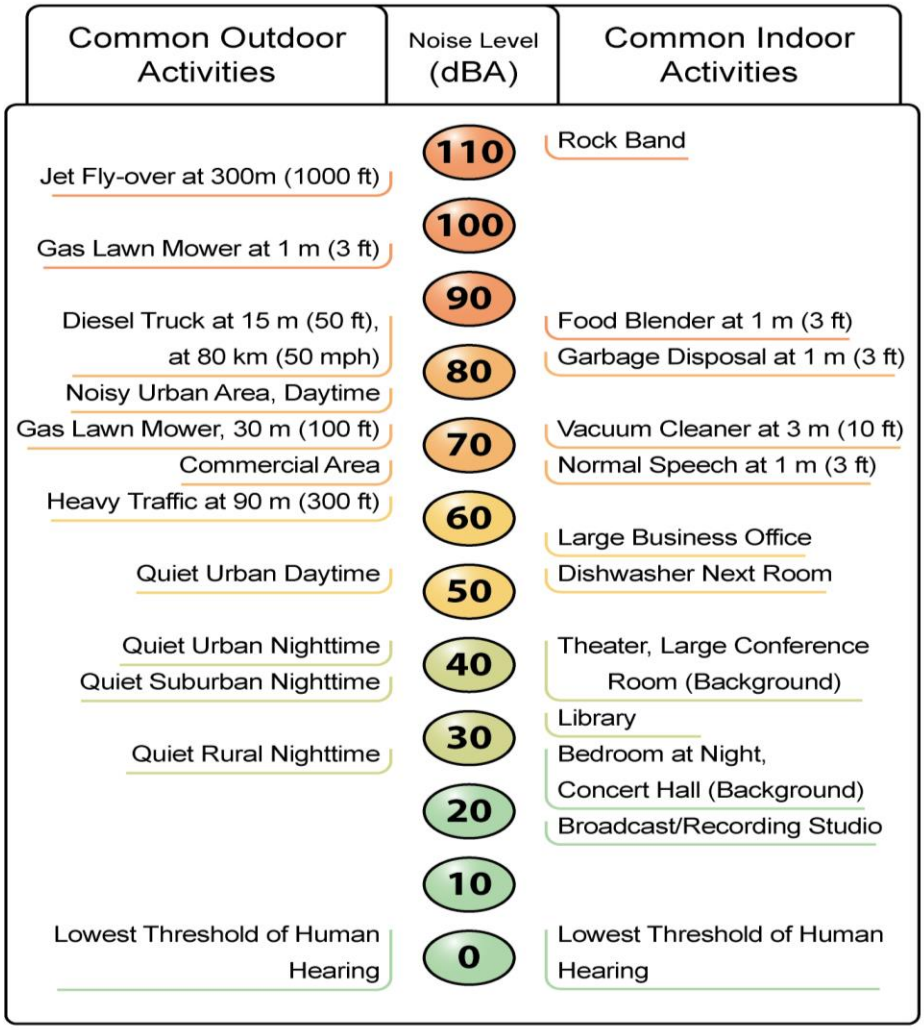
For highway transportation projects with Federal Highway Administration involvement (and Caltrans, as assigned), the Federal-Aid Highway Act and the regulations it applies (23 Code of Federal Regulations 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and designing phases of a highway project. The regulations include noise abatement criteria that are used to determine when a noise impact would occur. The noise abatement criteria differ depending on the type of land use that is under analysis. For example, the noise abatement criteria for homes (67 A-weighted decibels) is lower than the noise abatement criteria for commercial areas (72 A-weighted decibels). The following table lists the noise abatement criteria for use in the NEPA/23 Code of Federal Regulations 772 analysis. In the table, Activity Categories B and C include undeveloped lands allowed.

Table 2.1 Noise Abatement Criteria

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

Figure 2-2 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise levels discussed in this section with common activities.

Figure 2-2 Noise Levels of Common Activities



According to Caltrans' August 2006 and May 2011 Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, a noise impact occurs when the predicted future noise level with a project substantially exceeds the existing noise level—defined as a 12 A-weighted decibel or more—or when the future noise level with a project approaches or exceeds the noise abatement criteria. Approaching the noise abatement criteria is defined as coming within 1 A-weighted decibel.

If it is determined that the project would have noise impacts, potential noise abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are included in the project plans and specifications. This document discusses noise abatement measures that would likely be included in the project.

Caltrans' Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise

abatement is an engineering concern. A minimum of a 5 A-weighted decibel reduction for all projects affected in the future must be achieved for an abatement to be considered feasible.

Other considerations include topography, access requirements, other noise sources, and safety. A noise reduction of at least 7 A-weighted decibels must be achieved at one or more benefited receptors—areas people often use—for an abatement measure to be considered reasonable. The reasonableness determination is a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include residents' acceptance and the cost per benefited residence.

Affected Environment

A Noise Compliance Memorandum was completed in October 2019. Noise measurements were taken around the South Fork Kings River and along the detour to identify receptors. The surrounding land use along the project area is mainly agricultural land, with a few homes scattered in between the farmlands. No receptors were identified around the project area along the South Fork Kings River. Four homes along Avenal Cutoff Road were identified as potential receptors because they are close to the road.

Environmental Consequences

The project is not considered a Type 1 project because no through traffic lanes will be added, and the existing roadway will not be physically changed.

Existing noise levels were collected at the four homes along Avenal Cutoff Road to determine if noise abatement will be required. Noise levels were collected during morning and evening peak periods of travel. Exterior noise levels for residential areas must be 67 A-weighted decibels according to the noise abatement criteria in Table 2.1. The existing noise level at the first home on Gale Avenue was estimated to be 72 A-weighted decibels. The existing noise level at the second home on Orange Avenue was 64 A-weighted decibels. The existing noise level at the third home on Avenal Cutoff Road was 71 A-weighted decibels. The existing noise level at the fourth home on Harvey Street was 71 A-weighted decibels.

Predicted noise levels, including noise generated by traffic on the detour, were estimated for the four homes. It is expected that predicted noise levels for each home will increase by 6 A-weighted decibels. The predicted noise levels are not substantial and will not exceed 12 A-weighted decibels. No long-term noise abatement measures are being proposed for the four homes because the detour will only last until the new bridge is complete. Though long-term noise abatement measures are not expected for the project area or the detour, it is recommended that the homeowners are informed of the project before construction starts.

Avoidance, Minimization, and/or Noise Abatement Measures

No avoidance, minimization, and/or noise abatement measures are expected.

2.3 Biological Environment

The action area for biological resources covers all the areas that could be directly or indirectly affected by the project, including the project footprint, nearby areas subject to indirect effects, and any additional staging areas not included in the project footprint.

2.3.1 Natural Communities

This section of the document discusses natural communities of concern and focuses on biological communities. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation can potentially divide sensitive habitat and lessen its biological value.

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

Affected Environment

A Natural Environment Study was completed in September 2019. An updated Natural Environmental Study was completed March 2020.

The project's action area is approximately 386.89 acres. The action area encompasses all areas that could be affected (directly or indirectly) by the implementation of the project. This includes a 500-foot study area around the Stratford Kings River Bridge (Number 45-0007), the estimated 32-mile detour, and the surrounding Caltrans right-of-way. The action area is mainly dominated by agriculture, such as irrigated row crops, field crops, and dryland grain crops.

Valley Sink Scrub

Valley sink scrub lies in the project detour area south of the Avenal Cutoff Road and the State Route 269 intersection. This habitat generally occurs at lower to middle elevations in the San Joaquin Valley and overlaps with perennial grassland. Valley sink scrub habitat next to the detour was seen to be less disturbed and more suitable for special-status species. The landscape fades into valley grassland habitat as it moves south.

Valley-Foothill Riparian Habitat

Valley-foothill riparian habitat was identified within the project area. This habitat is usually dominated by winter-deciduous trees with an understory shrub layer. Trees found within the project area include black willow, Fremont's cottonwood, and red willow. The California blackberry and the Hind's willow were also present. Grasses and forbs were also identified, including the Himalayan blackberry, the bur chervil, the spiny sowthistle, the London rocket, the lamb's quarters, the peppergrass, and the puncture vine. This habitat type is found within the project area and falls under the jurisdiction of the California Department of Fish and Wildlife.

Environmental Consequences

Valley sink scrub lies in the project detour area south of the Avenal Cutoff Road and the State Route 269 intersection. No work will occur off the pavement at the detour location. Portable changeable message signs will be temporarily installed off the pavement in disturbed areas to direct traffic. No project impacts are expected for valley sink scrub.

Valley-foothill riparian habitat is present within the action area along the banks of the South Fork Kings River. This habitat is one of the few habitat types within the action area that supports several special-status species in the area. This habitat likely serves as a wildlife corridor through the intense agricultural activity and human disturbance in the area. The project is not expected to affect the habitat as a wildlife corridor after construction because the new bridge abutment would be placed about 8 feet farther offshore than the existing bridge allowing wildlife to move freely at the bridge.

Work on the Stratford Kings River Bridge will cause up to 8.43 acres of temporary impacts to valley-foothill riparian habitat. Temporary impacts will include vibrations, human foot traffic, equipment, vehicle access, and clearing and grubbing. Removing vegetation will be reduced to the minimal amount necessary to complete work.

Project construction will permanently impact up to 1 acre of valley-foothill riparian habitat. Permanent impacts will include clearing and grubbing, equipment traffic, tree removals, excavation, and grading; specifically, up to 22 mature trees will be removed for equipment access and operations during construction.

Caltrans has developed a suite of Best Management Practices that will be incorporated into the project design. Permits with the U.S. Army Corps of Engineers, the Central Valley Regional Water Quality Control Board, and the California Department of Fish and Wildlife are expected to be required to complete the project.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and/or mitigation measures will be used for the valley-foothill riparian habitat to minimize potential impacts associated with construction and operation:

- Pre-construction botanical surveys will be conducted no more than 30 days before construction starts.
- Temporary high visibility fencing will be installed to form an environmentally sensitive area to protect natural community habitats that occur outside of the project area.
- Where possible, work within the riverbed will be conducted during low-flow conditions or in dry conditions.
- Any foot traffic or equipment that cannot avoid passing over wetlands will do so only on wetland protection mats.
- Staging and storage areas must be outside of the habitat of all-natural communities.
- Vegetation removal will be reduced to the minimal amount necessary to complete work.

The following compensatory mitigation measure will be used for the valley-foothill riparian habitat.

- Any trees removed within the valley-foothill riparian habitat will be replaced based on their diameter at breast height. Heritage trees, which are 24 inches in diameter, will be replaced at a 10 to 1 ratio, and trees between 4 and 24 inches in diameter will be replaced at a 3 to 1 ratio. Any trees removed will be replaced based on permit requirements.

2.3.2 Wetlands and Other Waters

Regulatory Setting

Wetlands and other waters are protected under several laws and regulations. At the federal level, the Federal Water Pollution Control Act (also known as the Clean Water Act) (33 U.S. Code 1344), is the main law that regulates wetlands and surface waters. One purpose of the Clean Water Act is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over nontidal water bodies extend to the ordinary high-water mark in the absence of nearby wetlands. When nearby wetlands are present, the Clean Water Act's authority extends beyond the ordinary high-water mark to the limits of nearby wetlands. A three-parameter approach is used when classifying wetlands for the Clean Water Act. The approach includes hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils—soils formed during saturation and inundation.

All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

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

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

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

The executive order for the protection of wetlands (Executive Order 11990) also regulates the activities of federal agencies regarding wetlands. Executive Order 11990 states that a federal agency, such as the Federal Highway Administration and/or Caltrans, as assigned, cannot undertake or provide assistance for new construction in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction, and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Alternative Finding must be made.

At the state level, wetlands and other waters are regulated mainly by the State Water Resources Control Board, the Regional Water Quality Control Boards, and the California Department of Fish and Wildlife. In certain circumstances, the California Coastal Commission, the San Francisco Bay

Conservation and Development Commission, or the Tahoe Regional Planning Agency may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that would substantially divert or block the natural flow of, or substantially change the bed or bank of a river, stream, or lake to notify the California Department of Fish and Wildlife before starting construction. If the California Department of Fish and Wildlife determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement would be required. The California Department of Fish and Wildlife's jurisdictional limits are usually defined by the tops of stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the U.S. Army Corps of Engineers may or may not be included in the area covered by a Lake or Streambed Alteration Agreement obtained from the California Department of Fish and Wildlife.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Water Quality Control Act are allowed by the Waste Discharge Requirements and may be required even when the discharge is already allowed or exempt under the Clean Water Act. To comply with Section 401 of the Clean Water Act, the Regional Water Quality Control Boards also issue water quality certifications for activities that may cause a discharge to waters of the U.S. This is most often required together with a Section 404 permit request. See the water quality section for more details.

Affected Environment

A Natural Environment Study was completed in September 2019. An addendum to the Natural Environment Study was completed March 2020.

A wetland delineation and preliminary jurisdictional determinations were prepared in March 2019. A request for a preliminary jurisdictional determination was submitted to the U.S. Army Corps of Engineers on July 31, 2019. A preliminary jurisdictional determination was received from the U.S. Army Corps of Engineers on September 26, 2019. Early coordination with the Central Region of the California Department of Fish and Wildlife began on November 11, 2018.

Within the action area, the South Fork Kings River runs under the Stratford Kings River Bridge. South of the Stratford Bridge, the action area covers two irrigation canals: the Blakeley Canal and Tulare Lake Canal.

Fresh emergent wetlands and riverine habitat were identified within the action area of the South Fork Kings River and the two irrigation canals.

Fresh Emergent Wetlands

Fresh emergent wetlands are often or continually flooded by freshwater and are dominated by soft rushes, with patches of cattail, stinging nettle, flatsedge, and common tule. These wetlands occur along the banks of the South Fork Kings River and the Blakeley Canal and form the boundaries between riverine and valley-foothill riparian habitat on either side. Fresh emergent wetlands in the Central Valley have declined in size and number over the last century and remain threatened by water pollution and intensive management of waterways for agricultural use and development. It was determined that all fresh emergent wetlands within the action area are under the jurisdictions of the California Department of Fish and Wildlife and the U.S. Army Corps of Engineers.

Riverine Habitat

Riverine habitat is present in the South Fork Kings River, and in the diverted channels of the Blakeley Canal, and the Tulare Lake Canal. Riverine habitat is any intermittent or continuously running body of water. Rivers and streams provide habitat for numerous species such as insects, larvae, fishes, mollusks, crustaceans, and aquatic plants. Riverine habitats in the Central Valley have been changed and degraded over the last century. The South Fork Kings River, Blakeley Canal, and Tulare Lake Canal have experienced a reduction in the quality of riverine habitat. It was determined that the riverine habitat within the action area is under the jurisdictions of the California Department of Fish and Wildlife, the Regional Water Quality Control Board, and the U.S. Army Corps of Engineers.

Environmental Consequences

During construction, project work will avoid fresh emergent wetlands wherever possible. Access and staging will also avoid fresh emergent wetlands. The temporary wooden trestle bridge will end just before reaching the southwestern bank’s fresh emergent wetlands; expected impacts to fresh emergent wetlands will be temporary.

The project will temporarily impact up to 0.05 acre of fresh emergent wetlands during the construction of the bridge’s abutments. Temporary impacts are expected to be limited to incidental foot and equipment traffic over wetland protection mats, and during excavation for the bridge abutments. No permanent impacts to fresh emergent wetlands are anticipated.

Impacts on water quality within the riverine habitat will be reduced by using Caltrans’ Best Management Practices. Temporary impacts include trimming and removing vegetation on the banks on both sides of the river, removing piles during demolition, changing flow, sediment disturbance, vibratory impacts, and dewatering.

The project will temporarily impact up to 6 acres of riverine habitat from trestle and falsework installation, bridge demolition, and the replacement of the bridge. Impacts to water quality within the riverine habitat will be reduced by using Caltrans' Best Management Practices. Temporary impacts include trimming and removing vegetation on the banks on both sides of the river, removing piles during demolition, changing flow, sediment disturbance, vibratory impacts, and dewatering.

Installing bridge piles will permanently impact up to 0.003 acre of riverine habitat. If dewatering is required, a qualified biologist will be present to provide biological monitoring. If trees must be removed within the riverine habitat, the root ball must be left intact except where excavation is required.

Caltrans has developed a suite of Best Management Practices that would be incorporated into the project design. The project will also require a 1602 Lake or Streambed Alteration Agreement from the California Department of Fish and Wildlife, a Section 401 Water Quality Certification from the Regional Water Quality Control Board, a Section 404 Nationwide permit from the U.S. Army Corps of Engineers, and a Section 408 permit from the U.S. Army Corps of Engineers.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and/or mitigation measures will be used for fresh emergent wetlands and riverine habitat to minimize potential impacts associated with construction and operation:

- Any foot traffic or equipment that cannot avoid passing over wetlands will do so only on wetland protection mats.
- Pre-construction botanical surveys will be conducted no more than 30 days before construction starts.
- Temporary high visibility fencing will be installed to form an environmentally sensitive area to protect wetland and riverine habitats that occur outside of the project area.
- Where possible, work within the riverbed will be conducted during low-flow conditions or in dry conditions.
- Staging and storage areas must be outside of the habitat of fresh emergent wetland and riverine communities.
- Vegetation removal will be reduced to the minimal amount necessary to complete work.

The following avoidance, minimization, and/or mitigation measures would also be used for riverine habitat:

- All dewatering will be conducted with a qualified biologist present to provide biological monitoring.

- All tree removal will be done in such a manner that the root ball is left in place, and the soil is not removed, except where it is required by excavation.
- Project work will avoid the immediate shore of the South Fork Kings River wherever possible. If project work must take place on the shore, murky curtains will be used where appropriate to prevent the cloudiness or haziness of the river.

The following compensatory mitigation measures will be used for both fresh emergent wetlands and riverine habitat:

- Permanent impacts to fresh emergent wetlands will be mitigated for in acreage that is equal to permanent impacts through the purchase of conservation credits from the National Fish and Wildlife Foundation, or other in-lieu fee programs. Otherwise, the habitat will be established as part of a permittee-responsible mitigation project.
- Permanent impacts of up to 0.003 acre of riverine habitat will be mitigated in the form of conservation credits from the National Fish and Wildlife Foundation, or other in-lieu fee programs. Otherwise, the habitat will be established as part of a permittee-responsible mitigation project.

Wetlands Only Practicable Alternative Finding

This section is pursuant to Executive Order 11990, Protection of Wetlands. It has been added to the final environmental document.

Alternatives

When compared to building the project under Alternative 1A and Alternative 2A, the Build Alternative will impact the least amount of wetlands within the project area. Alternative 1A would have built a new bridge at the same location with a temporary detour bridge upstream of State Route 41; State Route 41 would have been temporarily realigned to the detour bridge during construction. Alternative 2A would have built a new bridge at the same location with a temporary detour bridge downstream of State Route 41; State Route 41 would have been temporarily realigned to the detour bridge during construction. The Build Alternative will build a new bridge at its current location and will detour traffic onto existing local roads during construction.

Alternative 1A would have impacted 0.06 acre of wetlands, and Alternative 2A would have impacted 0.22 acre of wetlands. The Build Alternative will impact 0.05 acre of wetlands. No impacts to wetlands would occur under the No-Build (No-Action) Alternative, but that alternative does not meet the purpose and need of the project.

Measures to Minimize Harm

The Build Alternative was designed to minimize impacts to wetlands within the project footprint. Best Management Practices and avoidance and

minimization measures will be implemented for the protection of wetlands. See the Avoidance, Minimization, and/or Mitigation section above and in Appendix C.

Finding

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

2.3.3 Plant Species

Regulatory Setting

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

This section of the document discusses all other special-status plant species, including the California Department of Fish and Wildlife’s species of special concern, the U.S. Fish and Wildlife Service’s candidate species, and the California Native Plant Society’s rare and endangered plants.

Regulatory requirements for the Federal Endangered Species Act can be found at 16 U.S. Code Section 1531, et seq. Also see 50 Code of Federal Regulations Part 402. Regulatory requirements for the California Endangered Species Act can be found at the California Fish and Game Code Section 2050, et seq. Caltrans’ projects are also subject to the Native Plant Protection Act, which can be found at the California Fish and Game Code Sections 1900-1913, and CEQA, which can be found at the California Public Resources Code Sections 21000-21177.

Affected Environment

A Natural Environment Study was completed for the project in September 2019. An updated Natural Environment Study was prepared March 2020.

Botanical surveys were conducted for the project in March, April, May, and June in 2018 and in April, May, and July in 2019. The following special-status

plant species were determined to have the potential to appear within the action area.

Vernal Barley

Vernal barley *(Hordeum intercedens)* is an annual grass found in coastal dunes, coastal shrubs, vernal pools, saline flats, alkaline grasslands, and depressions of valley and foothill grasslands. This plant species blooms from March to June and is found at elevations from 16 feet to 3,280 feet above sea level. Vernal barley has a California Rare Plant Rank of 3.2, meaning it is "fairly endangered in California," but for which "more information is needed." No records for vernal barley occur within 5 miles of the action area, and the nearest recorded occurrence dates to 1935. No individual vernal barley plants were found during botanical surveys, but potentially suitable habitat was found within the action area.

Mud Nama

Mud nama *(Nama stenocarpa)* is an annual herb in the *Boraginaceae* plant family that blooms from March to October and is found in marshes, swamps, lake margins, and riverbeds at elevations from 16 feet to 1,640 feet above sea level. Mud nama has a California Rare Plant Rank of 2B.2, meaning it is "rare or endangered in California, common elsewhere," and "fairly endangered in California." Only two herbarium collections have records of mud nama. One collection is from the San Luis National Wildlife Refuge in 1970, and the second is from roughly 9 miles west of the action area in 1999. During botanical surveys, potentially suitable habitat was found within the action area, but no mud nama, or evidence of its presence, was seen.

Crownscale

Crownscale *(Atriplex coronata var. coronata)* is an annual herb in the *Chenopodiaceae* plant family that blooms from March to October and is found in alkaline and clay soils, chenopod scrub, valley and foothill grasslands, vernal pools, and freshwater wetlands. The crownscale is native to California and is found only in the San Joaquin Valley, the Sacramento Valley, and the eastern coastal range. Crownscale has a California Rare Plant Rank of 4.2, meaning it is of "limited distribution in California," and "fairly endangered in California." Herbarium records show crownscale collections have been made exclusively on the western side of the greater Central Valley, with the most recent and nearest collections to the action area made in 2010 about 4 miles southeast of the Stratford Kings River Bridge. Potentially suitable habitat was seen within the action area, but botanical surveys did not produce observations or evidence of crownscale.

Environmental Consequences

Vernal Barley, Mud Nama, and Crownscale

Temporary and permanent impacts to individual vernal barley, mud nama, and crownscale are not expected because each plant species was not seen

within or near the action area. Though each plant species was not seen during botanical surveys, potentially suitable habitats were identified.

Construction is expected to permanently impact up to 0.33 acre of potentially suitable habitat for the mud nama and the crownscale.

Based on surveys conducted for the project in 2018 and 2019, and available literature and database information, no permanent impacts are expected for vernal barley because it is unlikely to be found within the action area.

Caltrans has developed a suite of Best Management Practices that are incorporated by reference and included in the project design. These Best Management Practices would be implemented as part of the project to avoid, minimize, and/or mitigate potential effects on special-status species.

Avoidance, Minimization and/or Mitigation Measures

The following avoidance and minimization measures will be used for vernal barley, mud nama, and crownscale to minimize potential impacts associated with construction and operation. No compensatory mitigation is proposed.

- A qualified biologist will provide a worker environmental awareness training for all workers, to educate them on special-status species and their potential to occur within the work area. The training will also cover Best Management Practices, permit conditions, environmental laws, and the consequences of violating them.
- Focused botanical surveys will be conducted during the blooming season before construction starts.
- Populations that cannot be avoided by work would have their locations recorded, and topsoil removed and stored safely. The topsoil will be replaced after construction to maintain the original seed bank.
- Populations where seeds cannot be collected or be avoided by work will be excavated and transplanted to a suitable location similar to the original location.

2.3.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service, and the California Department of Fish and Wildlife are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species section below. All other special-status animal species are discussed here, including the

California Department of Fish and Wildlife's fully protected species and species of special concern, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service's candidate species.

Federal laws and regulations relevant to wildlife include the following:

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

State laws and regulations relevant to wildlife include the following:

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

Affected Environment

A Natural Environment Study was completed for the project in September 2019. An updated Natural Environment Study was prepared in March 2020.

General wildlife surveys were conducted for the project in April 2018. Bat surveys were conducted in May, June, and July 2018. Migratory birds and raptor surveys were conducted in March, April, and June 2018, and April 2019. A detour specific windshield survey, a general wildlife survey, and a habitat assessment were conducted in September and November 2019.

The following special-status animal species were determined to have the potential to appear within the action area.

Hoary Bat

The hoary bat *(Lasiurus cinereus)* is a large, solitary bat with frosted fur, rounded ears, golden coloration around its face, and a wingspan of nearly 17 inches. Within California, hoary bats spend their winters along the coast and in southern California; they breed and spend their summers inland and north of winter ranges. The Western Bat Working Group classifies the hoary bat as a species of medium concern.

California Natural Diversity Database records for hoary bats do not occur within 5 miles of the action area; the nearest occurrences are in the city of Corcoran, from 1982, and in Hanford, from 1991. During bat surveys at the Stratford Kings River Bridge, bat detectors picked up hoary bat echolocation calls within the action area. Though vocalizations were detected, no visual observation or presence of hoary bats was found emerging from the surrounding foliage or on the underside of the Stratford Kings River Bridge. It is assumed that the surrounding valley-foothill riparian habitat and the bridge may host roosting hoary bats.

Western Red Bat

The western red bat *(Lasiurus blossevillii)* is a medium-sized bat with a rust-red-to-brown-red coat, short, rounded ears, and a 4-inch body length. Western red bats roost in the foliage of trees and occasionally shrubs. Although western red bats prefer riparian trees, they have been associated with cottonwood, willow, and sycamore trees near rivers. In California, western red bats are found west of the Sierra Nevada and the Mojave Desert, to the coast, along the length of the state. The western red bat is a state species of special concern; the Western Bat Working Group classifies it as a species of high concern.

The nearest California Natural Diversity Database record for the western red bat to the action area is a 1999 occurrence about 50 miles northwest, in Mendota. Bat surveys were conducted at the Stratford Kings River Bridge to see if western red bats were present. Suitable habitat was seen during visual surveys, but no bats were seen emerging from the surrounding foliage or on the underside of the Stratford Kings River Bridge. Western red bat vocalizations were detected using bat detectors. It is assumed that the surrounding valley-foothill riparian habitat and the Stratford Kings River Bridge may host roosting western red bats.

Loggerhead Shrike

The loggerhead shrike *(Lanius ludovianus)* is a medium-sized bird, with a grayish back, black wings, white breast, and a distinctive black mask around its eyes, which runs down its forehead. The loggerhead shrike is listed as a state species of special concern and is protected under the Migratory Bird Treaty Act. Loggerhead shrikes prefer open habitat with scattered shrubs, fences, and other perches, in open-canopied valley-foothill riparian habitat as well as several other habitat types.

The nearest California Natural Diversity Database record is for a 2001 occurrence near the city of Avenal, which is about 14 miles southwest of the action area. Loggerhead shrikes were seen perched both in and near the action area during general wildlife surveys and nesting surveys, but no nests were seen. Much of the action area is suitable habitat for loggerhead shrikes as potential nesting habitat or as foraging habitat.

Northern Harrier

Northern harriers *(Circus hudsonius)* are slender, medium-sized raptors, with a flat, owl-like face, yellow eyes, a long, rounded tail, and a wingspan of 40 to 45 inches. The northern harrier is listed as a state species of special concern and is protected under the Migratory Bird Treaty Act. Northern harriers are found in most of California, from annual grasslands to lodgepole pine and both freshwater and saltwater emergent wetlands.

The most recent documented occurrence of the northern harrier was identified well outside of Kings County. While records show no occurrences near the action area, suitable habitat for both foraging and nesting were identified within the action area. During nesting surveys, a northern harrier was seen hunting near the action area, but no nest was found.

Burrowing Owl

Burrowing owls *(Athene cunicularia)* are small owls that range from 7.5 to 10 inches in height. They have long legs, short tails, and wingspans of 21 to 24 inches. Burrowing owls are found in dry, open grasslands, range agricultural lands, desert habitats, and in pinyon-juniper and ponderosa pine habitats, up to 9,000 feet above sea level. The burrowing owl is a state species of special concern and is protected by the Migratory Bird Treaty Act.

The nearest California Natural Diversity Database records of burrowing owls are about 3 miles northwest of the action area, dated 2016. Additional records exist in the areas around the city of Huron, the Naval Air Station Lemoore, Kettleman City, and the city of Corcoran. Nesting surveys identified suitable habitat for burrowing owls within the action area near agricultural lands. No burrowing owls were identified during nesting surveys, and it is unlikely that any would be present long-term because the action area is often disturbed by agricultural activities.

Yellow-Headed Blackbird

The yellow-headed blackbird *(Xanthocephalus xanthocephalus)* is black-bodied with a bright yellow hood and a white patch on its wings. Yellow-headed blackbirds are found in deep, fresh emergent wetlands in summer; they prefer cattails, tule, and bulrush for roosting and nesting. During migration, they prefer open, cultivated lands, fields, and pastures. The yellow-headed blackbird is listed as a state species of special concern and is protected under the Migratory Bird Treaty Act.

The nearest California Natural Diversity Database record of the yellow-headed blackbird is a 2016 occurrence about 2 miles northwest of the action area. Nesting surveys identified suitable habitat for the yellow-headed blackbird within the action area. The Blakeley Canal is suitable for roosting, if not nesting. Fresh emergent wetlands within the action area were identified as potential foraging habitat. No yellow-headed blackbirds were identified during nesting surveys.

Black-Crowned Night Heron

Black-crowned night herons (*Nycticorax nycticorax*) are small and stocky, with thick short necks, large flattened heads, and heavily pointed beaks. They are listed in the California Department of Fish and Wildlife's Special Animal List and are protected under the Migratory Bird Treaty Act. They are found in

lowlands throughout most of California, in both freshwater and saltwater emergent wetland habitat.

Suitable foraging habitat and nesting habitat were seen within the action area. Black-crowned night herons were seen during nesting surveys, but no nests were found.

Western Pond Turtle

The western pond turtle *(Emys marmorata)* has a smooth, wide shell that has yellow and dark blotches. The species is omnivorous and often eats crustaceans, fishes, insects, the decaying flesh of dead animals, and vegetation. Western pond turtles use aquatic and terrestrial habitats; they prefer permanent to semi-permanent bodies of water that have cover in the form of algae or vegetation and access to basking sites. Terrestrial habitat is used for wintering in burrows, and where western pond turtles lay their eggs. The western pond turtle is listed as a state species of special concern.

Western pond turtles have been documented on the Stratford Kings River Bridge in the past. During botanical surveys, a western pond turtle was seen leaving a basking site, but the biologist onsite could not identify the species in time. The South Fork Kings River does contain suitable habitat for western pond turtles, and there is a high potential for their presence within the action area.

Environmental Consequences

Caltrans has developed a suite of Best Management Practices that are incorporated by reference and included in the project design. The Natural Environment Study identifies the following potential impacts to special-status animal species.

Hoary Bat and Western Red Bat

Up to 8.43 acres of potential habitat for both bat species will be temporarily impacted because of a buildup of construction activities that will generate noise, dust, and vibrations. There is a potential for permanent impacts of up to 1 acre due to the change in bridge abutments. Permanent impacts will also be caused by removing over 20 mature trees and trimming vegetation on the north side of the bridge.

Loggerhead Shrike

The project will generate up to 171.89 acres of potential temporary impacts to loggerhead shrike habitat. Potential impacts include work on the Stratford Kings River Bridge and the detour. Temporary impacts will be caused by increased noise from work, human activity, dust, vibrations, and visual disturbances. Most of the 171.89 acres will be far less impacted by work than the areas closest to the detour.

Removing trees to build the new bridge abutment will cause up to 1 acre of permanent impacts to loggerhead shrike habitat. Loggerhead shrikes disturbed by work while looking for food will be able to fly away from construction and look for food in a similar habitat nearby.

Northern Harrier

Construction is expected to temporarily impact up to 164.19 acres of northern harrier habitat; temporary impacts will include work on the Stratford Kings River Bridge (Number 45-0007) and the detour. Temporary impacts will be caused by noise from work, human activity, foot and equipment traffic, vibrations, and visual disturbances. Northern harriers disturbed by work while looking for food will be able to fly away from construction and look for food in a similar habitat nearby.

Burrowing Owl

The only suitable habitat for burrowing owls within the action area is agricultural land that is routinely disturbed by farming operations, which will likely prevent long-term occupancy. Construction activities will also disturb the action area. The expected temporary impacts are negligible. No permanent impacts are expected because the project will not permanently change habitat that is suitable for burrowing owls, and no work will be conducted within such habitat.

Yellow-Headed Blackbird

The project will temporarily impact up to 164.19 acres of yellow-headed blackbird habitat. Temporary impacts include both the Stratford Kings River Bridge and the detour. Temporary impacts will be caused by noise, human presence, equipment operation, dust, and vibrations.

Black-Crowned Night Heron

The project is expected to temporarily impact up to 0.73 acre of black-crowned night heron habitat. Temporary impacts will be caused by noise, dust, human presence, equipment operation, piling, driving, and vibrations. During construction, indirect impacts due to in-water activities will affect prey species.

Western Pond Turtle

Temporary impacts of up to 6 acres are expected for riverine habitat, and temporary impacts of up to 8.43 acres are expected for both valley-foothill riparian habitat and western pond turtle habitat. Temporary impacts to riverine habitat will be caused by construction activities, including the removal of the old bridge pilings, and the installation of the temporary wooden trestle bridge and its pilings. Temporary impacts to valley-foothill riparian habitat will be caused by noise, dust, human presence, equipment operation, vegetation trimming, tree removal activities, bioacoustics, and vibrations.

Project construction activities will permanently impact up to 131.88 square feet of riverine habitat and up to 1 acre of both valley-foothill riparian habitat and western pond turtle habitat. Installing piles for the new bridge will permanently impact riverine habitat. Removing trees and vegetation and installing abutments on the new bridge will permanently impact valley-foothill riparian habitat.

Avoidance, Minimization and/or Mitigation Measures

The following avoidance and minimization measures will be used for the following species to minimize potential impacts associated with construction and operation. No compensatory mitigation is proposed.

- A qualified biologist will provide worker environmental awareness training for all workers, to educate them on all special-status species that have the potential to occur within the work area. The training will also cover Best Management Practices, permit conditions, environmental laws, and the consequences of violating them.

Hoary Bat and Western Red Bat

- Clearing and grubbing will be minimized wherever possible and will occur between September 1 and February 1, when bats have moved from the area.
- Pre-construction surveys will be conducted for bats in the surrounding trees no more than two weeks before work starts and would be repeated five days before the bridge is demolished.
- If bats are found within jurisdictional areas of the project site, the California Department of Fish and Wildlife will be asked to determine the appropriate actions.

Loggerhead Shrike, Northern Harrier, Burrowing Owl, Yellow-Headed Blackbird, and Black-Crowned Night Heron

- Pre-construction surveys will be conducted no more than 30 days before construction activities start unless these activities start outside of the nesting season (February 1 to September 30).
- If construction activities extend into more than one nesting season, additional nesting surveys will be required at the start of a nesting season before work can continue.
- A qualified biologist will be present during all clearing and grubbing activities that are conducted between February 1 and September 30 to provide biological monitoring.
- If any bird species is found nesting in or near the project footprint, a 500-foot no-work buffer will be used for raptors, and a 100-foot no-work buffer will be used for other birds until a qualified biologist confirms that the young birds can fly. A qualified biological monitor will be required for all work within the buffers to ensure work does not disturb nests.

- If clearing and grubbing activities must be completed during the avian nesting season—February 1 through September 30—a qualified biologist will perform a site inspection before any trees are trimmed or removed to confirm that no active nests will be negatively affected by the work.

Western Pond Turtle

- Pre-construction surveys for western pond turtles will be conducted no more than 30 days before work starts.
- Whenever possible, work in the riverbed will be done in low-flow and dry periods.
- When restricting work to low-flow and dry periods is not possible, a qualified biologist will be present to watch all in-water work, and to ensure that any western pond turtles found in the project footprint can leave undisturbed and on their own.
- Temporary high visibility fencing will be installed in upland habitat on the boundaries of the project footprint to prevent western pond turtles from entering the work area.

2.3.5 Threatened and Endangered Species

Regulatory Setting

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

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

Endangered Species Act. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California Endangered Species Act allows for take incidental to otherwise lawful development projects; for these actions, an incidental take permit is issued by the California Department of Fish and Wildlife. For species listed under both the Federal Endangered Species Act and the California Endangered Species Act requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, the California Department of Fish and Wildlife may also authorize impacts to California Endangered Species Act species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

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

Affected Environment

A Natural Environment Study was completed for the project in September 2019. An updated Natural Environment Study was prepared in March 2020.

Technical assistance with the U.S. Fish and Wildlife Service was conducted from July to August 2019. The technical assistance determined that there is "no effect" for federally listed species to occur within the action area based on the species list dated May 22, 2019. Federally listed species include the San Joaquin kit fox, the Tipton kangaroo rat, the western snowy plover, the blunt-nosed leopard lizard, the giant garter snake, the California red-legged frog, the delta smelt, the vernal pool fairy shrimp, the vernal pool tadpole shrimp, and the San Joaquin woollythreads. Based on the species list dated March 26, 2020, technical assistance for new species was completed on March 26, 2020.

Early coordination with Steve Hulbert, Caltrans' liaison from the California Department of Fish and Wildlife, was conducted on November 6, 2018. Steve Hulbert agreed that there was a lack of habitat in the action area for the Tipton kangaroo rat, the Fresno kangaroo rat, the burrowing owl, and the blunt-nosed leopard lizard. The Swainson's hawk was the only state-listed species to occur within the action area.

This project lies outside National Oceanic and Atmospheric Administration Fisheries' jurisdiction.

No designated critical habitat will be impacted as a result of the implementation of the proposed project.

Tricolored Blackbird

The tricolored blackbird *(Agelaius tricolor)* is a blackbird with a red shoulder patch and a white median set of feathers on its wings. Tricolored blackbirds are found in marshes, grasslands, and wetlands. They require foraging grounds and nesting substrate; they typically forage in grasslands or agricultural pastures and use aquatic plants for nesting substrate. The tricolored blackbird is listed as a state threatened species and is protected under the Migratory Bird Treaty Act.

Tricolored blackbirds have been documented 6 miles northwest of the action area, but no evidence of the species was found within the action area. Potentially suitable nesting habitat was identified within the action area and contained fresh emergent wetlands and thickets along the Stratford Kings River shore. Though surveys produced no observations of tricolored blackbirds, they may be seen within the action area in the future.

Swainson's Hawk

Swainson's hawk *(Buteo swainsoni)* is state-listed as threatened by the state of California and is also protected under the Migratory Bird Treaty Act. Swainson's hawks travel between the U.S. and Argentina annually. In California, they are found in the Central Valley, the Mojave Desert, and in the Modoc Plateau.

Suitable habitat for the Swainson's hawk is present within the action area. Agricultural lands around the river and the valley-foothill riparian habitat are suitable for hunting, and the valley-foothill riparian habitat along the South Fork Kings River has several trees that are suitable for nesting. The Swainson's hawk population has been declining in California due to the loss of foraging habitat and breeding habitat. The nearest California Natural Diversity Database record of Swainson's hawk is a 2007 occurrence about 10 miles east of the action area. However, numerous Swainson's hawk occurrences are recorded for the valley floor within the greater Kings County area. A Caltrans biologist found one Swainson's hawk nesting within a half-mile of the project action area during nesting surveys.

Environmental Consequences

Table 2.2 shows an Endangered Species Act determination for 14 species that are included in the U.S. Fish and Wildlife Service's Updated Species List obtained on March 26, 2020. The project will not affect any species listed in Table 2.2. This determination came after communication with the U.S. Fish

and Wildlife Service on August 30, 2019 and was confirmed on March 26, 2020.

Table 2.2 Federal Endangered Species Act Effect Findings

Common Name	Scientific Name	Status	Effect Finding	Effect Finding for Critical Habitat (If Applicable)
San Joaquin Woollythreads	*Monolopia congdonii*	Federally Endangered	No Effect	No Effect
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	Federally Threatened	No Effect	No Effect
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	Federally Endangered	No Effect	No Effect
Delta Smelt	*Hypomesus transpacificus*	Federally Threatened	No Effect	No Effect
California Red-Legged Frog	*Rana draytonii*	Federally Threatened	No Effect	No Effect
Giant Garter Snake	*Thamnophis gigas*	Federally Threatened	No Effect	No Effect
Blunt-Nosed Leopard Lizard	*Gambelia sila*	Federally Endangered	No Effect	No Effect
Buena Vista Lake ornate shrew)	Sorex ornatus relictus	Federally Endangered	No Effect	No Effect
San Joaquin Kit Fox	*Vulpes macrotis mutica*	Federally Endangered	No Effect	No Effect
Tipton Kangaroo Rat	*Dipodomys nitratoides nitratoides*	Federally Endangered	No Effect	No Effect
Western Snowy Plover	*Charadrius nivosus nivosus*	Federally Threatened	No Effect	No Effect
Fresno Kangaroo Rat	*Dipodomys nitratoides exilis*	Federally Endangered	No Effect	No Effect
Giant Kangaroo Rat	*Dipodomys ingens*	Federally Endangered	No Effect	No Effect
California Tiger Salamander	*Ambystoma californiense*	Federally Endangered	No Effect	No Effect
California Jewelflower	*Caulanthus californicus*	Federally Endangered	No Effect	No Effect

Tricolored Blackbird

The project will temporarily impact up to 0.05 acre of potential tricolored blackbird habitat. Temporary impacts will be caused by construction noise, personnel, equipment, and vegetation trimming or removal. Though fresh emergent wetlands and thickets within the action area are potential habitats for tricolored blackbirds, they are not ideal. Suitable habitat was seen outside of the project area.

Swainson's Hawk

Construction activities in the project area and on the detour are expected to temporarily impact up to 163.46 acres of foraging habitat for the Swainson's hawk. Temporary impacts will be caused by noise, dust, human presence, equipment operation, and vibrations.

Project construction activities would permanently impact up to 1 acre of valley-foothill riparian habitat, which serves as suitable nesting habitat for Swainson's hawks. Permanent impacts would be caused by tree removal within valley-foothill riparian habitat.

Because the bridge is near a Swainson's hawk nest, there is potential for take if work disturbs the nesting hawks, causes them distress, or causes any other effects that result in nest abandonment or failure. There would be no plans to remove the nest tree. Caltrans has developed a suite of Best Management Practices that are incorporated by reference and included in the proposed project design.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and/or mitigation measures will be used to minimize potential impacts on tricolored blackbirds.

- Pre-construction surveys would be conducted no more than 30 days before construction activities start unless these activities start outside of the nesting season (February 1 to September 30).
- If construction activities extend into more than one nesting season, additional nesting surveys will be required at the start of a nesting season before work can continue.
- A qualified biologist will be present during clearing and grubbing activities that are conducted between February 1 and September 30 to provide biological monitoring.
- If tricolored blackbirds are found nesting in or near the project footprint, a 100-foot no-work buffer will be used until a qualified biologist confirms that the young birds can fly. A qualified biological monitor will be required for all work within that buffer to ensure work does not disturb the nest.
- Environmentally sensitive area fencing will separate and protect as much suitable tricolored blackbird habitat as possible—emergent wetland vegetation and shoreline thickets—near the project footprint.

The following compensatory mitigation measure will be used for tricolored blackbirds.

- A Section 2081 Incidental Take Permit will be sought from the California Department of Fish and Wildlife if nesting habitat is impacted during the breeding season. Caltrans will adhere to the measures and compensatory

requirements in the Incidental Take Permit. This was added to the final environmental document.

The following avoidance, minimization, and/or mitigation measures will be used to minimize potential impacts to Swainson's hawks.

- Protocol surveys for Swainson's hawks would be conducted the year before work starts. If work starts outside of the nesting season for Swainson's hawks, work may not continue into the nesting season until a pre-construction survey or a protocol survey for Swainson's hawks has been conducted.
- If a Swainson's hawk is found nesting in or near the project footprint, a 500-foot no-work buffer would be established, and no work would be allowed within the buffer unless a qualified biological monitor determines that work would not disturb the nest.
- If clearing and grubbing activities must be completed during the avian nesting season—February 1 to September 30—a qualified biologist would perform a site inspection before any trees are trimmed or removed to avoid the removal of any active nests. This was changed from the draft environmental document.

The following compensatory mitigation measure will be used for Swainson's hawks.

- A Section 2081 Incidental Take Permit will be sought from the California Department of Fish and Wildlife for the potential take of Swainson's hawks. Caltrans will adhere to the measures and compensatory requirements in the Incidental Take Permit. This was added to the final environmental document.

2.3.6 Invasive Species

Regulatory Setting

On February 3, 1999, President William J. Clinton signed Executive Order 13112 requiring federal agencies to combat the introduction or spread of invasive species in the U.S. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration guidance issued on August 10, 1999, directs the use of the state's invasive species list, which is maintained by the Invasive Species Council of California to define the invasive species that must be considered as part of the NEPA analysis for a proposed project.

Affected Environment

A Natural Environment Study was completed for the project in February 2020. Botanical surveys were conducted for the project in March, April, May, and June in 2018, and in April, May, and July in 2019. Invasive plant species were found within the action area during botanical surveys and are listed in the Natural Environment Study.

Environmental Consequences

Caltrans has developed a suite of Best Management Practices that will be implemented as part of the project. To minimize the spread of invasive species, all equipment entering or leaving the site will be pressure washed or steam-cleaned to remove non-native seeds. Excess material created by ground-disturbing activities will be disposed of at a preapproved location to minimize the spread of non-native seeds and plant matter. Excess material will also be covered with additional fill material to ensure that non-native seeds and plant matter do not spread and grow in other areas.

A worker environmental awareness training will be held before construction starts. Construction and maintenance workers will be made aware of environmental regulations and measures that were established to avoid sensitive habitats and species.

Avoidance, Minimization, and/or Mitigation Measures

No avoidance, minimization, and/or mitigation measures are expected for invasive species.

Chapter 3 CEQA Evaluation

3.1 Determining Significance under CEQA

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

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

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

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant with Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

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

“No Impact” determinations in each section are based on the scope, description, and location of the proposed project as well as the appropriate technical report (bound separately in Volume 2), and no further discussion is included in this document.

3.2.1 Aesthetics

CEQA Significance Determinations for Aesthetics

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

a) Have a substantial adverse effect on a scenic vista?

No Impact—The project will not have a substantial adverse effect on a scenic vista because the project area does not have any scenic vistas. (Visual Impact Assessment, August 2019)

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact—The project is not on a state scenic highway and will not damage scenic resources. (Visual Impact Assessment, August 2019)

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?

No Impact—The project will temporarily change the existing visual characteristics and its surroundings during construction. Trees and shrubs that are required to be removed will be replaced once the new bridge is built. (Visual Impact Assessment, August 2019)

The project will enhance the visual quality because the new bridge rail will be a “see-through-type” barrier and will allow highway users to view the South Fork Kings River. (Visual Impact Assessment, August 2019)

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact—The project will not create a new source of light or glare. (Visual Impact Assessment, August 2019)

3.2.2 Agriculture and Forest Resources

CEQA Significance Determinations for Agriculture and Forest Resources

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

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared per the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact—The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. All work will be conducted within a Caltrans right-of-way.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact—The project will not conflict with existing zoning for agricultural use, or a Williamson Act contract. All work will be conducted within a Caltrans right-of-way.

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—There are no forest lands or timberlands within the project limits.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact—There are no forest lands or timberlands within the project limits.

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 will not change the existing environment or result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Work will be conducted within a Caltrans right-of-way.

3.2.3 Air Quality

CEQA Significance Determinations for 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:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact—The project will not conflict with or obstruct implementation of the applicable air quality plan. (Air Quality Compliance Memorandum, November 12, 2019)

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—The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment because the project is exempt from conformity under 40 Code of Federal Regulations Section 93.126. (Air Quality Compliance Memorandum, November 12, 2019)

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact—The project will not expose sensitive receptors to substantial pollutant concentrations because the project was not found to be a "project of air quality concern." (Air Quality Compliance Memorandum, November 12, 2019)

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

No Impact—The project will not result in other emissions, adversely affecting a substantial number of people. (Air Quality Compliance Memorandum, November 12, 2019)

3.2.4 Biological Resources

CEQA Significance Determinations for 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 the U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated—No, the project will not have a significant impact because permanent impacts from the potential take of a Swainson's hawk nest or tricolored blackbird nest will be fully mitigated under the California Fish and Game Code Section 2081. As discussed in the Threatened and Endangered Species Section in Chapter 2, the project will impact up to 1 acre of Swainson's hawk nesting habitat. All nesting habitat for Swainson's hawks that is permanently lost due to project activities will be replaced by establishing nesting habitat, purchasing mitigation credits, or purchasing land/conservation easements to protect existing nesting habitat for Swainson's hawks or tricolored blackbirds.

Any trees removed will be replanted based on their diameter at breast height. Trees with a diameter of 24 inches or more, such as heritage trees, will be replaced at a 10 to 1 ratio; trees with a diameter that is between 4 inches and 24 inches will be replaced at a 3 to 1 ratio. A Section 2081 Incidental Take Permit may be required for the Swainson's hawk and tricolored blackbird if work disturbs nesting hawks or blackbirds, causes them distress, or causes any other effects that result in nest abandonment or failure.

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 the U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation Incorporated—No, the project will not have a significant impact because impacts to sensitive natural communities will be mitigated to a less than significant impact. As discussed in the Natural Communities Section in Chapter 2, the project will impact about 1 acre of valley-foothill riparian habitat. Permanent impacts to valley-foothill riparian habitat will be mitigated by replanting any trees removed based on diameter at breast height. Trees with a diameter of 24 inches or more will be replaced at a 10 to 1 ratio; trees with a diameter between 4 and 24 inches will be replaced at a 3 to 1 ratio. Any trees removed will be replaced based on permit requirements.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact with Mitigation Incorporated—No, the project will not have a significant impact because impacts to state or federally protected wetlands would be mitigated to a less than significant impact. As discussed in the Wetlands and Other Waters Section in Chapter 2, the project will temporarily impact up to 0.05 acre of fresh emergent wetlands.

- A 1602 Lake or Streambed Alteration Agreement from the California Department of Fish and Wildlife
- A Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board
- A Section 404 Nationwide permit from the U.S. Army Corps of Engineers

Mitigation measures will reduce impacts to below significance. Permanent impacts to fresh emergent wetlands will be mitigated for in acreage that is equal to permanent impacts through the purchase of conservation credits from the National Fish and Wildlife Foundation, or other in-lieu fee programs. Otherwise, habitat will be established as part of a permittee-responsible mitigation project. Permanent impacts to riverine habitat will be mitigated in the form of conservation credits from the National Fish and Wildlife

Foundation, or other in-lieu fee programs. Otherwise, habitat will be established as part of a permittee-responsible mitigation project.

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?

No Impact—The project will not 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. (Natural Environment Study, February 2020)

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact—The project will not conflict with any local policies or ordinances protecting biological resources. (Natural Environment Study, February 2020)

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—The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (Natural Environment Study, February 2020)

3.2.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource per Section 15064.5?

No Impact—The project will not cause a substantial adverse change in the significance of a historical resource per Section 15064.5 because no historical resources are within the project limits. (Historic Property Survey Report June 3, 2019, and Supplemental Historic Property Survey Report December 2, 2019)

b) Cause a substantial adverse change in the significance of an archaeological resource per Section 15064.5?

No Impact—There are no archaeological resources within the project limits. (Historic Property Survey Report June 3, 2019, and Supplemental Historic Property Survey Report December 2, 2019)

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact—The project will not disturb any human remains, including those interred outside of dedicated cemeteries. (Historic Property Survey Report June 3, 2019, and Supplemental Historic Property Survey Report December 2, 2019)

3.2.6 Energy

CEQA Significance Determinations for Energy

Would the project:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact—The project will not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation because Caltrans will implement its Best Management Practices to ensure that unnecessary waste of energy resources does not occur.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact—The project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.2.7 Geology and Soils

CEQA Significance Determinations for Geology and Soils

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?

No Impact—No known earthquake fault is present within the project area. The closest earthquake fault is the San Andreas Fault Line, which is about 40 miles south of the project area. (Foundation Report, September 2015)

ii) Strong seismic ground shaking?

No Impact—The project is within an area that has the potential for moderate seismic activity. The new bridge will be built to withstand strong seismic ground shaking. (Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015)

iii) Seismic-related ground failure, including liquefaction?

No Impact—The project will not cause seismic-related ground failure, including liquefaction. The purpose of the project is to address and reduce seismic-related ground failure, including liquefaction. The new bridge will be built to withstand seismic-related ground failure, including liquefaction. (Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015)

iv) Landslides?

No Impact—The project will not cause landslides, and it is not in an area that is prone to landslides. (Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015)

b) Result in substantial soil erosion or the loss of topsoil?

No Impact—The project will not result in substantial soil erosion or the loss of topsoil. (Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015)

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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact—No, the project is not on a geologic unit or soil that is unstable, or that will become unstable as a result of the project. (Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015)

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—The project is not on expansive soils. (Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015)

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact—The project will not build septic tanks or alternative wastewater disposal systems. (Initial Site Assessment, September 2019)

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact—The project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature because construction activities will not likely affect paleontological resources. (Paleontological Identification Report, October 2019)

3.2.8 Greenhouse Gas Emissions

CEQA Significance Determinations for 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?

Less Than Significant Impact—Though the project will cause greenhouse gas emissions during construction, the project is not expected to cause increases in operational greenhouse gas emissions. The project does not conflict with any relevant plan, policy, or regulation adopted to reduce greenhouse gas emissions. By using construction greenhouse gas-reduction measures, the impact will be less than significant.

3.2.9 Hazards and Hazardous Materials

CEQA Significance Determinations for 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?

Less Than Significant Impact—Caltrans' Standard Special Provisions will be enforced to safely dispose of and/or transport hazardous materials without causing a risk to the public, workers, or the environment. (Initial Site Assessment, September 2019)

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?

No Impact—Construction of the project will not release hazardous materials into the environment. Caltrans' Standard Special Provisions and Best Management Practices will be used to safely remove the old bridge without creating a hazard to the public. (Initial Site Assessment, September 2019)

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within a quarter-mile of an existing or proposed school?

No Impact—No existing or proposed school is within a quarter-mile of the project. (Google Web Search December 13, 2019)

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?

No Impact—The project is not on a site that is included on a list of hazardous materials sites. (Initial Site Assessment, September 2019)

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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—The project is not within 2 miles of a public airport or public use airport. (2018 Kings County Regional Transportation Plan-Chapter 7 Aviation)

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact—The project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact—The project will not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires because the project will be built over the South Fork Kings River, which flows year-round. The project area and detour are not within a high fire zone. (https://osfm.fire.ca.gov/media/6690/fhszs_map16.pdf)

3.2.10 Hydrology and Water Quality

CEQA Significance Determinations for Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less Than Significant Impact—Short-term water quality impacts are expected during construction activities over the South Fork Kings River. Installing bridge piles and the temporary wooden trestle bridge will contribute to short-term water quality impacts. Caltrans must reduce potential water quality impacts in the design and construction phases. By using Caltrans' Best Management Practices, water quality will be protected, and the risk for accidental releases of oil, grease, and chemical pollutants will be reduced. Potential impacts to the South Fork Kings River streambed and associated riparian habitat will require a Section 1600 Streambed Alteration Agreement before construction starts. In addition, a Water Quality Certification (Section 401) and a Section 404 Nationwide permit for waters of the U.S. will be obtained before construction starts. (Water Quality Assessment Report, December 2018)

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—The project will not decrease groundwater supplies or interfere with groundwater recharge such that the project may block sustainable groundwater management of the basin.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation onsite or offsite;

No Impact—The project will not result in substantial erosion or siltation onsite or offsite. Caltrans will prepare a Stormwater Pollution Prevention Plan and use its Best Management Practices to reduce erosion onsite or offsite. (Water Quality Assessment Report, December 2018)

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;

No Impact—The project will not increase the rate or amount of surface runoff in a manner that will result in flooding onsite or offsite because the new bridge's drainage system will go onto a Caltrans right-of-way and not directly into the South Fork Kings River.

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—The project will not create or contribute runoff water or provide substantial additional sources of polluted runoff. Caltrans' Best Management Practices will be used to reduce runoff into the South Fork Kings River. (Water Quality Assessment Report, December 2018)

iv) Impede or redirect flood flows?

No Impact—The project will not block or redirect flood flows. Work on the Kings River will be done from a temporary wooden trestle bridge, which will allow water to flow during construction. Installing the new bridge piers will be completed during low-flow conditions. (Water Quality Assessment Report, December 2018)

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact—The project area is within the 100-year floodplain and is expected to flood during the 100-year flood. Flooding will not cause the project to release pollutants because the project will replace a bridge. The project is not within a tsunami or seiche zone.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact—The project will not conflict with or block the usage of a water quality control plan or sustainable groundwater management plan. The majority of Kings County is under a layer of clay that limits the recharge rate for groundwater near the project area. Kings County relies on areas north and east to recharge groundwater. Stratford pumps its drinking water a mile northwest of the Stratford Kings River Bridge. (Water Quality Assessment Report, December 2018)

3.2.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact—The project will not physically divide an established community because the project is about 0.7 mile away from Stratford.

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 will not conflict with any land use plan, policy, or regulation because the project will replace an existing bridge with a new

bridge. The project is included in the Kings County 2018 Regional Transportation Plan.

3.2.12 Mineral Resources

CEQA Significance Determinations for 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?

No Impact—No known mineral resources of value are present within the project limits. (2035 Kings County General Plan-Resource Conservation Element)

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 will not result in the loss of availability of a locally important mineral resource recovery site because none are present near the project area or the detour. (Google Web Search, December 13, 2019)

3.2.13 Noise

CEQA Significance Determinations for Noise

Would the project result in:

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?

No Impact—The project will generate a substantial temporary increase in ambient noise levels at the project site and on the detour during construction. Noise measures will be used to reduce noise levels near the project area. Long-term abatement measures are not being considered on the detour because the increase in traffic volumes will cause a temporary impact until the bridge is completed. (Noise Study Memorandum, October 2019)

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Impact—The project will not generate excessive groundborne vibration or groundborne noise levels. As directed by Caltrans, the contractor will use appropriate noise abatement measures, such as turning off idling equipment, using and relocating temporary noise barriers to protect sensitive noise

receptors and to keep noise levels uniform, and avoiding impulsive noises. (Noise Study Memorandum October 2019)

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 2 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—The project is not within 2 miles of a public airport or public use airport and will not expose people living or working in the project area to excessive noise levels. (Google Web Search December 13, 2019)

3.2.14 Population and Housing

CEQA Significance Determinations for Population and Housing

Would the project:

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—The project will not encourage population growth because it will replace a bridge. The new bridge will have the same number of lanes as the existing bridge.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact—The project will not displace any homes or businesses because the project will replace a bridge.

3.2.15 Public Services

CEQA Significance Determinations for 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?

Less Than Significant Impact—The project will cause a less than significant impact to fire protection because mainline traffic on State Route 41 will be redirected onto an estimated 32-mile detour during construction. However, emergency services and Stratford residents will not be restricted to this route

and could drive around construction using local county roads. The project will not result in the need for new or changed public facilities because the project will replace a bridge.

Police protection?

Less Than Significant Impact—The project would cause a less than significant impact to police protection because mainline traffic on State Route 41 would be redirected onto an estimated 32-mile detour during construction. However, emergency services and Stratford residents would not be restricted to this route and could drive around construction using local county roads. The project would not result in the need for new or changed public facilities because the project would replace a bridge.

Schools?

No Impact—The project will not result in the need for new or changed public facilities because the project will replace a bridge.

Parks?

No Impact—The project will not result in the need for new or changed public facilities because the project will replace a bridge.

Other public facilities?

No Impact—The project will not result in the need for new or changed public facilities because the project will replace a bridge.

3.2.16 Recreation

CEQA Significance Determinations for 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?

No Impact—No parks or recreational facilities are near the project area. (Google Web Search December 13, 2019)

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 project will replace a bridge.

3.2.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities?

No Impact—The project will not conflict with a program plan, ordinance, or policy addressing the circulation system.

b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

No Impact—The project will not conflict with or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) because the project will not affect vehicle miles traveled. The project will replace a bridge with the same number of lanes.

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—The project will not increase hazards due to a geometric design feature or incompatible uses.

d) Result in inadequate emergency access?

Less Than Significant Impact—The project will temporarily impact emergency services, law enforcement, and public transportation during construction. Though the project will cause temporary traffic delays, emergency services and Stratford residents could drive around construction using local county roads.

3.2.18 Tribal Cultural Resources

CEQA Significance Determinations for Tribal Cultural Resources

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

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or

No Impact—The project will not affect historic resources that are listed or eligible for listing in the California Register of Historical Resources, or a local register of historical resources as defined in Public Resources Code Section 5020.1(k). (Historic Property Survey Report June 3, 2019, and Supplemental Historic Property Survey Report November 2019)

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In using the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency would consider the significance of the resource to a California Native American tribe.

No Impact—Tribal discussions determined that the project will not affect any tribal cultural resources within the project area. (Historic Property Survey Report June 3, 2019)

3.2.19 Utilities and Service Systems

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact—The project will not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities. The project will replace a bridge.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact—The project will replace a bridge.

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—The project will replace a bridge. The project will not affect a wastewater treatment provider.

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—The project will not generate solid waste because the project will replace a bridge.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact—The project will not generate solid waste.

3.2.20 Wildfire

CEQA Significance Determinations for Wildfire

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

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact—The project will not impair an adopted emergency response plan or emergency evacuation plan. The project is not in an area that is classified as a very high fire hazard severity zone. (https://osfm.fire.ca.gov/media/6690/fhszs_map16.pdf)

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—The project will not expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire because the project is not in an area that is prone to wildfires. (https://osfm.fire.ca.gov/media/6690/fhszs_map16.pdf)

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—The project will not require installing or maintaining associated infrastructure. (https://osfm.fire.ca.gov/media/6690/fhszs_map16.pdf)

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 will not expose people or structures to significant risks due to runoff, post-fire slope instability, or drainage changes because the project is in an area that is not prone to wildfires. Additionally, the project will not change the South Fork Kings River. (https://osfm.fire.ca.gov/media/6690/fhszs_map16.pdf)

3.2.21 Mandatory Findings of Significance

CEQA Significance Determinations for Mandatory Findings of Significance

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 with Mitigation Incorporated—The project will not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Permits and mitigation measures will be obtained to minimize impacts to natural communities, wetlands and other waters, and threatened and endangered species. See Chapter 2, Section 2.3 Biological Environment.

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.)

No Impact—The project will not have impacts that are individually limited or cumulatively considerable.

c) Does the project have environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly?

No Impact—The project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. Caltrans’ Standard Specifications and Provisions referenced in Section 2.2.2 Hazardous Waste and Materials will be used to minimize any adverse effects on human beings.

3.3 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to greenhouse gas emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of greenhouse gases generated by human activity, including carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, and various hydrofluorocarbons. Carbon dioxide is the most abundant greenhouse gas; while it is a naturally occurring component of earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated carbon dioxide.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing greenhouse gas emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

3.3.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source greenhouse gas reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and greenhouse gas emissions reduction at the project level.

The National Environmental Policy Act (known as NEPA) (42 U.S. Code Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration 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.

The Federal Highway Administration therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been made at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 U.S. Code Section 6201) and Corporate Average Fuel Economy Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the U.S. Compliance with federal fuel economy standards is determined through the Corporate Average Fuel Economy program on the basis of each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the U.S.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. Environmental Protection Agency in conjunction with the National Highway Traffic Safety Administration is responsible for setting greenhouse gas emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the U.S. Fuel efficiency standards directly influence greenhouse gas emissions.

State

California has been innovative and proactive in addressing greenhouse gas emissions and climate change by passing multiple senate and assembly bills and executive orders including, but not limited to, the following:

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

Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: Assembly Bill 32 codified the 2020 greenhouse gas emissions reduction goals outlined in Executive Order S-3-05, while further mandating that the California Air Resources Board create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The legislature also intended that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020 (Health and Safety Code Section 38551(b)). The law requires the California Air Resources Board to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective greenhouse gas reductions.

Executive Order S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The California Air Resources Board 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 greenhouse gas reduction goals.

Senate Bill 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the California Air Resources Board to set regional emissions reduction targets for passenger vehicles. The metropolitan planning organization for each region must then develop a "Sustainable Communities Strategy" that integrates transportation, land use, and housing policies to plan how it will achieve the emissions target for its region.

Senate Bill 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 Assembly Bill 32.

Executive Order B-16-12 (March 2012) orders state entities under the direction of the governor, including the California Air Resources Board, 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.

Executive Order B-30-15 (April 2015) establishes an interim statewide greenhouse gas emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of greenhouse gas emissions to implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets. It also directs the California Air Resources

Board to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent. 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.

Senate Bill 32, Chapter 249, 2016, codifies the greenhouse gas reduction targets established in Executive Order B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

Senate Bill 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands…is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

Assembly Bill 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

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

Senate Bill 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires the California Air Resources Board to prepare a report that assesses progress made by each metropolitan planning organization in meeting its established regional greenhouse gas emission reduction targets.

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

Executive Order 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 greenhouse gas emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This executive order also directs the California Air Resources Board 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.

3.3.2 Environmental Setting

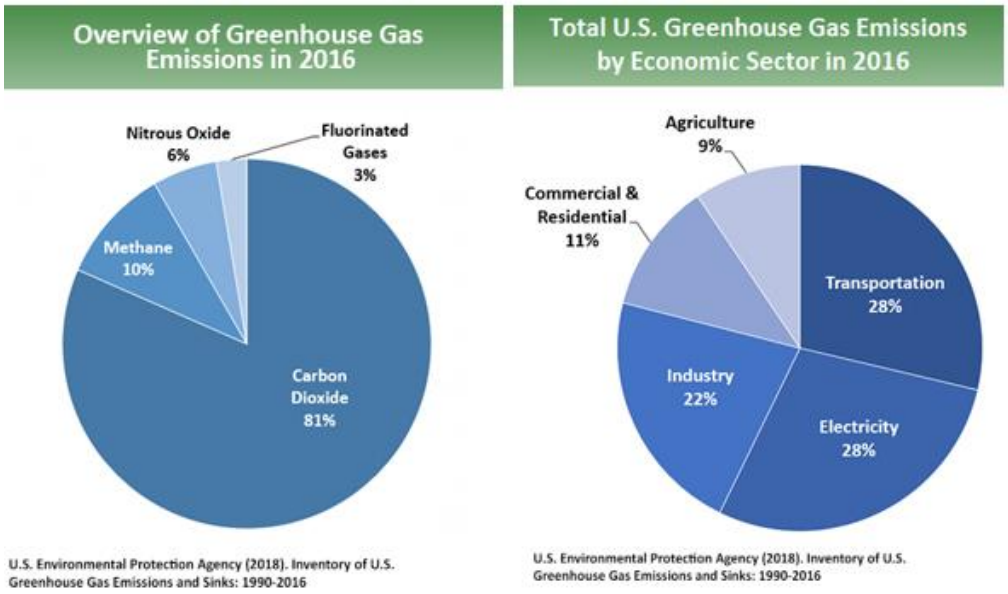
The project sits along State Route 41 in Kings County. The surrounding land use is mainly agricultural, with a mix of rural residential and commercial. The project goes over the South Fork Kings River, which is one of the many branches of the 133-mile-long Kings River that originates in the Sierra Nevada mountain range. State Route 41 is a two-lane rural highway that runs south-north and is a main transportation route in the area for both passenger and commercial vehicles. The nearest alternative route is State Route 269, which is about 17 miles to the west. The Kings County Regional Transportation Plan guides transportation development and addresses greenhouse gas emissions in the project area.

A greenhouse gas emissions inventory estimates the amount of greenhouse gases discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual greenhouse gas emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to achieve emission reduction goals. The U.S. Environmental Protection Agency is responsible for documenting greenhouse gas emissions nationwide, and the California Air Resources Board does so for the state, as required by Health and Safety Code Section 39607.4.

National Greenhouse Gas Inventory

The U.S. Environmental Protection Agency prepares a national greenhouse gas inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of greenhouse gases in the U.S., reporting emissions of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride. It also accounts for emissions of carbon dioxide that are removed from the atmosphere by “sinks” such as forests, vegetation, and soils that uptake and store carbon dioxide (carbon sequestration). The 1990-2016 inventory found that of the 6,511 million metric tons of carbon dioxide equivalents of greenhouse gas emissions in 2016, 81 percent is carbon dioxide, 10 percent is methane, and 6 percent is nitrous oxide; the balance consists of fluorinated gases. (U.S. Environmental Protection Agency 2018) In 2016, greenhouse gas emissions from the transportation sector accounted for nearly 28.5 percent of U.S. greenhouse gas emissions. See Figure 3-1.

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



State Greenhouse Gas Inventory

The California Air Resources Board collects greenhouse gas 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 greenhouse gas reduction goals.

The 2019 edition of the greenhouse gas emissions inventory found total California emissions of 424.1 million metric tons of carbon dioxide equivalents for 2017, with the transportation sector responsible for 41 percent of total greenhouse gases. It also found that overall statewide greenhouse gas emissions declined from 2000 to 2017 despite growth in population and state economic output. (California Air Resources Board 2019a) See Figures 3-2 and 3-3.

Figure 3-2 California 2017 Greenhouse Gas Emissions

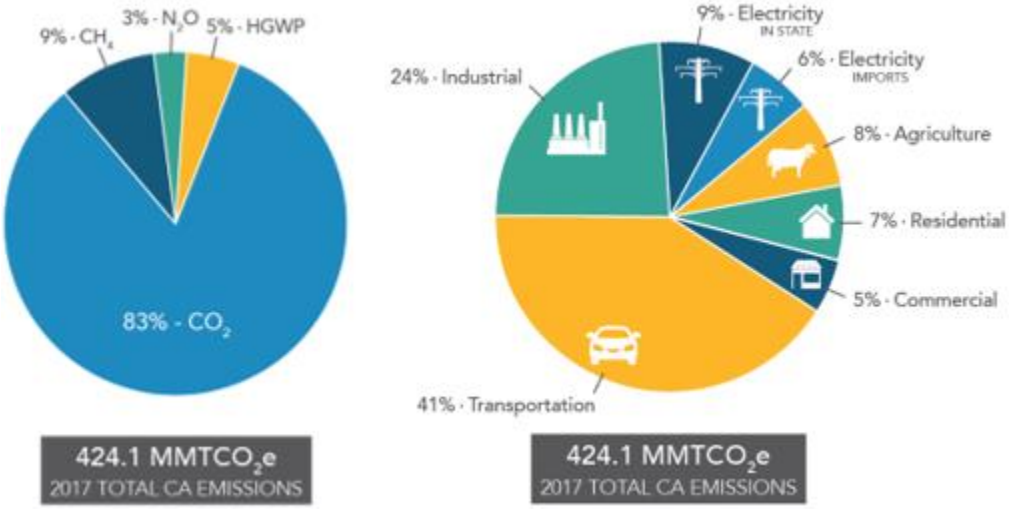
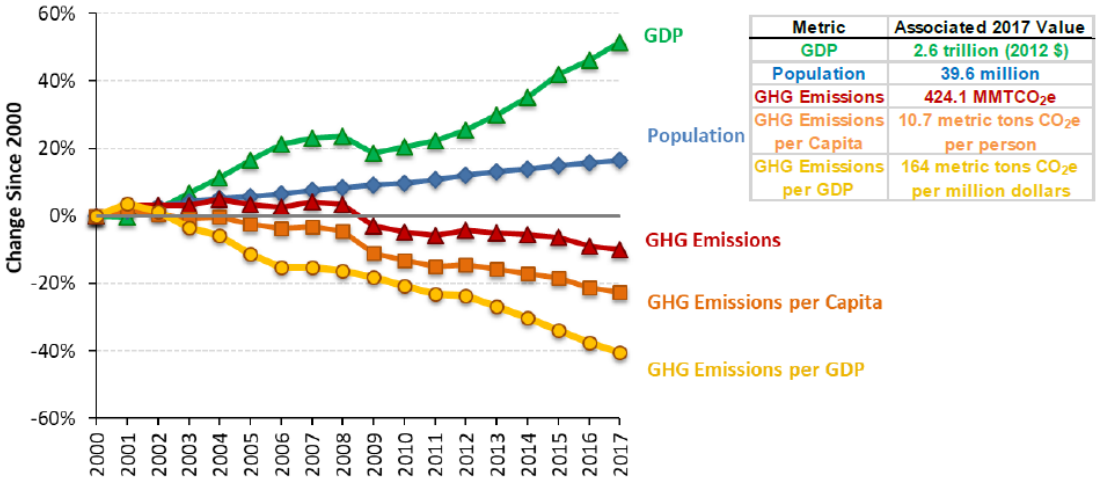


Figure 3-3 Change in California Gross Domestic Product, Population, and Greenhouse Gas Emissions since 2000



Assembly Bill 32 required the California Air Resources Board to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing greenhouse gas emissions to 1990 levels by 2020, and to update it every 5 years. The California Air Resources Board 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 Executive Order B-30-15 and Senate Bill 32. The Assembly Bill 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce greenhouse gas emissions.

Regional Plans

The California Air Resources Board sets regional targets for California's 18 metropolitan planning organizations to use in their Regional Transportation Plan/Sustainable Communities Strategy to plan future projects that will

cumulatively achieve greenhouse gas reduction goals. Targets are set at a percent reduction of passenger vehicle greenhouse gas emissions per person from 2005 levels. The Kings County Association of Governments is the metropolitan planning organization for the project area. The Kings County Association of Governments' Sustainable Communities Strategy for the 2014 Regional Transportation Plan/Sustainable Communities Strategy committed to reducing greenhouse gas emissions by 5 percent by 2020 and 10 percent by 2035, targets that remain in effect for the 2018 Regional Transportation Plan. Targets of a 5 percent reduction by 2020 and a 13 percent reduction by 2035 were established for Kings County in March 2018; these will take effect in the 2022 Regional Transportation Plan/Sustainable Communities Strategy update cycle. (Kings County Association of Governments 2018: page 12-12) The 2018 Sustainable Communities Strategy includes performance measures "Reduce Emissions" and "System Preservation," which includes maintaining system pavement and bridges and improving system reliability, mobility, and safety.

3.3.3 Project Analysis

Greenhouse gas emissions from transportation projects can be divided into those produced during operation of the State Highway System and those produced during construction. The main greenhouse gases produced by the transportation sector are carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. Carbon dioxide emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of methane and nitrous oxide are emitted during fuel combustion. In addition, a small amount of hydrofluorocarbon emissions is included in the transportation sector.

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

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

Operational Emissions

The project would replace a deteriorating bridge with a new bridge. The project would not add additional travel lanes, change roadway capacity, or vehicle miles traveled. Accordingly, no increase in operational greenhouse gas emissions is expected. While some greenhouse gas emissions during the construction period would be unavoidable, the project, once completed, would not lead to an increase in operational greenhouse gas emissions.

Construction Emissions

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

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

Carbon dioxide emissions generated from construction equipment were estimated using the Caltrans Construction Emissions Tool. The estimated emissions would be 347 tons of carbon dioxide from construction equipment and 477 tons of carbon dioxide from detour traffic over 200 working days.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify that they are aware of and will comply with all the California Air Resources Board emission reduction regulations. All projects also include Caltrans Standard Specifications 14-9.02, and Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes, including those of the San Joaquin Valley Air Pollution Control District.

The project will also implement Caltrans standardized measures (such as construction Best Management Practices) that apply to most or all Caltrans projects. Certain common regulations, such as equipment idling restrictions and development and implementation of a traffic control plan that reduce construction vehicle emissions, also help reduce greenhouse gas emissions.

CEQA Conclusion

While the project will result in greenhouse gas emissions during construction, it is expected that the project will not result in any increase in operational greenhouse gas emissions. The project does not conflict with any applicable

plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction greenhouse gas-reduction measures, the impact would be less than significant.

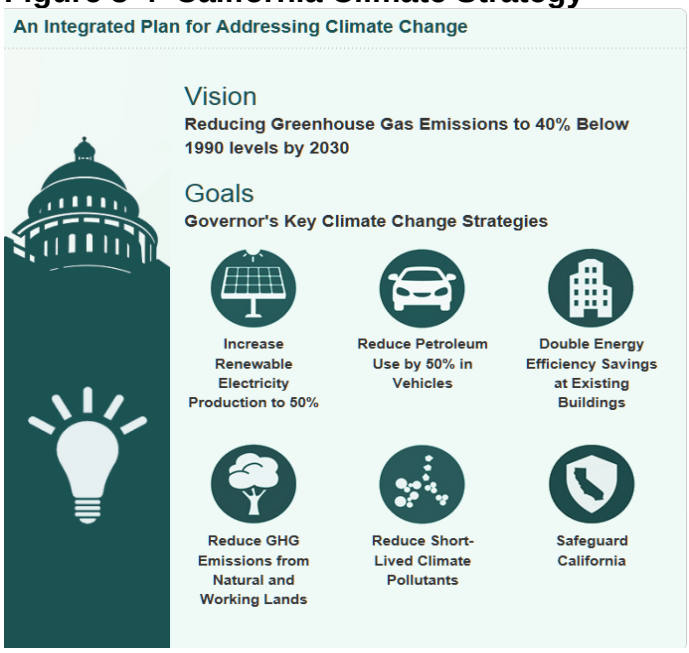
Caltrans is firmly committed to implementing measures to help reduce greenhouse gas emissions. These measures are outlined in the following section.

3.3.4 Greenhouse Gas Reduction Strategies

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 greenhouse gas emissions targets. Former Governor Edmund G. Brown Jr. promoted greenhouse gas reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding California.* See Figure 3-4.

Figure 3-4 California Climate Strategy



The transportation sector is integral to the people and economy of California. To achieve greenhouse gas emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from the transportation and goods movement. Greenhouse gas emission reductions

will come from cleaner vehicle technologies, lower-carbon fuels, and a reduction of vehicle miles traveled. A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030. (State of California 2019)

In addition, Senate Bill 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 forest lands, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above-ground matter and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the governor's Climate Action Team as the California Air Resources Board works to implement Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in Assembly Bill 32. Executive Order B-30-15, issued in April 2015, and Senate Bill 32 (2016), set an interim target to cut greenhouse gas emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan is a statewide, long-range transportation plan to meet our future mobility needs and reduce greenhouse gas emissions. In 2016, Caltrans completed the *California Transportation Plan 2040,* which establishes a new model for developing ground transportation systems, consistent with carbon dioxide reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

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

Caltrans Strategic Management Plan

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

- Increasing percentage of non-auto mode share
- Reducing vehicle miles traveled
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) greenhouse gas emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce greenhouse gas emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's Regional Transportation Plan/Sustainable Communities Strategy; contributes to the state's greenhouse gas reduction targets and advances transportation-related greenhouse gas emission reduction project types/strategies; and supports other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiatives

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

Project-Level Greenhouse Gas Reduction Strategies

The following measures would also be implemented in the project to reduce greenhouse gas emissions and potential climate change impacts from the project.

- Precast and prestressed concrete slab girder is the preferred alternative for this project. The use of precast elements reduces the need for additional falsework, forms, and other traditional construction components and makes construction more energy efficient.
- Caltrans staff would enhance the environmental training provided for contractor staff by adding a module on greenhouse gas reduction strategies, including limiting equipment idling time as much as possible.

The contractor will be required to:

- Incorporate measures to reduce the use of potable water.

- Seek to operate construction equipment with improved fuel efficiency by properly tuning and maintaining equipment, limiting equipment idling time, and using the right-sized equipment for the job.
- Comply with Caltrans' Standard Specifications, which would require the contractor to submit a list of all the equipment for the job.
- Comply with Caltrans Standard Specifications Section 14-9.02, Air Pollution Control, which would require contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Measures that reduce construction vehicle emissions also help reduce greenhouse gas emissions.
- Develop a traffic management plan to minimize delays.

3.3.5 Adaptation

Reducing greenhouse gas emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and variability in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and Federal Highway Administration NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S. Code Chapter 56A Section 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that

consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime." (USGCRP 2018)

The U.S. Department of Transportation 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 the U.S. Department of Transportation in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions." (U.S. DOT 2011)

Federal Highway Administration Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established Federal Highway Administration policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. The Federal Highway Administration has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels. (FHWA 2019)

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's latest effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- *Resilience* is the "capacity of any entity—an individual, a community, an organization, or a natural system—to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience." Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.

- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to: ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

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

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

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

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

Assembly Bill 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of

assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and expected climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

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

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

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

Project Adaptation Analysis

Sea-Level Rise

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

Floodplains Analysis

The southwest region of the U.S. is expected to experience less precipitation overall, but potentially heavier individual events with more falling as rain than snow. District 6 experienced such events in the winter of 2016-2017; heavy rains caused $85,000,000 in damages in 2017 alone. (Caltrans 2018)

The project area is near the Federal Emergency Management Agency Flood Insurance Rate Map Zone A. This zone shows areas that are expected to be flooded during the 100-year flood. The 100-year stormwater surface elevation is approximately 187.13 feet for both the existing and the proposed bridge.

The District 6 Climate Change Vulnerability Assessment (Caltrans 2018) projects a less than 5 percent increase in 100-year storm precipitation depth through 2085. The elevation for the underside of the existing bridge is 195.15 feet, and the proposed bridge is 195.94 feet. The existing bridge has no history of being overtopped. The minimum freeboard clearance—designated by the Central Valley Flood Protection Board for bridges—in this region is 2 feet. The new bridge freeboard will be about 8.02 feet; the existing bridge freeboard is 8.81 feet. While there is no direct relationship between a given increase in storm precipitation depth and stormwater surface elevation at a given location, the new bridge will exceed the Central Valley Flood Protection Board's minimum freeboard requirement by a large margin. Because of this, the project area is not likely to flood during 5 percent heavier precipitation events.

Wildfire

The project is not in a very high fire hazard severity zone. (California Department of Forestry and Fire Protection, 2007)

Climate Change References

California Air Resources Board (ARB). 2019a. *California Greenhouse Gas Emissions Inventory—2019 Edition*. https://ww3.arb.ca.gov/cc/inventory/data/data.htm. Accessed: August 21, 2019.

California Air Resources Board (ARB). 2019b. *California Greenhouse Gas Emissions for 2000 to 2017. Trends of Emissions and Other Indicators.* https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf. Accessed: August 21, 2019.

California Air Resources Board (ARB). 2019c. *SB 375 Regional Plan Climate Targets*. https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: August 21, 2019.

California Department of Transportation. 2018. *Caltrans Climate Change Vulnerability Assessments. District 6 Technical Report*. July. Prepared by WSP.

Federal Highway Administration (FHWA). 2019. *Sustainability.* https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated February 7, 2019. Accessed: August 21, 2019.

Federal Highway Administration (FHWA). No date. *Sustainable Highways Initiative*. https://www.sustainablehighways.dot.gov/overview.aspx. Accessed: August 21, 2019.

Kings County Association of Governments. 2018. *2018 Regional Transportation Plan/Sustainable Communities Strategy*. Adopted August 22, 2018.

State of California. 2018. *California's Fourth Climate Change Assessment*. http://www.climateassessment.ca.gov/. Accessed: August 21, 2019.

State of California. 2019. *California Climate Strategy*. https://www.climatechange.ca.gov/. Accessed: August 21, 2019.

U.S. Department of Transportation (U.S. DOT). 2011. *Policy Statement on Climate Change Adaptation*. June. https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm. Accessed: August 21, 2019.

U.S. Environmental Protection Agency (U.S. EPA). 2009. *Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act*. https://www.epa.gov/ghgemissions/endangerment-and-cause-or-

contribute-findings-greenhouse-gases-under-section-202a-clean. Accessed: August 21, 2019.

U.S. Environmental Protection Agency (U.S. EPA). 2018. *Inventory of U.S. Greenhouse Gas Emissions and Sinks.* https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: August 21, 2019.

U.S. Global Change Research Program (USGCRP). 2018. *Fourth National Climate Assessment*. https://nca2018.globalchange.gov/. Accessed: August 21, 2019.

Chapter 4 Comments and Coordination

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

Coordination During Preparation of Technical Studies and the Initial Study

The following agency coordination took place during the preparation of the technical studies and the draft Initial Study.

California Department of Fish and Wildlife

On November 6, 2018: Caltrans biologists performed a site visit and conducted an early coordination meeting to discuss California Department of Fish and Wildlife jurisdiction, species of concern, and potential conservation measures with Steve Hulbert, Caltrans' liaison from the California Department of Fish and Wildlife.

On March 14, 2019: Caltrans conducted a conference call with Steve Hulbert, Caltrans' liaison from the California Department of Fish and Wildlife, regarding the Lake or Streambed Alteration Agreement application for geotechnical work required for the project. Caltrans also discussed the California Department of Fish and Wildlife jurisdiction, species of concern, and potential conservation measures. The San Joaquin kit fox was discussed as having no suitable habitat within the action area, but the California Department of Fish and Wildlife may still require pre-construction surveys.

On November 6, 2019: There was an email exchange between Caltrans Biologist Rachel Flanagan and the California Department of Fish and Wildlife regarding Caltrans' comments on the Lake or Streambed Alteration Agreement for geotechnical work required for the project. The California Department of Fish and Wildlife stated that the comments were still being reviewed.

On December 3, 2019: There was an email exchange between Rachel Flanagan and the California Department of Fish and Wildlife regarding

Caltrans' comments on the Lake or Streambed Alteration Agreement for geotechnical work required for the project. The California Department of Fish and Wildlife replied with a PDF document of the updated agreement.

On December 17, 2019: There was an email exchange between Rachel Flanagan and the California Department of Fish and Wildlife regarding an update on the Lake or Streambed Alteration Agreement for geotechnical work required for the project. Caltrans signed the updated agreement and delivered it to the Fresno Region 4 California Department of Fish and Wildlife office.

March 25, 2020: Rachel Flanagan and Steve Hulbert had a telephone conversation detailing the new detour plan as well as quads queried that were not previously included in the California Natural Diversity Database. Steve Hulbert stated that the new location of the detour would not be an issue if ground disturbance and repaving is not included in the plans.

U.S. Fish and Wildlife Service

On March 12, 2019: Caltrans emailed Jennifer Schofield, Caltrans' liaison from the U.S. Fish and Wildlife Service, to determine if the project has the potential to affect federally listed species and the need for a Section 7 discussion under the Federal Endangered Species Act.

On May 22, 2019: A species list for the project area was generated from the U.S. Fish and Wildlife Service's Information for Planning and Consultation.

On July 15, 2019: Caltrans called Jennifer Schofield regarding the project and a no effect determination for federally listed species, including the tricolored blackbird.

On July 19, 2019: Caltrans received emailed guidance that the expected no effect determination for federally listed species, including the tricolored blackbird, was appropriate for a species under review for federal listing.

On August 30, 2019: There was an email exchange between Caltrans and Jennifer Schofield regarding Caltrans' "no effect" determination for federally listed species. Jennifer Schofield said the U.S. Fish and Wildlife Service had no further comments based on the project description and Caltrans' determination.

On October 15, 2019: Brandon Jones, the assistant fire chief for the Kings County Fire Department, was notified of the project. Brandon Jones' only concern was if emergency services would be able to navigate around construction using local county roads. Brandon Jones forwarded the email to Robert Thayer, the assistant sheriff for the Kings County Sheriff's Office, who had similar concerns.

On October 15, 2019, and December 16, 2019: The Kings County Office of Emergency Management was contacted via email regarding the project.

On November 25, 2019: The U.S. Fish and Wildlife Service's Information for Planning and Consultation generated an updated species list for the project area.

On January 22, 2020: The U.S. Fish and Wildlife Service's Information for Planning and Consultation generated a species list for the project detour area.

On March 26, 2020: There was an email exchange between Rachel Flanagan and Jennifer Schofield regarding Caltrans' "no effect" determination for federally listed species and critical habitat per the change in the detour. A representative from the U.S. Fish and Wildlife Service replied that they had no further comments based on the project description and Caltrans' determination.

Native American Coordination

Historic Property Survey Report

October 25, 2018: Made the initial project notification and request for cultural resource information in the project area per Assembly Bill 52 and Section 106 with Ruben Barrios, Sr., with the Tachi Yokut Tribe.

February 11, 2019: Made a second request for cultural resource information in the project area per Section 106 with Robert Jeff, Vice Chairman and Ruben Barrios, Sr., with the Tachi Yokut Tribe

Supplemental Historic Property Survey Report

October 17, 2019: Made a letter request for cultural resource information on the new detour per Section 106 with Leo Sisco, Chairman and Robert Jeff, Vice Chairman of the Tachi Yokut Tribe.

December 12, 2019: Transmitted a Supplemental Historic Property Survey Report and a request for comment on finding of No Historic Properties Affected per Section 106 to Leo Sisco and Robert Jeff.

May 4, 2020: Caltrans received an email from Shana Powers, Cultural Director of the Santa Rosa Tachi Yokuts Tribe, indicating the tribe would like to consult on the project due to a sensitive archeological site being identified in the area on October 9, 2009. Caltrans continues to work with the tribe regarding the archeological site.

Public Participation

A Public Notice of Intent to adopt a Mitigated Negative Declaration for this project was published in the *Hanford Sentinel* in English and Spanish on April 28, 2020. To ensure the safety of the public during the COVID-19 pandemic, Caltrans did not hold a public hearing. The Initial Study with Proposed Mitigated Negative Declaration was available for review and copying at the Caltrans District 6 office at 1352 West Olive Avenue, Fresno, California 93728, from 8:00 a.m. to 5:00 p.m. The document could have also been downloaded from the Caltrans District 6 website. Comments on the draft environmental document were accepted from April 28, 2020, to May 28, 2020.

Figure 4-1 and Figure 4-2 show the Public Notice of Intent to adopt a Mitigated Negative Declaration that was circulated in English and Spanish, respectively.

Figure 4-1 Public Notice (English)

PUBLIC NOTICE

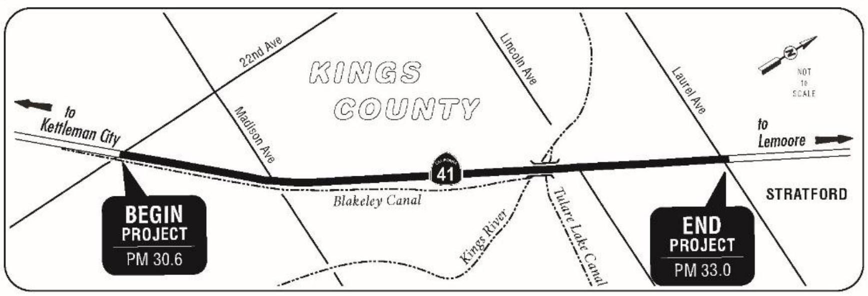
Notice of Intent to Adopt a MITIGATED NEGATIVE DECLARATION

(Study Results Available)

Stratford Kings River Bridge Replacement Project on State Route 41 in Kings County

PUBLIC COMMENT PERIOD

Comments will be accepted from April 28 to May 28. Due to the COVID-19 pandemic, to ensure the safety of the public and our staff, Caltrans will not hold any public gatherings at this time and will not offer the opportunity for a public hearing.



WHAT IS BEING PLANNED?

The California Department of Transportation (Caltrans) proposes to replace the Kings River Bridge on State Route 41 over the Kings River in Kings County near the town of Stratford. Caltrans plans to replace the bridge with a new standard structure. During construction, State Route 41 will be closed for an extended period of time, and interregional traffic will be detoured to State Route 198, Avenal Cutoff Road and Interstate 5.

WHY THIS PUBLIC NOTICE?

Caltrans has studied the effects this project may have on the environment. Our studies show the project will not significantly affect the quality of the environment, but there will be temporary construction impacts to traffic that may inconvenience commuters. This notice is to inform you of the preparation of an Initial Study with Proposed Mitigated Negative Declaration, which is now available for you to read and comment on.

WHAT'S AVAILABLE?

The Initial Study with Proposed Mitigated Negative Declaration and other project information are available for review and copying at the Caltrans District 6 office at 1352 West Olive Avenue, Fresno, CA 93728 from 8:00 a.m. to 5:00 p.m. Monday through Friday. The document can also be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-6.

If you prefer that a hard copy or CD of the document be sent to your home, please email Juergen Vespermann, Senior Environmental Planner, at juergen.vespermann@dot.ca.gov.

WHERE DO YOU COME IN?

If you would like to make any comments on the project or the Initial Study, please send your written comments by May 28, 2020 to Caltrans, Attention: Juergen Vespermann, 855 M Street, Suite 200, Fresno, CA 93721; or via email to juergen.vespermann@dot.ca.gov. If there are no major comments, Caltrans will proceed with the project.

CONTACT

For more information, please contact Juergen Vespermann, Senior Environmental Planner, at (559) 445-6369 or by email at juergen.vespermann@dot.ca.gov

For all other state highway matters in the area, please contact the District 6 Public Information Office by e-mail at D6.public.info@dot.ca.gov or by phone at (559) 488-4067.

SPECIAL ACCOMMODATIONS

Individuals who require documents in alternative formats are requested to contact the District 6 Public Affairs Office at (559) 444-2409. Telecommunication Devices for the Deaf (TDD) users may contact the California Relay Service line at 1 (800) 735-2929 or contact the California Relay Service TTY voice line by dialing 711.

Figure 4-2 Public Notice (Spanish)

AVISO PÚBLICO

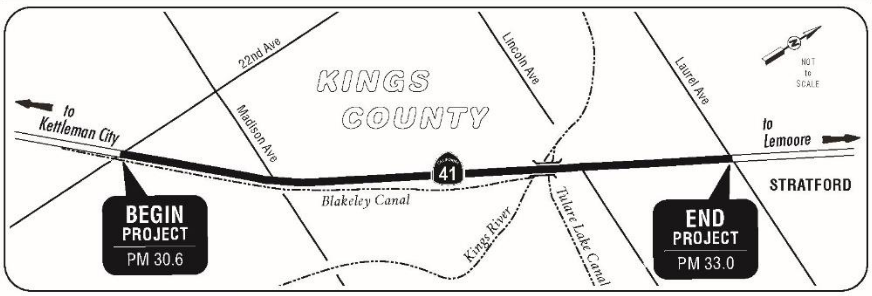
Notificación de Intención Para Adoptar una Propuesta de DECLARACIÓN NEGATIVA

(Resultados del Estudio Están Disponibles)

Proyecto de Reemplazo del Puente Stratford Kings River en la Ruta Estatal 41 en el Condado de Kings

PERÍODO DE COMENTARIO PÚBLICO

Se aceptarán comentarios y peticiones desde el 28 de Abril del 2020 hasta el 28 de Mayo del 2020. Debido a la pandemia del COVID-19, para garantizar la seguridad del público y de nuestro personal, Caltrans no realizará ninguna reunión pública en este momento y no ofrecerá la oportunidad de una audiencia pública.



¿QUÉ SE ESTÁ PLANEANDO?

El Departamento de Transportación (Caltrans) propone reemplazar el puente Kings River en la Ruta Estatal 41 sobre el río Kings en el Condado de Kings cerca de la ciudad de Stratford. Caltrans planea reemplazar el puente con uno nuevo que actualizara a los nuevos estandares de diseño. Durante la construcción, la Ruta Estatal 41 estará cerrada por un período prolongado de tiempo, y el tráfico interregional se desviará a la Ruta Estatal 198, la carretera Avenal Cutoff y la autopista Interestatal 5.

¿POR QUÉ ESTE AVISO?

Caltrans ha estudiado y evaluado los efectos que este proyecto puede tener en el medio ambiente. Nuestros estudios muestran que no afectará significativamente la calidad del medio ambiente, pero habrá impactos de construcción temporales en el tráfico que pueden incomodar a los viajeros. Este aviso es para informarle sobre la preparación de un Estudio Inicial con Propuesta Declaración Negativa Mitigada, que ahora está disponible para que pueda leerla y hacer comentarios.

¿QUÉ ESTA DISPONIBLE?

El Estudio Inicial con Propuesta Declaración Negativa Mitigada y otra información del proyecto están disponibles para su revisión y para copiar en la Oficina del Distrito 6 de Caltrans 1352 W. Olive Avenue Fresno, CA 93728 de Lunes a Viernes, 8:00a.m. a 5:00 p.m. El documento también se puede descargar en el siguiente sitio web: https://dot.ca.gov/caltrans-near-me/district-6. Si prefiere que se le envíe una copia imprimida o un CD del documento a su hogar, envíe un correo electrónico a Juergen Vespermann, Planificador Ambiental, a juergen.vespermann@dot.ca.gov.

¿CÓMO PARTICIPA USTED?

Si desea hacer algún comentario sobre el proyecto o el estudio inicial, envíe sus comentarios por escrito antes del 28 de mayo de 2020 a: Caltrans, Attention: Juergen Vespermann, 855 M Street, Suite 200, Fresno, CA 93721 o por correo electrónico a: juergen.vespermann@dot.ca.gov. Si no hay comentarios significativos, Caltrans procederá con el diseño del proyecto.

PARA MÁS INFORMACIÓN

Para obtener más información por favor comuníquese con Juergen Vespermann, Planificador Ambiental al (559) 445-6369 o por correo electrónico, juergen.vespermann@dot.ca.gov. Para todos los demás asuntos de carreteras estatales en el área, comuníquese con la Oficina de Información Pública del Distrito 6 por correo electrónico a D6.public.info@dot.ca.gov o por teléfono al (559) 488-4067.

ARREGLOS ESPECIALES

Las personas que requieren documentos en formatos especiales deben comunicarse con la Oficina de Asuntos Públicos del Distrito 6 al (559) 444-2409. Para obtener aparatos de telecomunicacion para sordos (TDD) pueden hablar al 1-800-735-2929 o contactar la linea California Relay Service TTY, solo marquen 711.

Chapter 5 List of Preparers

This document was prepared by the following Caltrans Central Region staff:

Allam Alhabaly, Transportation Engineer. B.S., School of Engineering, California State University, Fresno; 17 years of experience in environmental technical studies, with emphasis on noise studies. Contribution: Noise Study.

Myles Barker, Editorial Specialist. B.A., Mass Communication and Journalism, California State University, Fresno; 5 years of writing and editing experience. Contribution: Technical Editor.

Gilberto Baca, Project Manager. B.S., Civil Engineering, California State University, Fresno; 20 years of project development experience. Contribution: Project Manager.

Kari Kyler Daniska, Senior Environmental Planner—Mitigation Specialist. B.S., Biological Sciences, California State University, Chico; Certificate in Water/Wastewater Management, Shasta College; 10 years of experience in environmental science and planning, regulatory permitting, monitoring, reporting, and technical writing. Contribution: Mitigation Specialist/Senior Biologist.

Rachel Flanagan, Environmental Planner (Natural Sciences). B.S., Zoology, The University of Oklahoma; 3 years of experience in wildlife biology. Contribution: Natural Environment Study.

Emma Fryer, Consultant Biologist. B.S., Botany, Humboldt State University; 1 year of environmental planning and biological sciences experience. Contribution: Natural Environment Study.

David Gould, Associate Environmental Planner. B.S., Environmental Management and Protection, Minor in Geospatial Analysis, Humboldt State University; 1 year of environmental planning experience. Contribution: Environmental Coordinator; prepared environmental document.

Maya Hildebrand, Associate Environmental Planner (Air Quality Coordinator). B.S., Geology, Utah State University; 5 years of experience in air quality analysis and 4 years of experience in combined geological/environmental hazards. Contribution: Air Quality Compliance Memorandum.

Adam Inman, Engineering Geologist. M.S., Geology, California State University, Fresno; B.S., Geology, Minor in Applied Geology, California State University, Stanislaus; 5 years of experience in geology,

engineering geology, and environmental geology. Contribution: Initial Site Assessment.

Rogerio Leong, Engineering Geologist. B.S., Geology, University of Sao Paulo, Brazil; 17 years of environmental site assessment and investigation experience. Contribution: Authored and co-authored several Remedial Investigation/Feasibility Study Reports for Superfund contaminated sites. Contribution: Water Quality Assessment Report.

Mandy Macias, Associate Environmental Planner (Archaeology). B.A., Anthropology, California State University, Fresno; more than 20 years of California and Great Basin archaeology and cultural resources management experience. Contribution: Prehistoric Archaeology, Native American Consultation.

Kai P. Pavel, Engineering Geologist. P.G., M.A., Geography, Geology, English, Heinrich Heine University Düsseldorf, Germany; more than 13 years of experience in hazardous waste/materials, water quality, environmental site assessment, and investigation. Contribution: Paleontological Identification Report.

Som Phongsavanh, Senior Environmental Planner. B.S., Biology/Physiology, California State University, Fresno; 19 years of environmental planning experience. Contribution: Quality Control.

Andrew Pochwatka, National Pollutant Discharge Elimination System/Stormwater Coordinator. B.S., Civil Engineering, California State University, Sacramento; 10 years of experience in project design and 11 years of experience as a National Pollutant Discharge Elimination System/Stormwater District 6 Coordinator. Contribution: Stormwater.

Ruth Rhoades, Associate Environmental Planner. Registered Professional Archaeologist (RPA). M.A., Cultural Resources Management, Sonoma State University; Professionally Qualified Staff: Lead Archaeological Surveyor, Historical Archaeology; 18 years of experience in archaeological and cultural resources management, including 2 years with Caltrans. Contribution: Cultural resources compliance documents.

Jasvir Singh, P.E., Project Engineer. B.S., Civil Engineering, California State University, Long Beach; 29 years of experience in engineering. Contribution: Project report and design.

Jeff Sorensen, Associate Environmental Planner. B.A., Business Administration, California State University, Fresno; more than 36 years of land use, transportation, and environmental planning experience. Contribution: Coordinated the environmental process. Prepared the Initial Study with Mitigated Negative Declaration.

Lea Spann, Engineering Geologist. B.A., Environmental Studies, University of California, Santa Barbara; over 20 years of hazardous waste/materials experience and 5 years of environmental planning experience. Contribution: Preliminary Site Assessment for Hazardous Waste.

Jennifer H. Taylor, Environmental Office Chief. B.A., Political Studies and Organizational Sciences, Pitzer College; more than 30 years of experience in environmental and land use planning. Contribution: Oversight review of the environmental document.

Vladimir Timofei, Transportation Engineer. M.S., Civil Engineering, California State University, Fullerton; 18 years of environmental technical studies experience. Contribution: Noise Study.

Juergen Vespermann, Senior Environmental Planner. Civil Engineering Degree, Fachhochschule Muenster, Germany; more than 20 years of experience in transportation planning/environmental planning. Contribution: Quality review.

Chelsea Starr, Environmental Planner. B.S., Biology, University of Washington; 2 years of environmental planning experience. Contribution: Environmental coordinator; prepared environmental document.

Brian Wickstrom, Associate Environmental Planner (Archaeology). M.A., Special Studies: Cultural Resources Management, Sonoma State University; more than 30 years of cultural resource experience. Contribution: Cultural resources compliance documents.

Chapter 6 Distribution List

The following agencies, elected officials, school districts, county board of supervisors, and Native American tribes and communities were mailed individual copies of the Notice of Intent to Adopt a Mitigated Negative Declaration. Local land and business owners were also notified.

Federal Agencies

Colonel James Handura
District Commander
U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, California 95814

State Agencies

Patrick Pulupa
Executive Officer
California State Water Resources Control Board
1685 E Street
Fresno, California 93706

Julie Vance
Regional Manager
California Department of Fish and Wildlife
1234 East Shaw Avenue
Fresno, California 93710

Hanford Area Commander
California Highway Patrol
1565 Glendale Avenue
Hanford, California 93230

The following agencies were also given notice through the California State Clearinghouse:

- Central Valley Flood Protection Board
- California Department of Conservation
- California Public Utilities Commission
- California Department of Water Resources
- California Transportation Commission
- California State Water Resources Control Board: Water Quality

Regional and Local Agencies and Districts

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Executive Officer
Central Valley Flood Protection Board
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Doctor Guadalupe Soils
Board President
Lemoore Union High School District
5 Powell Avenue
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Ben Luis
Principal
Liberty Middle School
1000 Liberty Drive
Lemoore, California 93245

Jerry Waymire
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Lemoore Union Elementary School District
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Christina Gonzales
Principal
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Kings County Association of Governments
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Amanda Verhaege
Emergency Services Coordinator
Kings County Office of Emergency Management
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Hanford, California 93230

Empire West Side Irrigation District
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Chuck Kinney
Deputy Director
Kings County Planning Division
1400 West Lacey Boulevard
Hanford, California 93230

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U.S. Congressman
House of Representatives, California's 21st District
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Selma, California 93662

Dianne Feinstein
Senator
U.S. Senate
2500 Tulare Street, Suite 4290
Fresno, California 93721

Kamala Harris
Senator
U.S. Senate
2500 Tulare Street, Suite 5290
Fresno, California 93721

State Elected Officials

Rudy Salas
Assemblyman
California State Assembly, District 32
113 Court Street, Suite 201
Hanford, California 93230

Melissa Hurtado
Senator
California State Senate, District 14
611 North Douty Street
Hanford, California 93230

County Board of Supervisors

Joe Neves
District 1 Supervisor
Kings County Board of Supervisors
1400 West Lacey Boulevard
Hanford, California 93230

Native American Tribes, Agencies, and Communities

Leo Sisco
Chairman
Santa Rosa Rancheria Tachi-Yokut Tribe
Post Office Box 8
Lemoore, California 93245

Neil Peyron
Chairman
Tule River Indian Tribe of California
Post Office Box 589
Porterville, California 93258

Robert L. Gomez, Junior
Tribal Chairman
Tubatulabals of Kern Valley
Post Office Box 226
Lake Isabella, California 93240

David Laughing Horse Robinson
Kawaiisu Tribe of Tejon Reservations, Wukchumni Tribal Council
Post Office Box 1547
Kernville, California 93238

Lorrie Planas
Choinumni Tribe
2736 Palo Alto Avenue
Clovis, California 93611

Robert Ledger Senior
Chairman
Dumna Wo-Wah Tribal Government
2191 West Pico Avenue
Fresno, California 93705

Darlene Franco
Chairwoman
Wukchumni Tribal Council of Tulare County
Post Office Box 6576
Visalia, California 93290

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Delia Dominguez
Chairwoman
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Wuksache Tribe
1028 East K Road
Visalia, California 93292

Kenneth Woodrow
Chairman
Wuksache Indian Tribe/Eshom Valley Band
1179 Rockhaven Court
Salinas, California 93906

Appendix A Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
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Making Conservation a California Way of Life.

November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin
Director

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

Appendix B Required Consultation and Concurrence Determination

State of California • Natural Resources Agency — Gavin Newsom, *Governor*
DEPARTMENT OF PARKS AND RECREATION — Lisa Ann L. Mangat, *Director*
OFFICE OF HISTORIC PRESERVATION
Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

July 2, 2019

VIA EMAIL

In reply refer to: FHWA_2019_0617_001

Mr. John Thomas, Acting Branch Chief
Southern San Joaquin Valley Cultural Resources Branch
Caltrans District 6 Fresno
855 M Street, Suite 200
Fresno, CA 93721

Subject: Determinations of Eligibility for the Proposed Stratford Kings River Bridge Replacement Project, Kings County, CA

Dear Mr. Thomas:

Caltrans is initiating consultation regarding the above project in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). As part of your documentation, Caltrans submitted a Historic Property Survey Report (HPSR), a Historical Resources Evaluation Report (HRER), and an Archaeological Survey Report for the proposed project.

Caltrans is proposing to demolish and construct a new replacement bridge at the existing bridge location (Bridge No. 45-0007) at PM 32.3 on State Route (SR) 41in Kings County, California and use local roads 22nd Avenue and Laurel Road to detour SR 41 traffic during construction of the new bridge. A complete project description and area of potential effect boundaries are located on pages 1-2 of the HPSR and Appendix A of the HRER.

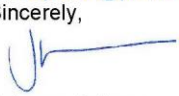
Pursuant to Stipulation VIII.C.6 of the PA, Caltrans determined that the following properties are not eligible for the National Register of Historic Places (NRHP):

- John Victoria Farm Complex – 20891 Lincoln Avenue, Stratford, CA
- Souza's Associated Service – 19538 State Highway 41, Stratford, CA

FHWA_2019_0617_001

Based on review of the submitted documentation, I concur.

If you have any questions, please contact Natalie Lindquist at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov .
Sincerely,



Julianne Polanco
State Historic Preservation Officer

Appendix C Avoidance, Minimization and/or Mitigation Summary

To ensure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record that follows) would be implemented. During project design, avoidance, minimization, and/or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in the Environmental Commitments Record are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. Because the following Environmental Commitments Record is a draft, some fields have not been completed; they will be filled out as each of the measures is implemented.

Note: Some measures may apply to more than one resource area. Duplicated or redundant measures have not been included in this Environmental Commitments Record.

Utilities and Emergency Services

A traffic management plan will be developed to minimize delays and maximize safety for motorists. The traffic management plan will include, but will not be limited to, the following:

- The Caltrans Public Information Office will communicate information to the public.
- The Construction Zone Enhanced Enforcement Program will be used, and the California Highway Patrol will assist and manage traffic onto the detour.
- Local and emergency services will be able to drive around the Stratford Kings River Bridge using local county roads.

Traffic and Transportation/Pedestrian and Bicycle Facilities

A traffic management plan will be developed to minimize delays and maximize safety for motorists. The traffic management plan will include, but will not be limited to the following:

- Information will be provided through brochures, mailers, and a website by the Caltrans Public Information Office.

- The Construction Zone Enhanced Enforcement Program will be used, and the California Highway Patrol will assist and manage traffic onto the detour.
- To manage traffic flows, temporary traffic signals will be required at the intersections of State Route 269, Avenal Cutoff Road, and the intersection at the northbound off-ramp of Interstate 5.

Water Quality and Stormwater Runoff

In addition to the measures listed in Section 2.3.2, Wetlands and Other Waters, the following measures will be required to minimize potential water quality impacts associated with construction and operation.

- Implement the Caltrans Statewide National Pollutant Discharge Elimination System Stormwater permit and stormwater Best Management Practices to prevent and reduce impacts during construction.
- Prepare and use a Stormwater Pollution Prevention Plan before construction. The contractor will prepare the plan before Caltrans approves it.

Hazardous Waste and Materials

The following Standard Special Provisions will be required due to aerially deposited lead in the project area:

- Standard Special Provision 7-1.02K(6)(j)(ii)-Lead Compliance Plan
- Standard Special Provision 14-11.08-Regulated Material Containing Aerially Deposited Lead
- Standard Special Provision 14-11.14-Treated Wood Waste

Biological Resources

The following are Caltrans' Standard Special Provisions that will be required for biological resources:

- Standard Special Provision 14-1.01-Environmental Stewardship, including Environmentally Sensitive Areas
- Standard Special Provision 14-6.02-Species Protection (buffers, work stoppage areas)
- Standard Special Provision 14-6.03-Bird Protection (nest protection buffers)

Natural Communities

The following avoidance, minimization, and/or mitigation measures will be used for valley-foothill riparian habitat to minimize potential impacts associated with construction and operation:

- Pre-construction botanical surveys will be conducted no more than 30 days before construction starts.
- Temporary high visibility fencing will be installed to form an environmentally sensitive area to protect natural community habitats that occur outside of the project area.
- Where possible, work within the riverbed will be conducted during low-flow conditions or in dry conditions.
- Any foot traffic or equipment that cannot avoid passing over wetlands will do so only on wetland protection mats.
- Staging and storage areas must be outside of the habitat of all-natural communities.
- Vegetation removal will be reduced to the minimal amount necessary to complete work.

The following compensatory mitigation measure will be used for valley-foothill riparian habitat.

- Any trees removed within valley-foothill riparian habitat will be replaced based on their diameter at breast height. Heritage trees, which are 24 inches in diameter, will be replaced at a 10 to 1 ratio, and trees between 4 and 24 inches in diameter will be replaced at a 3 to 1 ratio. Any trees removed will be replaced based on permit requirements.

Wetlands and Other Waters

The following avoidance, minimization, and/or mitigation measures will be used for both fresh emergent wetlands and riverine habitat to minimize potential impacts associated with construction and operation:

- Any foot traffic or equipment that cannot avoid passing over wetlands will do so only on wetland protection mats.
- Pre-construction botanical surveys will be conducted no more than 30 days before construction starts.
- Temporary high visibility fencing will be installed to form an environmentally sensitive area to protect wetland and riverine habitats that occur outside of the project area.
- Where possible, work within the riverbed will be conducted during low-flow conditions or in dry conditions.
- Staging and storage areas must be outside of the habitat of wetland and riverine communities.
- Vegetation removal will be reduced to the minimal amount necessary to complete work.

The following avoidance, minimization, and/or mitigation measures will also be used for riverine habitat:

- All dewatering will be conducted with a qualified biologist present to provide biological monitoring.
- All tree removal will be done in such a manner that the root ball is left in place, and the soil is not removed, except where it is required by excavation.
- Project work will avoid the immediate shore of the South Fork Kings River wherever possible. If project work must take place on the shore, murky curtains will be used where appropriate to prevent the cloudiness or haziness of the river.

The following compensatory mitigation measures will be used for both fresh emergent wetlands and riverine habitat:

- Permanent impacts to wetlands will be mitigated for in acreage equal to that of the permanent impacts through the purchase of conservation credits from the National Fish and Wildlife Foundation, or other in-lieu fee programs. Otherwise, the habitat will be established as part of a permittee-responsible project.
- Permanent impacts of up to 0.003 acre of riverine habitat will be mitigated in the form of conservation credits from the National Fish and Wildlife Foundation, or other in-lieu fee programs. Otherwise, the habitat will be established as part of a permittee-responsible mitigation project.

Plant Species

The following avoidance, minimization, and/or mitigation measures will be used for vernal barley, mud nama, and crownscale to minimize potential impacts associated with construction and operation. No compensatory mitigation is proposed.

- A qualified biologist will provide worker environmental awareness training for all workers, to educate them on special-status species that have the potential to occur within the work area. The training will also cover Best Management Practices, permit conditions, environmental laws, and the consequences of violating them.
- Focused botanical surveys will be conducted during the blooming season before construction starts.
- Populations that cannot be avoided by work will have their locations recorded, and topsoil removed and stored safely. The topsoil will be replaced after construction to maintain the original seed bank.
- Populations where seeds cannot be collected or be avoided by work will be excavated and transplanted to a suitable location similar to the original location.

Animal Species

The following avoidance, minimization, and/or mitigation measure will be used for the following species to minimize potential impacts associated with construction and operation. No compensatory mitigation is proposed.

- A qualified biologist will provide a worker environmental awareness training for all workers, to educate them on special-status species that have the potential to occur within the work area. The training will also cover Best Management Practices, permit conditions, environmental laws, and the consequences of violating them.

Hoary Bat and Western Red Bat

- Clearing and grubbing will be minimized wherever possible and will occur between September 1 and February 1, when bats will have moved from the area.
- Pre-construction surveys will be conducted for bats in the surrounding trees no more than two weeks before work starts and would be repeated five days before the bridge is demolished.
- If bats are found within jurisdictional areas of the project site, the California Department of Fish and Wildlife will be asked to determine the appropriate actions.

Loggerhead Shrike, Northern Harrier, Burrowing Owl, Yellow-Headed Blackbird, and Black-Crowned Night Heron

- Pre-construction surveys will be conducted no more than 30 days before construction activities start unless these activities start outside of the nesting season (February 1 to September 30).
- If construction activities extend into more than one nesting season, additional nesting surveys will be required at the start of a nesting season before work can continue.
- A qualified biologist will be present during all clearing and grubbing activities that are conducted between February 1 and September 30 to provide biological monitoring.
- If any bird species are found nesting in or near the project footprint, a 500-foot no-work buffer will be used for raptors, and a 100-foot no-work buffer will be used for other birds until a qualified biologist confirms that the young birds can fly. A qualified biological monitor will be required for all work within the buffers to ensure that work does not disturb nests.
- If clearing and grubbing activities must be completed during the avian nesting season (February 1 through September 30), a qualified biologist will perform a site inspection before any trees are trimmed or removed to confirm that work will not negatively affect any active nests.

Western Pond Turtle

- Pre-construction surveys for western pond turtles will be conducted no more than 30 days before work starts.
- Whenever possible, work in the riverbed will be done in low-flow and dry periods.
- When restricting work to low-flow and dry periods is not possible, a qualified biologist will be present to watch all in-water work and to ensure that any western pond turtles found in the project footprint can leave undisturbed and on their own.
- Temporary high visibility fencing will be installed in upland habitat on the boundaries of the project footprint to prevent western pond turtles from entering the work area.

Threatened and Endangered Species

The following avoidance, minimization, and/or mitigation measures will be used to minimize potential impacts to tricolored blackbirds:

- Pre-construction surveys will be conducted no more than 30 days before construction activities start unless these activities start outside of the nesting season (February 1 to September 30).
- If construction activities extend into more than one nesting season, additional nesting surveys will be required at the start of a nesting season before work can continue.
- A qualified biologist will be present during all clearing and grubbing activities that are conducted between February 1 and September 30 to provide biological monitoring.
- If tricolored blackbirds are found nesting in or near the project footprint, a 100-foot no-work buffer will be used until a qualified biologist confirms that the young birds can fly. A qualified biological monitor will be required for all work within that buffer to ensure work does not disturb the nest.
- Environmentally sensitive area fencing will separate and protect as much suitable tricolored blackbird habitat as possible—emergent wetland vegetation and shoreline thickets—near the project footprint.

The following compensatory mitigation measure will be used for tricolored blackbirds.

- A Section 2081 Incidental Take Permit will be sought from the California Department of Fish and Wildlife if nesting habitat is impacted during the breeding season. Caltrans will adhere to the measures and compensatory requirements in the Incidental Take Permit. This was added to the final environmental document.

The following avoidance, minimization, and/or mitigation measures will be used to minimize potential impacts to Swainson's hawks:

- Protocol surveys for Swainson's hawks will be conducted the year before work starts. If work starts outside of the nesting season for Swainson's hawks, work may not continue into the nesting season until a pre-construction survey or a protocol survey for Swainson's hawks has been conducted.
- If a Swainson's hawk is found nesting in or near the project footprint, a 500-foot no-work buffer will be established, and no work will be allowed within the buffer unless a qualified biological monitor determines that work will not disturb the nests.
- If clearing and grubbing activities must be completed during the avian nesting season (February 1 to September 30), a qualified biologist will perform a site inspection before any tree trimming or removal to confirm that work will not negatively impact any active nests.

The following compensatory mitigation measure will be used for Swainson's hawks:

- A Section 2081 Incidental Take Permit will be sought from the California Department of Fish and Wildlife for the potential take of Swainson's hawks. Caltrans will adhere to the measures and compensatory requirements in the Incidental Take Permit. This was added to the final environmental document.

Appendix D Comment Letters and Responses

This appendix contains the comments received during the public circulation and comment period from April 28, 2020, to May 28, 2020. A Caltrans response follows each comment presented.

Comment from: California Department of Fish and Wildlife

Comment 1:

May 28, 2020

Juergen Vespermann, Branch Chief
California Department of Transportation, District 6 855 M Street, Suite 200
Fresno, California 93721

Subject: Stratford Kings River Bridge Replacement Project
Initial Study with Proposed Mitigated Negative Declaration
State Clearinghouse Number 2020049051

Dear Mr. Vespermann:

The California Department of Fish and Wildlife received a proposed Mitigated Negative Declaration and supporting Initial Study prepared by Caltrans for the above-referenced Project pursuant to the California Environmental Quality Act and California Environmental Quality Act Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, California Department of Fish and Wildlife appreciates the opportunity to provide comments regarding those aspects of the Project that California Department of Fish and Wildlife, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

CDFW ROLE

California Department of Fish and Wildlife is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statue for all the people of the State, Fish and Game Code Section 711.7, subdivision a and 1802; Public Resources Code, Section 21070; California Environmental Quality Act Guidelines Section 15386, subdivision a. California Department of Fish and Wildlife, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species,

Section 1802. Similarly, for purposes of California Environmental Quality Act, California Department of Fish and Wildlife is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

California Department of Fish and Wildlife is also submitting comments as a Responsible Agency under California Environmental Quality Act, Public Resources Code Section Code, Section 21069; California Environmental Quality Act Guidelines, section 15381. California Department of Fish and Wildlife expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to California Department of Fish and Wildlife's lake and streambed alteration regulatory authority, Fish and Game Code, Section 1600. Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act, Fish & Game Code, Section 2050, related authorization as provided by the Fish and Game Code will be required.

PROJECT DESCRIPTION SUMMARY

Proponent: Caltrans

Objective: Caltrans proposes to replace bridge number 45.0007 which conveys State Route 41 traffic over the Kings River at about post mile 32.3.

Location: The bridge is located just southwest of the community of Stratford in Kings County.

Timeframe: Unspecified.

COMMENTS AND RECOMMENDATIONS

California Department of Fish and Wildlife offers the following comments to assist Caltrans in adequately identifying and/or sufficiently reducing to less-than-significant the potentially significant, direct and indirect Project-related impacts to biological resources. Editorial comments or other suggestions may also be included to improve the document.

Currently, the proposed Mitigated Negative Declaration indicates that the Project-related impacts to biological resources would be less than significant with implementation of the specific avoidance, minimization, and mitigation efforts described in the Initial Study. However, as currently drafted, it is unclear whether some of the species-specific measures sufficiently reduce impacts to a level that is less-than-significant. In particular, California Department of Fish and Wildlife is concerned with Caltrans' proposed avoidance buffers for the State Threatened tricolored blackbird *Agelaius tricolor* and Swainson's hawk *Buteo swainsoni*.

California Department of Fish and Wildlife will recommend Caltrans either propose greater no-disturbance buffers in order to reduce to less-than-significant the potential Project-related effects to the aforementioned State threatened species, or obtain incidental take authorization in the event these greater no-disturbance buffer cannot be maintained.

I. Environmental Setting and Related Impact

Would the Project 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 California Department of Fish and Wildlife or the United States Fish and Wildlife Service.

Swainson's Hawk

Issue: Swainson's Hawks are known to have nested in the vicinity of the Project bridge historically, specifically in the riparian area associated with the Kings River north of the bridge. The Project activities will involve varying degrees of ground disturbance at the bridge and within the right-of-way approaching and departing the bridge.

California Department of Fish and Wildlife agrees that Swainson's Hawks in the area may have become habituated to vehicular traffic along the right-of-way and farming activities on the adjoining cropland.

However, California Department of Fish and Wildlife considers it possible that the Project-related activities would represent a novel stimulus which could result in nest abandonment if they occur within one half mile of an active Swainson's Hawk nest. This nest abandonment would represent take of the State Threatened species as it is defined in Section 86 of the Fish and Game Code.

Specific Impacts: In the Initial Study, Caltrans indicates it will maintain a 500-foot no disturbance buffer from active Swainson's Hawk nests during Project implementation. However; considering the nature of the Project and its setting, California Department of Fish and Wildlife considers this 500-foot no disturbance buffer insufficient to avoid take of Swainson's Hawk. Therefore, California Department of Fish and Wildlife does not agree that the proposed 500-foot no-disturbance buffer reduces to less-than-significant the potential Project-related effect on the species.

Evidence impact would be significant: Swainson's Hawks exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the San Joaquin Valley limits their local distribution and abundance, California Department of Fish and Wildlife 2016. Adoption of the Mitigated Negative Declaration as it is written will allow activities that will involve ground disturbance, drilling, compaction, paving employing heavy equipment and

work crews within 500 feet of active Swainson's Hawk nests. These activities could affect these nests and have the potential to result in nest abandonment, significantly impacting local nesting Swainson's Hawks.

Recommended Potentially Feasible Avoidance and Mitigation Measures. Because the Project-related activities represent novel stimuli and threaten nest abandonment, California Department of Fish and Wildlife recommends Caltrans propose a greater no-disturbance buffer in order to reduce to less-than-significant the Project-related effects on the species.

Further, California Department of Fish and Wildlife recommends Caltrans seek and obtain incidental take authorization prior to initiating Project-related activities within the recommended no-disturbance buffer, not after it is determined that the nesting pair have been disturbed. California Department of Fish and Wildlife recommends the following edits to the Swainson's Hawk Avoidance, Minimization, and/or Mitigation Measures section of the Initial Study. Further, California Department of Fish and Wildlife recommends these revised measures and be made conditions of Project approval.

Recommended Mitigation Measure 1: Recommended edit to the Avoidance, Minimization and/or Mitigation Measures for Swainson's Hawk on page 50 of the Initial Study.

Currently, under the Avoidance, Minimization, and/or Mitigation Measures section of the Initial Study, Caltrans proposes: "If a Swainson's hawk is found nesting in or near the project footprint, a 500-foot no-work buffer would be established, and no work would be allowed within the buffer unless a qualified biological monitor determines that work would not disturb the nest."

California Department of Fish and Wildlife recommends Caltrans propose an unqualified "one half mile no-work buffer would be established" around active Swainson's Hawk nests in the vicinity of the Project bridge.

Response to comment 1:

Changes in the draft environmental document have been made to clarify and be consistent with Table 1.1 which states that a Section 2081 Incidental Take Permit would be obtained during the project's final design.

Caltrans does not use established thresholds such as one-half mile buffers since Swainson's hawks have varying tolerances for human activity. Analysis of surrounding land use and typical activities near the nest is used to predict how a Swainson's hawk nesting pair may respond to construction activities. This nest is surrounded by agricultural/rural land and is immediately next to a popular fishing and swimming spot where cars frequently park. The level of activity and noise generated by construction, such as pile driving and demolition work may disturb nesting activity. Caltrans has successfully implemented avoidance and minimization measures for Swainson's hawks,

which include buffers, seasonal work windows, monitoring, attenuation, and stopping construction. Because there are activities that may occur immediately next to the nest, and once started may not be stopped, there is a potential for take. Therefore, Caltrans will seek an Incidental Take Permit.

Comment 2:

Recommended Mitigation Measure 2: Recommended edit to the Avoidance, Minimization, and/or Mitigation Measures for Swainson's Hawk on page 50 of the Initial Study.

Caltrans proposes "A Section 2081 Incidental Take Permit may be required for the Swainson's hawk if work disturbs nesting hawks, causes them distress, or causes any other effects that result in nest abandonment or failure."

California Department of Fish and Wildlife recommends Caltrans seek an Incidental Take Permit pursuant to Fish and Game Code section 2081 b, if this buffer cannot be maintained, and that the Permit be obtained prior to initiating Project-related vegetation- or ground-disturbance within the one-half mile no-disturbance buffer. California Department of Fish and Wildlife does not consider monitoring for disturbance, distress, or any other effects that result in nest abandonment or failure as an avoidance measure and therefore, California Department of Fish and Wildlife does not agree that this measure is effective to reduce impacts to Swainson's hawk to less than significant. California Department of Fish and Wildlife has concerns that through the implementation of this measure as it is currently in the Initial Study, take of Swainson's hawk may occur and even if work is halted, the end result is a violation of CESA that cannot be remedied through the acquisition of an ITP after the fact.

Response to comment 2: Because there are activities that may occur immediately next to the nest, and once started may not be stopped, there is a potential for take; therefore, Caltrans will seek an Incidental Take Permit.

Comment 3:

Tricolored Blackbird

Issue: Tricolored Blackbirds have the potential to nest near the Project bridge. The Project activities will involve varying degrees of ground disturbance at the bridge and within the right-of-way approaching and departing the bridge. California Department of Fish and Wildlife agrees that Tricolored Blackbirds in the area may have become habituated to vehicular traffic along the right-of-way and farming activities on the adjoining cropland. However, California Department of Fish and Wildlife considers it possible that the Project-related activities would represent a novel stimulus which could result in nest abandonment if it occurs within 500 feet of active Tricolored

Blackbird nests. This nest abandonment would represent take of the State Threatened species as it is defined in section 86 of Fish and Game Code.

Specific impacts: In the Initial Study, Caltrans indicates it will maintain a 100-foot no-disturbance buffer from active Tricolored Blackbird nests during Project implementation. However, California Department of Fish and Wildlife considers this 100-foot no-disturbance buffer insufficient to avoid take of Tricolored Blackbirds. Therefore, California Department of Fish and Wildlife does not agree that the proposed no-disturbance buffer reduces to less-than-significant the potential Project-related environmental effect on the species.

Evidence impact is potentially significant: The lack of suitable Tricolored Blackbird nesting habitat in the San Joaquin Valley limits their local distribution and abundance. Approval of the Project will allow ground-disturbing activities that will involve noise, groundwork, and movement of workers that could affect nests and have the potential to result in nest abandonment, significantly impacting locally nesting Tricolored Blackbirds.

Recommended Potentially Feasible Avoidance and Mitigation Measures: Because the Project-related activities represent novel stimuli and threaten nest abandonment, California Department of Fish and Wildlife recommends Caltrans propose a greater no-disturbance buffer in order to reduce to less-than-significant the Project-related effects on the species. California Department of Fish and Wildlife recommends the following edits to the Tricolored Blackbird Avoidance, Minimization, and/or Mitigation Measures section of the Initial Study. Further, California Department of Fish and Wildlife recommends these revised measures and be made conditions of Project approval.

Recommended Mitigation Measure 3: Recommended edit to the Avoidance, Minimization and/or Mitigation Measures for Tricolored Blackbird on page 50 of the Initial Study.

Currently, Caltrans proposes: “If any tricolored blackbirds are found nesting in or near the project footprint, a 100-foot no-work buffer would be used for tricolored blackbirds until a qualified biologist confirms that the young birds are able to fly” and that “a qualified biological monitor would be required for all work within that buffer to ensure work does not disturb the nest.” California Department of Fish and Wildlife recommends Caltrans propose a 500-foot no-work buffer” and that no work be allowed within that buffer, with or without a biological monitor for the reasons described in the Swainson’s hawk Comment 1 discussion above.

Response to comment 3: Changes in the draft environmental document have been made to clarify and be consistent with Table 1.1 which states that a Section 2081 Incidental Take Permit would be obtained during the project’s final design. Caltrans does not use established thresholds such as 500-foot

buffers since tricolored blackbirds have varying tolerances for human activity. Analysis of surrounding land use and typical activities near the nest is used to predict how a tricolored blackbird nesting pair may respond to construction activities. This nest is surrounded by agricultural/rural land and is immediately next to a popular fishing and swimming spot where cars frequently park. The level of activity and noise generated by construction, such as pile driving and demolition work may disturb nesting activity. Caltrans has successfully implemented avoidance and minimization measures for tricolored blackbirds. Such measures include buffers, seasonal work windows, monitoring, attenuation, and stopping construction. Because there are activities that may occur immediately next to the nest, and once started may not be stopped, there is a potential for take; therefore, Caltrans will seek an Incidental Take Permit.

Comment 4:

Recommended Mitigation Measure 4: Recommended edit to the Avoidance, Minimization, and/or Mitigation Measures for Tricolored Blackbird on page 50 of the Initial Study.

Currently, Caltrans proposes obtaining coverage under a “2081 Incidental Take Permit if the 100-foot no-work buffer cannot be maintained.” California Department of Fish and Wildlife recommends obtaining take authorization through the acquisition of an ITP if the above recommended 500-foot no-disturbance buffer cannot be maintained. California Department of Fish and Wildlife advises the Permit be acquired well in advance of vegetation- or ground-disturbing activities to prevent prolonged interruption of active construction.

ENVIRONMENTAL DATA

The California Environmental Quality Act requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations, Public. Resources Code, Section 21003, subdivision e. Accordingly, please report any special-status species and natural communities detected during Project surveys to The California Natural Diversity Database. The California Natural Diversity Database field survey form can be mailed electronically to California Natural Diversity Database at CNDDB@wildlife.ca.gov. The types of information reported to California Natural Diversity Database can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be necessary. Fees are payable

upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by California Department of Fish and Wildlife. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final.

California Department of Fish and Wildlife appreciates the opportunity to comment on the Project to assist Caltrans in identifying and mitigating the Project's impacts on biological resources.

More information on survey and monitoring protocols for sensitive species can be found at California Department of Fish and Wildlife's website https://www.wildlife.ca.gov/Conservation/Survey-Protocols.

Please see the enclosed Mitigation Monitoring and Reporting Program table which corresponds with the recommended edits to existing mitigation measures in this comment letter, Attachment 1. If you have any questions, please contact Jim Vang, Environmental Scientist, at 559-243-4014 extension 254, or by electronic mail at Jim.Vang@wildlife.ca.gov.

Sincerely,

Julie A. Vance Regional Manager

Attachment 1: Mitigation Monitoring and Reporting Program

cc:

United States Fish and Wildlife Service
2800 Cottage Way, Suite W-2605 Sacramento, California 95825

Regional Water Quality Control Board Central Valley Region
1685 “E” Street
Fresno, California 93706-2020

United States Army Corps of Engineers San Joaquin Valley Office
1325 “J” Street, Suite #1350
Sacramento, California 95814-2928

Literature Cited

California Department of Fish and Wildlife. 2016. Five Year Status Review for Swainson’s Hawk (*Buteo swainsoni*).

California Department of Fish and Wildlife. April 11, 2016.

Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT: Stratford Kings River Bridge Replacement Project State Clearinghouse Number: 2020049051

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
Mitigation Measure 1: Swainson's Hawk Avoidance	
Mitigation Measure 2: Swainson's Hawk Take Authorization (if avoidance is not feasible)	
Mitigation Measure 3: Tricolored Blackbird Avoidance	
Mitigation Measure 4: Tricolored Blackbird Take Authorization (if avoidance is not feasible)	

Response to comment 4: Because there are activities that may occur immediately next to the nest, and once started may not be stopped, there is a potential for take; therefore, Caltrans will seek an Incidental Take Permit for the Tricolored Blackbird.

Comment from: California Highway Patrol

Comment 1:

May 2020

Good morning!

The bridge replacement proposal was forwarded to me by the Hanford California Highway Patrol office as any detour may affect our operations due to our proximity to the bridge. If you know the route of the planned detour could you forward it to me for review? I am responsible for coordinating any resources for our area of responsibility.

Thank you very much!

Jay Adams, #15753
Sergeant
Coalinga Area
Office: 559-935-2093
Cell: 661-406-5119

Response to comment 1:

From: Starr, Chelsea@DOT <Chelsea.Starr@dot.ca.gov>
Sent: Tuesday, May 12, 2020 11:46 AM
To: Adams, Jay@CHP <JAdams@chp.ca.gov>
Cc: Vespermann, Juergen@DOT <juergen.vespermann@dot.ca.gov>
Subject: Re: Stratford bridge construction

Good Afternoon,

My name is Chelsea Starr with Caltrans District 6 and I am the Environmental Planner assigned to the Stratford Kings River Bridge Replacement project. The proposed detour would last for the entirety of construction, about 200 working days. During construction, mainline traffic would be redirected onto an estimated 32-mile long detour. Heading South from Fresno, traffic would turn onto State Route 198 heading west, then onto Avenal-Cutoff Road, then south on Interstate 5, then back onto State Route 41. Traffic heading north from Paso Robles would take the reverse order. Local residences, community of Stratford, and emergency services will be able to use County Roads including Laurel Avenue and 22nd Avenue during construction.

The following image of the proposed detour was taken from the draft environmental document, which is available for download at: https://dot.ca.gov/caltrans-near-me/district-6/district-6-projects/06-0v110.

Please let me know if you have any additional comments or concerns.

Thank you!
Chelsea Starr
California Department of Transportation, District 6
855 M St Suite 200
Fresno, CA 93721
Office: (559) 445-6451
Cell: (559) 392-4151

Comment: 2

Thank you very much for the quick response! This looks like a very extensive bit of work. I'm not sure of your level of involvement in the detour planning, but do you know if any alternate routes are being considered? Looking at the detour, we expect our operations to be significantly impacted by the routing onto Avenal Cutoff Road due to several traffic safety concerns.

We would be happy to collaborate with your agency in establishing the safest route possible, if you are interested. As history can attest, our agencies have a positive track record for working together to keep Californians safe!

Feel free to call or reach out to any of us, anytime. I have copied the other Coalinga Area sergeants as well as the Area commander (Rob Brunell) to keep them in the loop. We have a unique command staff here, as we all worked road patrol in the Coalinga Area prior to promoting, and we are familiar with the traffic/crash patterns.

Thank you,
Jay

Jay Adams, 15753
Sergeant
Coalinga Area
Office Phone: 559-935-2093
Cell Phone: 661-406-5119

Response to comment 2:

From: Baca, Gilberto@DOT <gilberto.baca@dot.ca.gov>
Sent: Wednesday, May 13, 2020 1:12 PM
To: Adams, Jay@CHP <jadams@chp.ca.gov>; Brunell, Robert@CHP <RBrunell@chp.ca.gov>; Vial, Brent@CHP <BVial@chp.ca.gov>; Beeson, Jimmy@CHP <JBeeson@chp.ca.gov>
Cc: Vespermann, Juergen@DOT <juergen.vespermann@dot.ca.gov>; Starr, Chelsea@DOT <Chelsea.Starr@dot.ca.gov>; Trudo, Christina C@DOT <christina.trudo@dot.ca.gov>
Subject: RE: Stratford bridge construction

Hi Jay,

The project team has analyzed several routes and the Avenal Cutoff has the least impact to the public. Please let me know if you would like to discuss this further and I can schedule a web-conference meeting. Coordination between our agencies will be helpful for implementing a plan of enforcement and information for the public during the construction of the bridge.

Thank you,

Gilberto Baca, P.E.
Project Manager
District 6 - Program Project Management
2015 E. Shields Avenue, Suite 100
Fresno CA 93726
Office: (559) 243-8425
Direct: (559) 779-6618

Comment from: Phone call and Email with Mike Nordstrom

Comment 1:

Mike Nordstrom, a lawyer based out of Hanford, California, left a phone message on Friday, May 8, 2020, with Caltrans Senior Environmental Planner Juergen Vespermann. Juergen Vespermann returned his call on Friday May 8, 2020, in the afternoon and Tuesday morning around 9:30. Mike Nordstrom returned Juergen Vespermann's call and forwarded his message to Kevin Murai with the Caltrans Encroachment Permits Division.

Mike Nordstrom's interest was in regard to an irrigation pipe crossing State Route 41 at the Kings River. Mike Nordstrom was directed to contact the engineers in the Caltrans Encroachment Permits Division regarding permitting private utilities in a Caltrans right-of-way. The email chain is provided below.

Response to comment 1:

From: Vespermann, Juergen@DOT
Sent: Tuesday, May 12, 2020 9:58 AM
To: nordlaw@nordstrom5.com
Cc: Baca, Gilberto@DOT <gilberto.baca@dot.ca.gov>; Murai, Kevin@DOT <kevin.murai@dot.ca.gov>
Subject: FW: Stratford public comment

Mike,
Please see below for contact information in regards to an encroachment permit for private utilities. Please let me know if there is anything else I can help with.
Juergen Vespermann

From: Murai, Kevin@DOT <kevin.murai@dot.ca.gov>
Sent: Monday, May 11, 2020 10:47 AM
To: Baca, Gilberto@DOT <gilberto.baca@dot.ca.gov>
Subject: RE: Stratford public comment

Hi Gilberto,

Yes, we deal with private utilities through encroachment permits. They will need to fill out a permit application TR-0100, provide an engineered plan set and there will be permit fees involved.

Please have them go to the following website, https://dot.ca.gov/programs/traffic-operations/ep/applications, to obtain the TR-0100. To help with applying for the permit, the Encroachment Permit Application utilities checklist (TR-0413), should also be completed and attached with the permit application. PLEASE MAKE SURE YOU FILL OUT

ALL BOXES IN THE TR-0100 FORM, IF IT DOESN'T APPLY, PLACE "NA" IN THE BOX.

When they've completed the application, please send completed application, plan set and checklist to our district 6 permit inbox, District6EncroachmentPermits@dot.ca.gov.

For permit fee and any additional questions, please contact Eduardo Torres, Kern County permit writer/inspector, 661-342-3708.

List of Technical Studies

Foundation Report State Route 41 Bridge over Kings River Bridge Number 45-0007 September 15, 2015

Water Quality Assessment Report, December 2018

Historic Property Survey Report, June 3, 2019

Visual Impact Assessment, August 15, 2019

Natural Environment Study, February 2020

Initial Site Assessment, September 2019

Paleontological Identification Report, October 2019

Location Hydraulic Study, October 30, 2019

Noise Study Memorandum, October 2019

Air Quality Compliance Memorandum, November 12, 2019

Supplemental Historic Property Survey Report, November 2019

To obtain a copy of one or more of these technical studies/reports or the Initial Study, please send your request to the following email address: d6.public.info@dot.ca.gov.

Please indicate the project name and project identifying code (under the project name on the cover of this document) and specify the technical report or document you would like a copy of. Provide your name and email address or U.S. postal service mailing address (street address, city, state and zip code).