DRAFT INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

PIONEER AVENUE OVER LONE TREE CREEK BRIDGE REPLACEMENT

STANISLAUS COUNTY, CALIFORNIA



Prepared for:



Stanislaus County Department of Public Works 1716 Morgan Road Modesto, CA 95358

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May 2022

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Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

PROJECT DESCRIPTION

Stanislaus County Public Works (County), in operation with the California Department of Transportation (Caltrans), is proposing to replace the existing Pioneer Avenue over Lone Tree Creek Bridge (Bridge No. 38C0262) with a two-lane bridge structure to provide improved safety and operations on the facility as the Pioneer Avenue over Lone Tree Creek Bridge Replacement Project (Project). The bridge replacement would include a 45-foot cast-in-place, two-lane, single-span bridge that would be constructed on the existing alignment.

DETERMINATION

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the County's intent to adopt an MND for this Project.

Stanislaus County has prepared an Initial Study for this Project and 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 impact on energy, land use and planning; mineral resources; population and housing; public services, recreation; and wildfire.

The Project would have a less than significant impact on aesthetics; agriculture and forest resources; geology and soils; greenhouse gas emissions; and utilities and service systems.

The Project would have less than significant impact with mitigation incorporated on air quality; biological resources; cultural resources; hazards and hazardous materials; hydrology and water quality; noise; transportation and traffic; tribal cultural resources; and mandatory findings of significance.

Chuck Covolo Project Manager Department of Public Works Stanislaus County

05-16-2022

Date

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EXECUTIVE SUMMARY

Stanislaus County Public Works (County), in operation with the California Department of Transportation (Caltrans), is proposing to replace the existing Pioneer Avenue over Lone Tree Creek Bridge (Bridge No. 38C0262) with a two-lane bridge structure to provide improved safety and operations on the facility as the Pioneer Avenue over Lone Tree Creek Bridge Replacement Project (Project). The bridge replacement would include a 45-foot cast-in-place, two-lane, single-span bridge that would be constructed on the existing alignment. **Table i**, below, provides a summary of potential impacts to environmental resources from the Project.

This environmental document is prepared in conformance with the requirements of the California Environmental Quality Act (CEQA) Public Resources Code 21000-21178. Stanislaus County is the Lead Agency for CEQA implementation.

Resource	Project Impacts	Summary of Avoidance, Minimization, and/or Mitigation Measures
Aesthetics	Less than significant	N/A
Agriculture and Forest Resources	Less than significant	N/A
Air Quality	Less than significant with mitigation incorporated	Dust and erosion control during construction.
Biological Resources	Less than significant with mitigation incorporated	Environmentally Sensitive Area Fencing; pre-construction nesting bird surveys; and measures to minimize or avoid impacts to special status wildlife species.
Cultural Resources	Less than significant with mitigation incorporated	Compliance with regulations relating to discovery of previously unknown cultural resources or human remains.
Energy	No impact	N/A
Geology and Soils	Less than significant	Standard BMPs incorporated.
Greenhouse Gas Emissions	Less than significant	Comply with all local Air Quality Management District rules, ordinances, and regulations for air quality restrictions.
Hazards and Hazardous Materials	Less than significant with mitigation incorporated	Proper handling of potential hazardous materials.
Hydrology and Water Quality	Less than significant with mitigation incorporated	Standard BMPs and Storm Water Management Plan.
Land Use and Planning	No impact	N/A
Mineral Resources	No impact	N/A
Noise	Less than significant with mitigation incorporated	Minimize construction-generated noise.
Population and Housing	No impact	N/A
Public Services	No impact	N/A

Table i: Summary of Potential Impacts

Resource	Project Impacts	Summary of Avoidance, Minimization, and/or Mitigation Measures		
Recreation	No impact	N/A		
Transportation/ Traffic	Less than significant	N/A		
Tribal Cultural Resources	Less than significant with mitigation incorporated	Compliance with regulations relating to cultural resources		
Utilities and Service Systems	Less than significant	N/A		
Wildfire	No impact	N/A		
Mandatory Findings of Significance	Less than significant with mitigation incorporated	With mitigation measures in place, all impacts will be reduced to less than significant. Potentially cumulative impacts to biological resources will also be reduced to less than significant impacts with mitigation incorporated.		

The detailed CEQA checklist summarizing specific Project impacts is included within each of the sections of the Initial Study provided in Chapter 2 of this document.

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VLIST OF ABBREVIATIONS

AASHTO American Association of State Highway and Trans	portation Officials
AB Assembly Bill	
ADT Average Daily Traffic	
APE Area of Potential Effects	
AUL Activity and Use Limitations	
bgs below ground surface	
BMPs Best Management Practices	
BSA Biological Study Area	
CAA Clean Air Act	
CAAQS California Ambient Air Quality Standards	
Caltrans California Department of Transportation	
CARB California Air Resources Board	
CCIC Central California Information Center	
CDFW California Department of Fish and Wildlife	
CESA California Endangered Species Act	
CEQA California Environmental Quality Act	
CFG California Fish and Game	
CFR Code of Federal Regulation	
CNDDB California Natural Diversity Database	
CNPS California Native Plant Society	
CO Carbon Monoxide	
CO ₂ Carbon Dioxide	
CTS California Tiger Salamander	
CWA Clean Water Act	
dB Decibel	
dBA Decibel A-weighted	
EDR Environmental Data Resources	
EO Executive Order	
EPA Environmental Protection Agency	
ESA Environmentally Sensitive Area	
FESA Federal Endangered Species Act	
FHWA Federal Highway Administration	
FHWAFederal Highway AdministrationFTIPFederal Transportation Improvement Plan	

L _{max}	Maximum Sound Level
LOS	Level of Service
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MT CO _{2e}	Metric Tonnes Carbon Dioxide Equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NEPA	National Environmental Protection Act
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen Dioxide
NOx	Nitrogen Oxides
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
O ₃	Ozone
OHP	Office of Historic Preservation
OHWM	Ordinary High-Water Mark
Pb	Lead
PM	Particulate Matter
PRC	Public Resources Code
Program	Storm Water Management Program
Project	Pioneer Avenue over Lone Tree Creek Bridge Replacement Project
REC	Recognized Environmental Conditions
ROG	Reactive organic compounds
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO ₂	Sulfur Dioxide
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WSE	Water surface elevation

1.0 PROJECT

1.1 INTRODUCTION

Stanislaus County, in coordination with Caltrans, proposes to replace the existing Pioneer Avenue over Lone Tree Creek Bridge (Bridge No. 38C0262) to provide improved safety and operations on the facility.

1.2 **PROJECT DESCRIPTION**

The Pioneer Avenue over Lone Tree Creek Bridge is located in Stanislaus County, California approximately 100 feet south of Freelove Road and south of the town of Valley Home. The existing bridge was constructed in 1918 and is a north-south two-lane local road with average daily traffic (ADT) of 350 vehicles per day. The replacement is needed to provide improved safety and operations on the facility.

This project is included in the Fiscal Years 2018/2019 Federal Transportation Improvement (FTIP) and is funded through the Highway Bridge Program.

The existing 2-span reinforced concrete slab bridge is 32 feet long and 21 feet wide. The bridge replacement includes a 45-foot cast-in-place, two-lane, single-span bridge that will be constructed on the existing alignment. Two 10-foot lanes, 3-foot shoulders, and railing Concrete Barrier Type 85 will yield a total width of 30 feet. The bridge will be simply supported by diaphragm abutments founded on cast-in-steel-shell piles behind the existing abutment. The replacement structure would be designed to meet current American Association of State Highway and Transportation Officials (AASHTO) standards.

It is anticipated that excavators, dozers, concrete truck, drill rigs and dump trucks will be required to construct the new bridge.

There are existing overhead electrical lines, including communication lines, on the east of the roadway that may require relocation. A public utility easement may be required to accommodate the relocation of overhead electrical and communication lines. Additionally, temporary right of way would be required from adjacent properties, west and east of the existing bridge, to complete the proposed creek diversion. Close coordination with the local utility companies and private property owners will be carried out in order to ensure access during construction.

Construction within Lone Tree Creek would be limited to temporary ground disturbance associated with construction activities and minimal permanent fills as a result of foundation removals, abutments and rock slope protection to prevent erosion.

Construction is anticipated to begin in May 2024 and is proposed to take approximately 10 months to complete. Access over Pioneer Avenue bridge will be temporarily unavailable during construction. Detour routes will be available from each direction utilizing Pleasant Valley Road, Aker Road, Victory Avenue, Lone Tree Road, Freelove Road and Valley Home Road. Access to all properties will remain during construction.

1.3 PERMITS AND APPROVALS NEEDED

Environmental findings within the Project include impacts to waters of the U.S., impacts to habitat for federally and state listed wildlife, potential effects to water quality, and utility relocations. The following consultations and environmental permits will be obtained prior to the start of construction.

Agency	Permit/Approval	Status
Regional Water Quality Control Board	401 Water Quality Certification	Will be Obtained Prior to Construction
Environmental Protection Agency	Clean Water Act 402 National Pollutant Discharge Elimination System	Will be Obtained Prior to Construction
California Department of Fish and Wildlife	1602 Streambed Alteration Agreement	Will be Obtained Prior to Construction
United States Army Corps of Engineers	404 Nationwide Permit 14	Will be Obtained Prior to Construction
United State Fish and Wildlife Service	Biological Opinion for California Tiger Salamander	Will be Obtained Prior to Construction

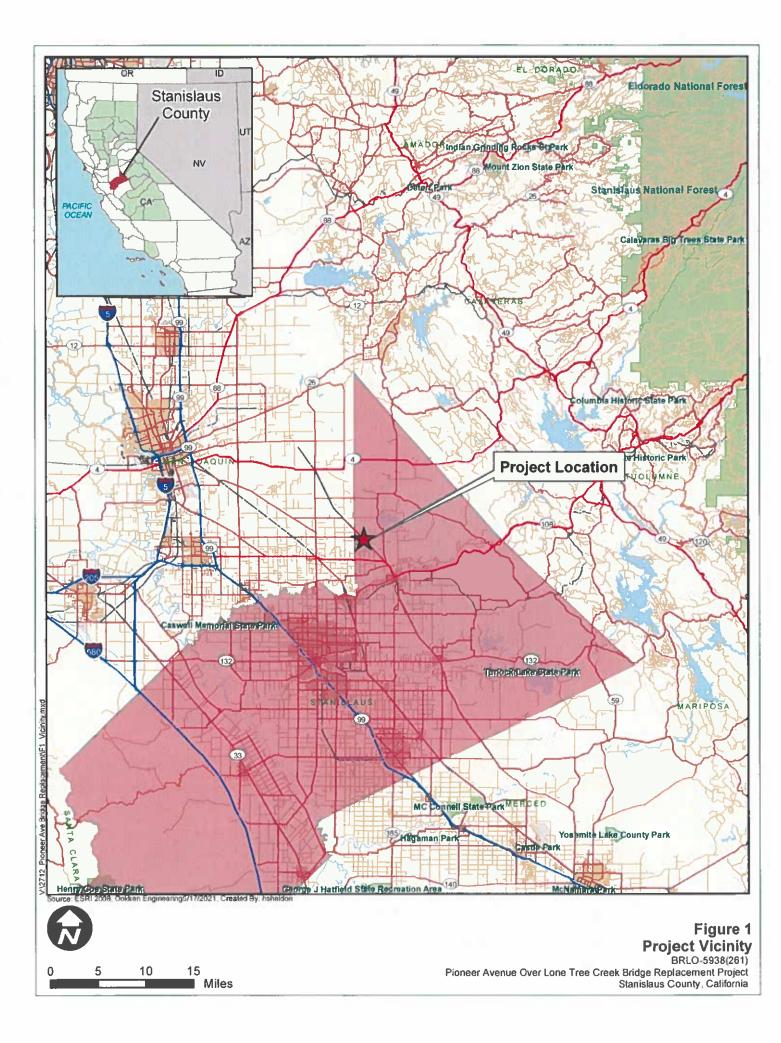
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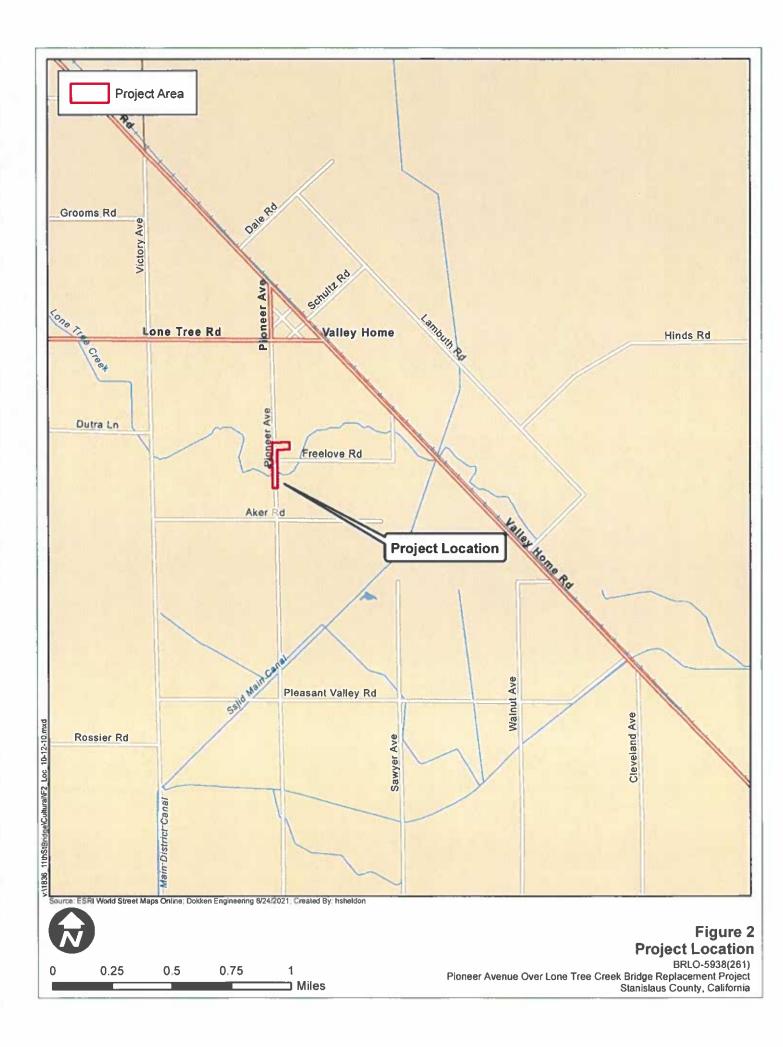
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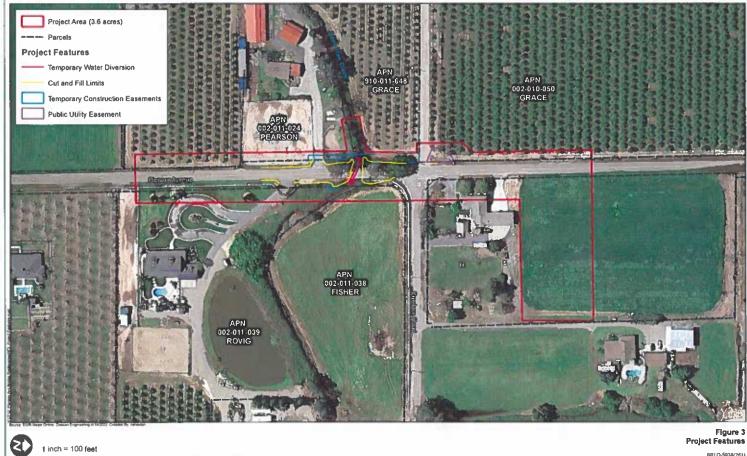
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BRLO-5634(261) Pioneer Avenue Over Lone Tree Creek Bridge Replacement Project Stahislous County, California

2.0 Initial Study

This chapter explains the impacts that the Project would have on the human, physical, and biological environments in the Project area. It describes the existing environment that could be affected by the Project, potential impacts from the alternatives, and avoidance, minimization, and/or mitigation measures. Any indirect impacts are included in the general impacts analysis and discussions that follow.

2.1 **AESTHETICS**

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				\boxtimes
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				\boxtimes
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?			\boxtimes	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				\boxtimes

REGULATORY SETTING

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with...enjoyment of aesthetic, natural, scenic and historic environmental qualities (California Public Resources Code Section 21001[b])." Stanislaus County does not have specific sections or chapters regarding aesthetics or visual resources within the General Plans.

DISCUSSION

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

No Impact. No designated scenic vistas are at or near the proposed Project area. No lands preserved under a scenic easement or contract are within or adjacent to the Project area. Furthermore, there are no Wild and Scenic Rivers within the Project corridor, as designated per the Wild and Scenic Rivers Act of 1968. Therefore, **No Impact** to a scenic vista or Wild and Scenic River would result from the Project.

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 would not substantially change the existing visual character or quality of public views of the site. The Project site is not located within a State Scenic Highway nor is the site visible from a state highway, including any state highways designated as scenic highways. There are two trees adjacent to Project limits, one non-native eucalyptus tree and one native valley oak tree, that may be removed or trimmed to accommodate construction. However, trimming/removal of these trees is not anticipated to substantially alter the existing visual environment. Therefore, **No Impact** to scenic resources within a State Scenic Highway would result from development of the Project, and no mitigation is required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings?

Less Than Significant Impact. The proposed Project does not include major vertical features or other visual intrusions that would block views of the surrounding setting. The existing bridge will be replaced by a similarly sized structure, and therefore changes in the visual environmental would be minimal and would not drastically alter the Project area or surrounding environment. During construction, motorists and nearby residents may observe heavy construction equipment, temporary traffic control features, lighting, and construction workers. Visual effects due to Project construction would be short-term and would cease to persist upon Project completion. Visual impacts would be temporary and therefore, will be Less Than Significant.

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 would not create a new source of light or glare, and therefore, **No Impact** to nighttime views would occur in the area.

FINDINGS

The Project would have Less Than Significant relating to aesthetics.

No Impact

2.2 AGRICULTURE AND FOREST RESOURCES

	Potentially	Less Than	Less Than
Would the Project:	Significant	Significant	Significant
·	Impact	with Mitigation	Impact

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 Dept. 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 pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?		\boxtimes	
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?		\boxtimes	
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))?			\boxtimes
d) Result in the loss of forest land or conversion of forest land to non- forest use?			\boxtimes
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?			\boxtimes

AFFECTED ENVIRONMENT

Agriculture is the leading industry in Stanislaus County and the Project area includes Unique Farmland and parcels under the Williamson Act, also known as the California Land Conservation Act of 1965. The proposed bridge replacement would not conflict with the goals and objectives defined in the Agricultural Element of the Stanislaus County General Plan, designed to strengthen the agricultural sector and conserve agricultural lands for agricultural uses.

DISCUSSION

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

Less Than Significant Impact. To identify Prime and Unique Farmland within the project area, an examination of the Department of Conservation's California Important Farmland Finder website was utilized. This query revealed that approximately 0.64 acres of Unique Farmland lies within the Project area, just west of Pioneer Avenue. This portion of Unique Farmland supports an orchard of almond trees (*Prunus dulcis*). Existing utility lines adjacent to Pioneer Avenue, within the Project area, are anticipated for relocation as part of the Project. A new guy pole is anticipated for relocation on the edge of the existing orchard classified as Unique Farmland. A temporary easement would be required in this area and the associated utility work and road work would temporarily disturb approximately 0.07 acres of land mapped as Unique Farmland. Furthermore, the placement of a new guy wire pole would create a permanent impact of approximately 0.001 acres. However, direct impacts, such as tree removal, to the adjacent

orchard are not anticipated. The placement of the new guy pole, between Pioneer Avenue and the existing orchard, would not alter or convert Unique Farmland in a way that would inhibit the current use of the land or degrade the value of the land. Therefore, impacts would be **Less Than Significant**.

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

Less Than Significant Impact. The parcels adjacent to the Project (APN 002-010-050, APN 002-010-060, APN 002-011-024 and APN 002-011-038 and APN 002-011-039) both east and west of the existing bridge, are part of the Williamson Act (Figure 4. Parcels Under the Williamson Act). The Project would require a guy pole easement from APN 002-010-050 (Grace), as well as a temporary construction easement from APN 910-011-648 (Grace), APN 002-011-024 (Pearson) and APN 002-011-039 (Rovig). After Project completion, the areas acquired for temporary construction easements will return to pre-existing conditions. The easement for installation of the guy pole would still preserve farmland use on the parcel and would not change the zoning or conflict with agricultural uses and operations. Therefore, impacts would be Less Than Significant.

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 forests or forest resources located within the Project area; therefore, the Project will have **No Impact** with existing zoning, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

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

No Impact. There are no forests or forest resources located within the Project area; therefore, the Project will have **No Impact** and will not result in the loss of forest land or conversion of forest land to non-forest use.



Feet

BRLD-5608(261) Pioneer Avenue Over Long Tzee Creek Bridge Replacement Project Stansleus County, California

e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project will replace an existing bridge with a similar structure with the purpose of improving safety and operations on the facility and does not anticipate changes in the existing environment which could result in conversion of Farmland or forest land to other uses. Therefore, there would be **No Impact**.

FINDINGS

The Project would have **Less than Significant Impact** relating to agriculture and forest. Minor temporary and permanent impacts to Unique Farmland and Williamson Act land may occur during utility relocations; however, these impacts would not alter zoning or use of Unique Farmland or Williamson Act land. Additionally, no crops or any portion of a crop will be removed as a result of the Project construction and any temporary impacts to agricultural activities would be minimized to the greatest extent possible.

2.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				\boxtimes
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?		\boxtimes		
c) Expose sensitive receptors to substantial pollutant concentrations?		\boxtimes		
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

REGULATORY SETTING

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns. The criteria pollutants are carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

Regional level conformity in California is concerned with how well the region is meeting the standards set for CO, NO₂, O₃, and PM. California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTPs) are developed to include all of the transportation projects planned for a region over a period of years, usually at least 20 years. Based on the projects included in the RTP, an air quality model is developed to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the CAA are met. If the conformity analysis is successful, the regional planning organization, such as the San Joaquin Valley Air Pollution Control District (SJVAPCD) for Stanislaus County, and the appropriate federal agencies, such as the FHWA, make the determination that the RTP is in conformity with the State Implementation Plan (SIP) for achieving the goals of the CAA. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the transportation project are the same as described in the RTP, then the project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Federal and State Ambient Air Quality Standards

California and the federal government have established standards for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). The pollutants of greatest concern in the Project area are O₃, PM 2.5 microns (PM_{2.5}) and PM 10 microns (PM₁₀).

State Regulations

Responsibility for achieving California's air quality standards, which are more stringent than federal standards, is placed on the California Air Resources Board (CARB) and local air districts, and is to be achieved through district- level air quality management plans that will be incorporated into the SIP. In California, the Environmental Protection Agency (EPA) has delegated authority to prepare SIPs to the CARB, which, in turn, has delegated that authority to individual air districts.

The CARB has traditionally established state air quality standards, maintaining oversight authority in air quality planning, developing programs for reducing emissions from motor vehicles, developing air emission inventories, collecting air quality and meteorological data, and approving SIPs.

Responsibilities of air districts include overseeing stationary source emissions, approving permits, maintaining emissions inventories, maintaining air quality stations, overseeing agricultural burning permits, and reviewing air quality-related sections of environmental documents required by CEQA.

The California CAA of 1988 substantially added to the authority and responsibilities of air districts. The California CAA designates air districts as lead air quality planning agencies, requires air districts to prepare air quality plans, and grants air districts authority to implement transportation control measures. The California CAA focuses on attainment of the state ambient air quality standards, which, for certain pollutants and averaging periods, are more stringent than the comparable federal standards.

The California CAA requires designation of attainment and non-attainment areas with respect to state ambient air quality standards. The California CAA also requires that local and regional air districts expeditiously adopt and prepare an air quality attainment plan if the district violates state air quality standards for CO, SO₂, NO₂, or O₃. These Clean Air Plans are specifically designed to attain these standards and must be designed to achieve an annual 5% reduction in district-wide emissions of each non-attainment pollutant or its precursors. Where an air district is unable to achieve a 5% annual reduction, the adoption of "all feasible measures" on an expeditious schedule is acceptable as an alternative strategy (Health and Safety Code Section 40914(b)(2)). No locally prepared attainment plans are required for areas that violate the state PM₁₀ standards.

The California CAA requires that the state air quality standards be met as expeditiously as practicable but, unlike the federal CAA, does not set precise attainment deadlines. Instead, the act established increasingly stringent requirements for areas that will require more time to achieve the standards.

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (2005) provides CARB recommendations for the siting of new sensitive land uses (including residences) near freeways, distribution centers, ports, refineries, chrome plating facilities, dry cleaners, and gasoline stations. The handbook recommends that new development be placed at distances from such facilities.

AFFECTED ENVIRONMENT

The proposed Project is located within the San Joaquin Valley Air Basin and is under the auspices of the SJVAPCD. No additional capacity is proposed for the Project (no new through- or turn-lanes) and the Project would not result in any new trips, vehicle miles traveled, or vehicle hours traveled in the permanent condition. Table 1 of the Caltrans Transportation Project-Level Carbon Monoxide Protocol lists specific types of projects that are exempt from all emissions analyses for determining air quality conformity. Included in the list is "Widening narrow pavements or reconstructing bridges (no additional travel lanes)". Additionally, since the Project is consistent with these requirements, the Project will not be increasing operational traffic and it is assumed to be consistent with SJVAPCD and is exempt from local conformity review.

DISCUSSION

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

No Impact. The Project is consistent with the site land use and zoning; all construction easements would be temporary, and replacement of an existing bridge with no additional travel lanes would not conflict with or obstruct implementation of any federal, state, or local air quality plan. Therefore, there would be **No Impact**

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Less than Significant with Mitigation. The CARB is required to designate areas of the state as attainment, non-attainment, or unclassified for any state standard. An "attainment" designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A "non-attainment" designation indicates that a pollutant concentration violated the standard at least once within a calendar year. The air quality attainment status of Stanislaus County is shown on Table 2.

	Designation/Classification			
Pollutant	Federal Standards	State Standards		
Ozone – 8-Hour	No Federal Standard	Non-attainment/Severe		
Ozone – 1-Hour	Non-attainment/Extreme	Non-attainment		
PM ₁₀	Attainment	Non-attainment		
PM _{2.5}	Non-attainment	Non-attainment		
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified		
Nitrogen Dioxide	Attainment/Unclassified	Attainment		
Sulfur Dioxide	Attainment/Unclassified	Attainment		
Sulfates	No Federal Standard	Attainment		
Lead	No Designation/Classification	Attainment		
Hydrogen Sulfide	No Federal Standard	Unclassified		
Visibility Reducing Particles	No Federal Standard	Unclassified		
Vinyl Chloride	No Federal Standard	Attainment		

Table 2. NAAQS and CAAQS Attainment Sta	tus for Stanislaus County
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Sources: CARB 2020, EPA 2020

Long Term Emissions

The proposed Project would replace an existing two-lane bridge, adding no additional travel lanes. As a result, no additional long-term emissions are expected to be generated as a result of the Project.

Construction Emissions

Temporary construction activities would include site preparation and bridge construction that will involve excavation, grading, and other construction activities. During construction, short-term air quality effects are expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. These emissions would be temporary and limited to the immediate area surrounding the construction site. The total construction time is anticipated to be 10 months. All construction impacts to air quality would be short-term and intermittent; therefore, impacts are anticipated to be less than significant. The emission of pollutants during construction would not contribute significantly to a net increase of any criteria pollutant. Construction-related emissions for the proposed Project are presented on **Table 3** below.

All construction activities would follow the SJVAPCD rules and would implement all appropriate air quality Best Management Practices (BMPs), including minimizing equipment idling time and use of water or similar chemical palliative to control fugitive dust. The implementation of BMPs listed in **AQ-1** and **AQ-2** would further minimize potential impacts on air quality caused during to construction. These measures provide compliance guidelines for minimizing fugitive dust to protect sensitive receptors in the vicinity. With adherence to **AQ-1** and **AQ-2**, impacts from construction emissions would be **Less Than Significant with Mitigation**.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant with Mitigation. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. One sensitive receptor, a residential home, is located adjacent to the Project area. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NO_x, volatile organic compounds, directly emitted PM₁₀ and PM_{2.5}, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities may also result in small increases in traffic congestion during lane closures on the rural County-maintained roads. Additional congestion can result in an increase in vehicle hours traveled, slower vehicle speeds and therefore increased emissions. However, these additional impacts would be minor and short term during the construction and none of the affected roadways convey large volumes of traffic daily.

Construction emissions were estimated using the latest Sacramento Metropolitan Air Quality Management District's Road Construction Model (Version 9.00, SMAQMD 2018). Construction-related emissions for the proposed Project are presented in **Table 3**. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that would be generated by construction of the proposed Project. See Appendix A for additional construction emissions information.

Activity	CO (lbs/day)	NOx (lbs/day)	ROG (lbs/day)	SOx (lbs/day)	PM10 (lbs/day)	PM2.5 (lbs/day)
Grubbing/Land Clearing	9.56	8.93	0.91	0.02	0.59	0.39
Grading/Excavation	64.79	79.66	7.71	0.16	3.49	3.00
Drainage/Utilities/ Sub-Grade	46.73	55.38	5.42	0.11	2.47	2.11
Paving	12.86	9.11	0.93	0.02	0.47	0.41
Maximum daily (lbs/day)	64.79	79.66	7.71	0.16	3.49	3.00
Project Total (tons/construction project)	5.07	6.02	0.59	0.01	0.27	0.23

Table 3. Construction Emissions fro	om Construction Activity
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Source: SMAQMD Road Construction Model 2018

Toxic Air Contaminants

The greatest potential for TAC emissions would be related to diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used during construction. These substances would comply with all applicable SJVAPCD rules for their manufacture and use. Construction would have no permanent impact on sensitive receptors. BMPs outlined in measures **AQ-1** and **AQ-2** would further minimize the potential for construction emissions related impacts. Given the above analysis, the impact is considered to be **Less Than Significant with Mitigation Incorporated**.

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

Less than Significant Impact. The Project site is located within an agricultural area, with four residential homes adjacent to the Project area. However, construction activities would not have the potential to produce sufficient quantities of other emissions that could lead to odors that would affect a substantial number of people. Therefore, the Project would have a Less than Significant Impact on other emissions that could affect a substantial number of people.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The measures **AQ-1** and **AQ-2** would be implemented as part of the Project to minimize short term construction related air quality emissions.

- AQ-1: The construction contractor shall comply with the SJVAPCD Regulation VIII as it pertains to fugitive dust (PM₁₀).
- AQ-2: Wind erosion control BMPs will be implemented as follows:
 - Water shall be applied on disturbed open soil by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution.

- All distribution equipment shall be equipped with a positive means of shutoff.
- Unless water is applied by means of pipelines, at least one mobile unit shall be available at all times to apply water or dust palliative to the Project.
- If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non-potable supplies. Non-potable tanks, pipes and other conveyances shall be marked "NON-POTABLE WATER – DO NOT DRINK."
- Materials applied as temporary soil stabilizers and soil binders will also provide wind erosion control benefits.

FINDINGS

The Project would have Less than Significant Impacts with Mitigation Incorporated relating to air quality.

2.4 BIOLOGICAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game U.S. Fish and Wildlife Service, or NOAA Fisheries?				
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 Game or US Fish and Wildlife Service?				
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vemal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				\boxtimes
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?			\boxtimes	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				\boxtimes
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?				\boxtimes

REGULATORY SETTING

This section describes the Federal, State, and local plans, policies, and laws that are relevant to biological resources within the Biological Study Area (BSA), defined as the Project area plus a 50-foot buffer. The total area of the BSA is approximately 6.9 acres.

Federal Regulations

National Environmental Policy Act

The National Environmental Policy Act (NEPA) provides an interdisciplinary framework for environmental planning by Federal agencies and contains action-forcing procedures to ensure that Federal agency decision makers take environmental factors into account. NEPA applies whenever a Federal agency proposes an action, grants a permit, or agrees to fund or otherwise authorize any other entity to undertake an action that could possibly affect environmental resources. Caltrans, under delegation from the Federal Highways Administration (FHWA), is the NEPA Lead Agency for this Project.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) of 1973 (16 United States Code (U.S.C.) section 1531 et seq.) provides for the conservation of endangered and threatened species listed pursuant to Section 4 of the FESA (16 U.S.C. section 1533) and the ecosystems upon which they depend. These species and resources have been identified by United States Fish and Wildlife Services (USFWS) or National Marine Fisheries Service (NMFS).

Clean Water Act

The Clean Water Act (CWA) was enacted as an amendment to the Federal Water Pollutant Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to waters of the United States (U.S.). The CWA serves as the primary Federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. The CWA empowers the U.S. EPA to set national water quality standards and effluent limitations, and includes programs addressing both point-source and non-point-source pollution. Point-source pollution originates or enters surface waters at a single, discrete location, such as an outfall structure or an excavation or construction site. Non-point-source pollution originates over a broader area and includes urban contaminants in storm water runoff and sediment loading from upstream areas. The CWA operates on the principle that all discharges into the nation's waters are unlawful unless they are specifically authorized by a permit; permit review is CWA's primary regulatory tool. This Project will require a CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Permit regulated by the EPA.

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the U.S. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in USACE regulations).

The Regional Water Quality Control Board (RWQCB) has jurisdiction under Section 401 of the CWA and regulates any activity which may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of USACE (i.e., waters of the U.S. including any wetlands). The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act. The Project would require a Water Quality Certification under Section 401 of the CWA.

Executive Order 13112: Prevention and Control of Invasive Species

Executive Order (EO) 13112 (signed February 3, 1999) directs all Federal agencies to prevent and control introductions of invasive species in a cost-effective and environmentally sound manner. The EO and directives from the FHWA require consideration of invasive species in NEPA analyses, including their identification and distribution, their potential impacts, and measures to prevent or eradicate them.

Executive Order 13186: Migratory Bird Treaty Act

EO 13186 (signed January 10, 2001) directs each Federal agency taking actions that could adversely affect migratory bird populations to work with USFWS to develop a Memorandum of Understanding that will promote the conservation of migratory bird populations. Protocols developed under the Memorandum of Understanding will include the following agency responsibilities:

 Avoid and minimize, to the maximum extent practicable, adverse impacts on migratory bird resources when conducting agency actions;

- Restore and enhance habitat of migratory birds, as practicable; and
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.

The EO is designed to assist Federal agencies in their efforts to comply with the Migratory Bird Treaty Act (MBTA; 50 Code of Federal Regulations (CFR) 10 and 21) and does not constitute any legal authorization to take migratory birds. Take is defined under the MBTA as "the action of or attempt to pursue, hunt, shoot, capture, collect, or kill" (50 CFR 10.12) and includes intentional take (i.e., take that is the purpose of the activity in question) and unintentional take (i.e., take that results from, but is not the purpose of, the activity in question).

State Regulations

California Environmental Quality Act

California State law created to inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities and to work to reduce these negative environmental impacts. The County of Stanislaus is the CEQA Lead Agency for this Project.

California Endangered Species Act

The California Endangered Species Act (CESA; California Fish and Game (CFG) Code Section 2050 et seq.) requires the California Department of Fish and Wildlife (CDFW) to establish a list of endangered and threatened species (Section 2070) and to prohibit the incidental taking of any such listed species except as allowed by the Act (Sections 2080-2089). In addition, CESA prohibits take of candidate species (under consideration for listing).

CESA also requires the CDFW to comply with CEQA (Public Resources Code Section 21000 et seq.) when evaluating incidental take permit applications (CFG Code Section 2081(b) and California Code Regulations, Title 14, section 783.0 et seq.), and the potential impacts the project or activity for which the application was submitted may have on the environment. The CDFW's CEQA obligations include consultation with other public agencies which have jurisdiction over the project or activity (California Code Regulations, Title 14, Section 783.5(d)(3)). CDFW cannot issue an incidental take permit if issuance would jeopardize the continued existence of the species (CFG Code Section 2081(c); California Code Regulations, Title 14, Section 783.4(b).

Section 1602: Streambed Alteration Agreement

Under CFG Code 1602, public agencies are required to notify CDFW before undertaking any project that will divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occurs during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resources. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Section 3503 and 3503.5: Bird and Raptors

CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. Trees and shrubs are present in and adjacent to the BSA and could contain nesting sites.

Section 3513: Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

AFFECTED ENVIRONMENT

Online databases from the USFWS, NMFS, CDFW's California Natural Diversity Database (CNDDB), and the California Rare Plant Society (CNPS) were used to generate a list of special status species with potential off occurring in the vicinity of the Project.

The BSA was used to generate an official species list through the Information for Planning and Consultation operated by USFWS. The NMFS official species list was obtained via the NMFS West Coast Region Google Earth Species List tool with a query of the USGS 7.5-minute quadrangle Escalon. The USGS 7.5-minute quadrangles of Escalon, Oakdale, Farmington, Avena, Riverbank, and Peters were included in the search query to generate the CNDDB and CNPS search results.

On March 15, 2021, general biological surveys, habitat assessments, and a delineation of jurisdictional waters were conducted by Dokken Engineering biologists Scott Salembier, Hanna Sheldon, and Vincent Chevreuil. In addition, H.T. Harvey & Associates herpetologist John Romansic, PhD., and ecologist Kim Briones conducted a focused reconnaissance survey for the state and federally listed California tiger salamander (CTS). General biological surveys and habitat assessments included walking meandering transects, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat within the BSA to support sensitive plants and wildlife. Jurisdictional delineations were conducted in accordance with the technical methods outlined in USACE A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar 2008). Methodology of the CTS reconnaissance survey included documenting the existence and size of local mammal burrows and their proximity to aquatic habitat, identifying adequate upland habitat along Lone Tree Creek, identifying the potential of CTS predators within the BSA, and surveying potential breeding sources located outside of the Project area but within dispersal distance of CTS.

The BSA was defined as the area required for Project activities, plus an approximate 50-foot buffer to account for adjacent biological resources and potential changes in Project design. The total area of the BSA is approximately 6.9 acres.

Physical Conditions

Topography

The BSA is located within the USGS 7.5-minute quadrangle of Escalon. The Project area occurs within a single distinct topographic region of the San Joaquin Valley floor, and the elevation within the Project area is approximately 153 feet above mean sea level.

Soils

The Natural Resource Conservation Service (NRCS) Custom Soil Resource Report for the Project (NRCS 2022) identifies the soil types within the BSA as Madera sandy loam with 0 to 2 percent slopes (96.3% of BSA) and Exeter sandy clay loam with 0 to 2 percent slopes (3.7% of BSA).

Hydrological Resources

The BSA includes one surface water feature, Lone Tree Creek, which is a jurisdictional stream channel that is a tributary of the San Joaquin River. The Project area is within Federal Emergency Management Agency (FEMA) Zone X, designated as an area of minimal flood hazard (FEMA 2021).

Land Cover Types

Vegetation communities within the BSA include annual grassland, hay production, urban/barren, orchard, and riparian habitat. In addition, Lone Tree Creek provides stream channel habitat within the BSA (Figure 5. Waters and Vegetation Communities within the BSA). There are two trees adjacent to Project limits, one non-native eucalyptus tree and one native valley oak tree, that may be removed or trimmed to accommodate construction.

Annual Grassland

Annual grassland occurs within the BSA to the east of Pioneer Avenue, along the northern bank of Lone Tree Creek. There is evidence that this habitat has been disturbed in the past and is comprised of a variety of native and non-native grass and forb species. The dominant grass species within the BSA, include ripgut brome (*Bromus diandrus*), fiddleneck (*Amsinckia sp.*) and cheeseweed (*Malva parviflora*). Annual grassland habitat provides suitable foraging habitat for a diverse array of bird species as well as marginal habitat to burrowing mammals such as gophers and field mice. Additionally, the underground refugia and upland habitat present within the annual grasslands provides potential habitat opportunities for CTS. Annual grasslands comprise approximately 0.45 acres (~6.5%) of the BSA.

Hay Production Field

Hay production occurs in a field in the northern extent of the Project area, east of Pioneer Avenue. This habitat is frequently disturbed by agricultural activities such as discing and weed removal, and the vegetation community is dominated by a non-native grass species that is harvested for hay. This hay production field provides suitable foraging habitat for a diverse array of local bird species. The BSA contains approximately 1.58 acres (~22.8%) of hay production field.

Urban/Barren

The BSA includes Pioneer Avenue, a paved road which runs north to south through the entire Project area. Additionally, the BSA includes Freelove Road, a paved road which extends east from Pioneer Avenue, as well as several driveways and dirt roads used for access to adjacent properties and agricultural lands. The roads are barren, compacted, and are regularly disturbed. Included in the southwestern portion of the BSA is a compacted dirt lot that is void of vegetation. The BSA contains approximately 2.93 acres (~42.4%) of urban/barren land.

Orchard

Orchard land spans the BSA from north to south and is bounded between Pioneer Avenue and the western extent of the BSA. Maintenance surrounding the orchards includes regular watering through irrigation lines, clearing orchard floors, and may include the use of pesticides. Orchard lands comprise approximately 1.58 acres (~22.8%) of the BSA.

Riparian Corridor

Riparian habitat occurs in the western extent of the BSA and continues adjacent to Lone Tree Creek. The riparian corridor has been fragmented and disturbed by agricultural activities – mainly via urban and agricultural development – and provides sparse habitat within the BSA. The canopy of the riparian corridor is mainly composed of interior live oak (*Quercus wislizeni*), white alder (*Alnus rhombifolia*), and cottonwood trees (*Populus fremontii*). The shrub understory of the riparian habitat is dominated by the non-native species Himalayan blackberry (*Rubus armeniacus*). The BSA contains approximately 0.17 acres (~2.4%) of riparian habitat.

Stream Channel – Lone Tree Creek

The BSA contains approximately 270 linear feet of Lone Tree Creek. Lone Tree Creek is a natural stream channel that is a tributary of the San Joaquin River. The channel, within the BSA, has defined banks that are bordered by an orchard to the north and annual grassland to the east. The banks contain a section of riparian corridor that is vegetated by a mix of native and non-native species and dominated by Himalayan blackberry. The channel flow volume varies throughout the year, as evident by the pattern of vegetation along the channel's banks. The BSA contains approximately 0.21 acres (~3.0%) of stream channel.

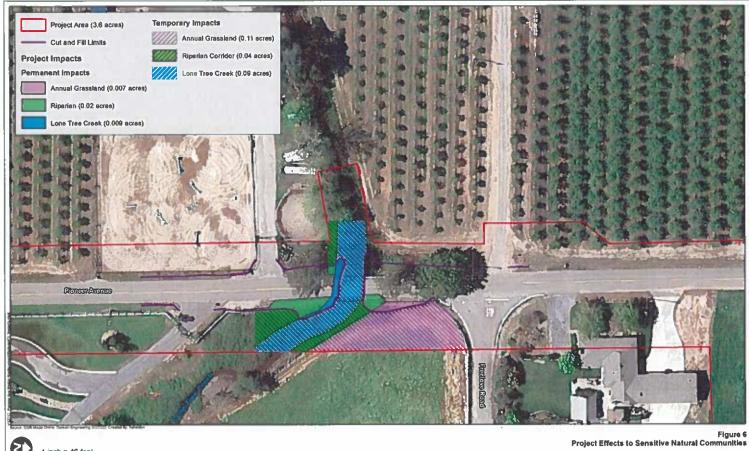
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500 Feet

BRLO-5938(261) Pioneer Avenue Over Love Tree Creek Bridge Replacement Project Stanistrus County, California



(2) 1 inch = 46 feel 80 120

160

200 Feet

BRLO-5038(261) Planeer Avenue Over Lone Tree Creek Bridge Replacement Project Stanislaus County, Celifornia

DISCUSSION

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?

Less Than Significant with Mitigation Incorporated. Literature research, habitat assessments, and biological surveys determined that a special status wildlife species has the potential of occurring within the BSA: the CTS (*Ambystoma californiense*). The CTS is both federally and state listed as threatened and is considered to have a high potential to occur within the BSA based on nearby potential breeding habitat, presence of upland dispersal and estivation habitat, and nearby occurrences of the species. As a result of potential Project related impacts to CTS, formal consultation with USFWS and consultation with CDFW under Section 2081 for an Incidental Take Permit, will be required. With the implementation of measures BIO-1 through BIO-18, impacts to CTS and CTS habitat will be minimized to Less Than Significant with Mitigation Incorporated.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant with Mitigation Incorporated. Project impacts to sensitive habitats, including Lone Tree Creek, are anticipated to be minor and are not anticipated to substantially degrade the existing habitat community. The total net permanent impacts to Lone Tree Creek are approximately 0.009 acres (or 392 square feet). Additionally, approximately 0.09 acres of Lone Tree Creek would be temporarily impacted during construction due to equipment access, installation of temporary water diversion and demolition of the existing bridge. Temporary impacts to Lone Tree Creek will be restored upon completion of construction. The Project will minimize impacts to Lone Tree Creek through the use of avoidance and minimization measures, BMPs, and by complying with all permit conditions specified by regulatory agencies during the permitting phase of the Project, therefore, impacts will be Less Than Significant with Mitigation Incorporated.

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?

No Impact. The jurisdictional delineation completed for the Project determined that there are no wetlands within the Project BSA and the Project would have **No Impact** on federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less than Significant Impact. The CDFW Biogeographic Information & Observation System (CDFW 2021a) was reviewed to determine if the BSA is located within an Essential Connectivity Area. The BSA is within an area of Terrestrial Connectivity Rank 1 – limited connectivity opportunity. This ranking indicates that land use within the region, such as agricultural development, limits opportunities for habitat connectivity and no connectivity importance has been assigned to this region. Due to this low ranking and the scope of this Project, implementation of the Project will not impact any existing terrestrial habitat connectivity networks. The Project would require a temporary creek diversion that has the potential to limit fish passage through the BSA; however, this diversion would be completely removed upon the completion of work. Construction

of the proposed Project would have a **Less than Significant Impact** on the Project area in terms of its potential for use as migratory fish and wildlife corridors.

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

No Impact. There are no local policies or ordinances that protect biological resources in Stanislaus County; therefore, the Project will have **No Impact** with regards to conflict with any local policies or ordinances.

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. There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans within the Project area; therefore, the Project will have **No Impact** or conflict with any habitat conservation plan.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The following avoidance, minimization, and mitigation measures along with BMPs have been incorporated into the Project design to minimize impacts to special status fish and wildlife species and natural communities to the greatest extent practicable:

- **BIO-1:** Every individual working on the Project must attend a biological awareness training session delivered by a biologist. This training program shall include information regarding the sensitive habitats and special-status species occurring or potentially occurring within the Project area, and the importance of avoiding impacts to these species and their habitat.
- **BIO-2:** Prior to the start of construction activities, the Project limits within Lone Tree Creek, the riparian corridor, and annual grassland habitat will be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources.
- **BIO-3:** Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels):
 - Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities;
 - All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution;
 - All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters;
 - Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants;
 - Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to

aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters;

- All erosion control measures and storm water control measures would be properly
 maintained until the site has returned to a pre-construction state;
- All temporarily disturbed areas would be revegetated, either through hydroseeding or other means, with native species
- All construction materials would be hauled off-site after completion of construction;
- Upon completion of construction activities, any temporary barriers to surface water flow must be removed in a manner that would allow flow to resume with the least disturbance to the substrate.
- **BIO-4:** Vegetation removal will be avoided to the greatest extent practicable. Where feasible, trees and shrubs will be trimmed rather than removed.
- **BIO-5:** Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.
- BIO-6: A chemical spill kit must be kept onsite and available for use in the event of a spill.
- **BIO-7:** Following the completion of construction, all sensitive natural areas (Lone Tree Creek, riparian corridor, and annual grassland) disturbed by Project activities would be regraded as to decompact the soils and seeded with a California native hydroseed mix to allow the site to return to pre-construction conditions.
- **BIO-8:** A USFWS approved biologist(s) will conduct a visual encounter preconstruction survey of the Project area for CTS no more than 14 days prior to the start of groundbreaking or other general construction activities that could affect the species. The names of the proposed biologists will be sent to USFWS within a certain number of days (no less than 30 days prior to construction), and this/these designated biologist(s) will have stop work authority. The survey will pay particular attention to detecting any burrows that could be used as refugia by the CTS, as well as any potential depressions that may become inundated.
- **BIO-9:** The biologist or on-site inspector will perform daily clearance sweeps under equipment, trucks, and other materials prior to commencement of work.
- **BIO-10:** Plastic mono-filament netting (erosion control matting) or similar material that could trap wildlife must not be used. Acceptable substitutes include jute, coconut coir matting or tackified hydroseeding compounds.
- **BIO-11:** To avoid inadvertent entrapment of animals during construction, all excavated, steepwalled holes or trenches greater than 6 inches deep must be covered at the end of the day or contain at least one escape ramp made of earth fill or wooden planks. All holes must be inspected by a biologist or on-site inspector at the beginning of each workday and before the holes and trenches are filled. Anything stored within the holes or trenches

overnight must be inspected for CTS before being moved. If at any time a CTS is discovered, the project manager and agency approved biologist(s) will be notified and the agency approved biologist will contact USFWS for further guidance.

- **BIO-12:** If a water body will be temporarily dewatered by pumping, pump intakes shall be screened with wire mesh no larger than 5 millimeters. The intake should be placed within a perforated bucket or other method that reduces suction to prevent CTS from entering the pump system. Pumped water shall be managed in a matter that does not degrade water quality and, upon completion of the Project, shall be released back into the water body in a manner that does not cause erosion.
- **BIO-13:** Prior to the start of construction all burrows that may serve as potential habitat for CTS will be flagged and avoided with a 10-foot buffer. If burrows cannot be reasonably avoided, the burrows will be inspected with a scope by a USFWS Approved biologist. If scoping of the burrows confirms absence of CTS, the burrows will be hand excavated. If scoping cannot determine the presence or absence of CTS, USFWS will be contacted for further coordination.
- **BIO-14:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.
- **BIO-15:** All food-related trash must be disposed into closed containers and must be removed from the Project area daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.
- **BIO-16:** The contractor must not apply rodenticide or herbicide within the Project area during construction.
- **BiO-17**: If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.
- **BIO-18:** Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st September 30th) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, the clearing activities must be completed, or a supplemental nesting bird survey is required.

A minimum 100 foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.

FINDINGS

The Project would have Less Than Significant Impacts with Mitigation Incorporated relating to biological resources.

2.5 CULTURAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				\boxtimes
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		
c) Disturb any human remains, including those interred outside of dedicated cemeteries?		\boxtimes		

REGULATORY SETTING

CEQA established statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project's environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of a historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect state-owned resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing stateowned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

AFFECTED ENVIRONMENT

An Area of Potential Effects (APE) was established as the area of direct and indirect effects which encompasses an approximately 6-acre area. The APE extends for approximately 1,000 feet along Pioneer Avenue and encompasses portions of two adjacent parcels that extend to the east of Pioneer Avenue. The vertical APE consists of a maximum of 20 feet of depth from the existing ground surface to below ground surface (bgs) to accommodate earthwork for the construction of bridge abutments. The minimum depth of ground disturbance is approximately 5 feet bgs, required for all roadway approach realignment, vegetation removal, and fill compaction. The Project does not involve relocation of any buried utilities. Efforts to identify potential cultural resources within the APE included background research, a record search from the Central California Information Center (CCIC), California State University, Sacramento, and a pedestrian ground surface survey. The APE can be seen in Figure 7.

A pedestrian survey of the APE was conducted by archaeologist Michelle Campbell, M.A. on March 15, 2021, for the purpose of identifying and recording archaeological resources. The pedestrian survey did not identify any archaeological resources within the APE. Inspection of open surfaces, visible cut slopes, and channel cut banks during the field survey revealed no evidence of subsurface artifacts, features, or other indicators of past human use (such as soil change). While surface visibility varied in areas depending on density of vegetation, overall visibility was approximately 70 percent. A review of the geologic formations, occurrences of bedrock located in the area, and the steepness of the slopes, indicate that the APE has a low potential for intact prehistoric archaeological resources and a moderate potential for historic-era archaeological resources due to the presence of mining in the general area.

Native American Consultation

To help determine whether the Project may have an effect, Public Resources Code Section 21080.3.1 requires the CEQA lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed Project.

On January 14, 2021, Dokken Engineering sent a letter and map figures depicting the Project vicinity and location to the Native American Heritage Commission (NAHC) in West Sacramento, asking the commission to review the Sacred Lands File for any Native American cultural resources that might be affected by the Project. On February 5, 2021, Nancy Gonzalez-Lopez, Cultural Resource Analyst, replied via fax that a review of the sacred lands file failed to indicate the presence of Native American cultural resources in the "immediate project area." On April 29, 2021, initial consultation letters were sent to the Native American individuals on the list provided by the NAHC. The letter provided a summary of the project and requested information regarding comments or concerns the Native American community might have about the Project. For those individuals that did not reply to the letter, emails were sent on February 17, 2022.

Project notification letters were sent out to the following tribes:

- North Valley Yokuts Tribe
- Southern Sierra Miwuk Nation
- Tule River Indian Tribe

To date, no responses have been received.

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. Dokken Engineering obtained a record search (File #11630N) for the Project area and a one-mile radius surrounding the Project area from the Central California Information Center

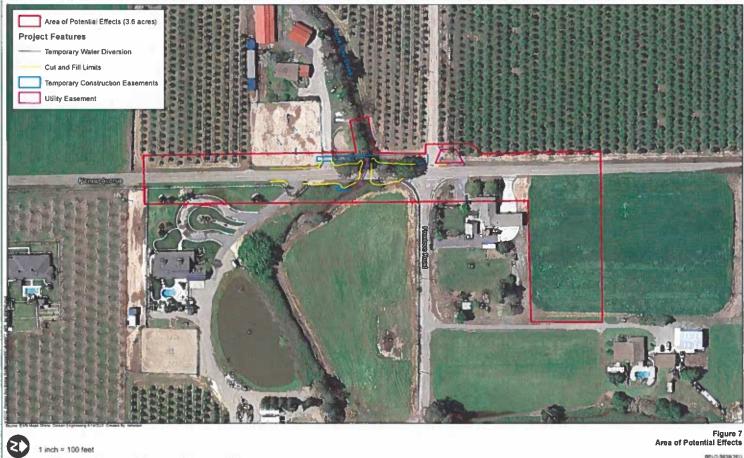
(CCIC), California State University, Sacramento, on January 19, 2021. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, the OHP Determinations of Eligibility, and the California Inventory of Historical Resources. Dokken Engineering staff reviewed historic USGS topographic maps, General Land Office maps, and historic aerials. According to the records search, no cultural resources have been documented within the APE.

As there are no eligible or potentially eligible cultural resources documented or encountered within the Project area, the Project would have **No Impact** on historical resources as defined in §15064.5.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant with Mitigation Incorporated. In an effort to identify archaeological resources that might be affected by the undertaking, a pedestrian survey, background research, and consultation with individuals and organizations were conducted. A record search conducted at the CCIC identified two cultural resources within a one-mile radius of the APE and no resources within the APE. The pedestrian survey did not observe any cultural resources within the APE.

At this time, no further archaeological study is required unless Project plans change to include areas not previously included in the project APE or if additional information is received from other sources or special interest groups. Native American groups have expressed concerns regarding the Native American resources in the immediate area. Consultation will continue throughout the course of the Project. With any project, there is always the possibility that unknown cultural resources may be encountered during construction. With the implementation of Mitigation Measures **CR-1** and **CR-2**, potential impacts to cultural resources as a result of the Project would be **Less than Significant with Mitigation Incorporated**.



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BRLO-9638(261) Panes: Avenue Over Lone Tree Creek Bridge Replacement Project

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

Less than Significant with Mitigation Incorporated. With any project that involves ground disturbance, there is always the possibility that unmarked burials may be unearthed during construction. This impact is considered potentially significant. Implementation of measure CR-2 would reduce this to a Less than Significant Impact with Mitigation Incorporated.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

- **CR-1:** If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological survey would be needed if Project limits are extended beyond the present survey limits.
- **CR-2:** Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the County coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.

FINDINGS

The Project would have Less Than Significant Impacts with Mitigation Incorporated relating to cultural resources.

2.6 ENERGY

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?				\boxtimes
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				\boxtimes

DISCUSSION

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

No Impact. The Project is a bridge replacement and would not contribute to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation. Therefore, there would be **No Impact**.

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 any state or local plans for renewable energy or energy efficiency. Therefore, there would be **No Impact**.

FINDINGS

No Impact to energy is anticipated; therefore, no avoidance, minimization, and/or mitigation measures will be required.

2.7 GEOLOGY AND SOILS

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

REGULATORY SETTING

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

AFFECTED ENVIRONMENT

The Project is located in the Great Valley Geomorphic Province and does not have any mapped or known faults within or near the Project area.

DISCUSSION

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
 - ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction? *iv)* Landslides?

No Impact. The Project would not expose people or structures to potential substantial adverse effects, including risk of loss, injury, or death involving rupture of a known fault, strong seismic ground shaking, seismic-related ground failure, or landslides. The Project is not located within a fault zone and the nearest fault is the Green Springs Run fault, a Late Quaternary fault (movement during past 700,00 years) located over 20 miles east of the Project. Therefore, there would be **No Impact**.

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

Less than Significant Impact. The Natural Resource Conservation Service Web Soil Survey was used to identify soils within the Project area. The area includes a range of various sandy loams with little to no slopes. A majority of the area (93%) consists of Madera sandy loam, 0 to 2 percent slopes, with a small area (7%) of Exeter sandy clay loam, 0 to 2 percent slopes. The Project would involve ground disturbance in the form of minor cut and fill for bridge foundation removals, abutments, and rock slope protection. The total amount of disturbed soil will be limited to a small area and these minor grading impacts are not expected to result in a substantial soil erosion or loss of topsoil. The impacts associated with excavation would be Less than Significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The Project would not be located on soil that is known to be unstable or would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. There has been no history of seismic activity in Stanislaus County that would lead to this type of risk affecting the Project after it has been constructed, therefore **No Impact** is anticipated.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The Project is not located on expansive soil as defined in Table 18-1-B of the *Uniform Building Code (1994)*, therefore **No Impact** is anticipated.

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

No Impact. The Project will not utilize septic tanks or an alternative waste water disposal system on the site. Therefore, there would be **No Impact**.

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

No Impact. The Stanislaus County General Plan Environmental Impact Report shows the area surrounding the Project as having high paleontological sensitivity. No findings of unique paleontological resources or sites or unique geological features were identified during the record search and archaeological pedestrian survey. The Project would involve minor grading and excavation. Due to the amount of farming and previous ground disturbance in the area to construct the bridge, no paleontological resources are expected to be encountered. Therefore, there would be **No Impact**.

FINDINGS

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The Project would have Less Than Significant Impacts relating to geology and soils.

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2.8 GREENHOUSE GAS EMISSIONS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			\boxtimes	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

REGULATORY SETTING

California's primary legislation for reducing greenhouse gas (GHG) emission is the California Global Warming Solutions Act, Assembly Bill (AB) 32. Agencies that regulate GHG emissions include the SJVAPCD, Caltrans, and the CARB. The SJVAPCD adopted the Climate Change Action Plan in August 2008, which is intended to reduce federal, State, and local GHG emissions by targeting the largest emitters of GHGs: the transportation and energy sectors.

DISCUSSION

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

Less Than Significant. GHG emissions can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds.

Long Term Emissions

The proposed Project would replace the existing two-lane bridge with a new two-lane structure designed to meet AASHTO standards. As the Project would not increase the travel lane capacity or alter the speed limits on the existing roads, long term GHG emissions are not expected to increase as a result of the proposed Project.

Construction Emissions

A Temporary increase in GHG would be generated by use of construction vehicles as well as minor increases in traffic congestion when construction requires lane closures on existing roadways. The Sacramento Metropolitan Air Quality Management District's Road Construction Model estimates that the Project would generate approximately 1,080 MT CO₂e throughout the course of the Project (see Appendix A). These emissions are not expected to result in any cumulatively considerable increases in GHG emissions. All construction impacts to GHG emissions would be short-term and intermittent.

The emission of GHGs during construction of the proposed Project would be negligible and therefore Less Than Significant.

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

Less than Significant. The Project involves replacement of an existing bridge in kind in order to provide improved safety and operations on the facility. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emission. Impacts would be Less Than Significant.

FINDINGS

The Project would have Less Than Significant Impacts relating to GHG emissions.

2.9 HAZARDS AND HAZARDOUS MATERIALS

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

REGULATORY SETTING

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during Project construction.

AFFECTED ENVIRONMENT

A hazardous waste Initial Site Assessment (ISA) was prepared for the Project. The proposed Project area was evaluated for the presence of Recognized Environmental Conditions (RECs) and/or Activity and Use Limitations (AULs), which are:

REC: "...the presence or the likely presence of any hazardous substances or petroleum hydrocarbons on the (Subject Property) that indicate an existing release, a past release, or a

material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property."

AUL: "...an explicit recognition by a federal, tribal, state, or local agency that residual levels of hazardous substances or petroleum hydrocarbons may be present on the property, and that unrestricted use of the property may not be acceptable."

EnviroStor indicates one cleanup site within the Project area. The site is an active case reported as a leak detection during stock inventory. It is located on the northernmost parcel within the Project area, APN 002-010-060. The cleanup status of this site is not yet reported.

An Environmental Data Resources (EDR) database search was obtained January 27, 2021. EDR identified 1 REC within the American Society for Testing and Materials standard radial search of 1 mile from the Project area. The REC identified is the same cleanup site that was identified by EnviroStor.

DISCUSSION

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. The purpose of the Project is to replace the existing bridge in kind which would not increase the risk of hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Large trucks carrying hazardous materials may utilize the new bridge in the same manner as the existing bridge, thus the new bridge is not expected to create additional risks related to the transport of hazardous materials. The Project has the potential to dispose hazardous materials such as lead-based paint and chemically treated wood during the construction of the Project. However, with the implementation of measures HAZ-1 through HAZ-5, a Less Than Significant Impact is anticipated.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant with Mitigation Incorporated. The Project would involve the use of heavy equipment for grading, filling, and the hauling of materials. Such equipment may require the use of common materials that have hazardous properties, e.g., petroleum-based fuels. These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within designated areas and the use of hazardous materials within the Project area would be temporary.

With any project that involves excavation, there is a possibility of encountering unknown hazardous contamination during construction. With the implementation of measure **HAZ-5**, Project impacts from upset or accident conditions will be reduced to **Less Than Significant with Mitigation Incorporated**.

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

No Impact. There are no schools within one-quarter mile of the Project. The nearest school is the Valley Home School located approximately 0.54 miles north of the Project area. The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of a school. Therefore, there would be **No Impact**.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant with Mitigation Incorporated. The databases EnviroStor and EDR were used to find active hazardous waste sites within the vicinity of the proposed Project. One site was identified within a one-mile radius of the Project site, located within the Project area at 12506 Pioneer Avenue, which is the parcel where staging has been proposed. This site was reported in 1985 as a leak detection during stock inventory. The case status is reported as active, and the release/cleanup information is not reported. During pedestrian surveys, no evidence of current hazards was observed at this location. The Project would potentially conduct activities within this site; however, measures HAZ-1 through HAZ-5 would be incorporated to ensure that any hazard would be mitigated for, should it be discovered throughout construction, reducing the Project impacts to Less than Significant with Mitigation Incorporated.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?

No Impact. The Project would not result in a safety hazard for people residing or working in the Project area as the Project is not within the vicinity of an airport land use plan or within two miles of a public airport or public use airport. Therefore, there would be **No Impact**.

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

Less than Significant Impact. The Project would replace an existing bridge and would not change emergency access in the permanent condition. During construction, lane closures may result in minor increase in congestion but would not be expected to substantially limit emergency access as either a single lane will remain open, or detour routes will be available for emergency use. Furthermore, the roadways within the Project area are not identified as planned evacuation routes. Due to the temporary nature of lane closures related to the Project, impacts would be Less than Significant.

g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no wildlands are adjacent to or within the Project area. Therefore, there would be **No Impact**.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

- HAZ-1: If lead-based paints are present within the Project area, to avoid impacts from pavement striping during construction it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provisions for "REMOVE TRAFFIC STRIPE AND PAVEMENT MARKINGS."
- **HAZ-2:** A Site Investigation is recommended for asbestos, ACMs, or lead-based paints in the existing bridge that have been disturbed before construction or will be disturbed during construction. This investigation should be implemented before construction and documented as part of the Phase II ISA.
- **HAZ-3:** Any leaking transformers observed during the course of the Project should be considered a potential PCB hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

- **HAZ-4:** Any chemically treated wood must be treated as TWW and disposed of as hazardous waste. For the TWW, the DTSC regulations §66261.9.5 provide alternative management standards for TWW. Caltrans 2018 SSP for TWW, SSP 14-11.14, is based on DTSCs AMS regulations. This SSP directs the Contractor to follow the AMS including providing training to all personnel that may come in contact with TWW. This training must include, at a minimum, safe handling, sorting and segregating, storage, labeling (including date), and proper disposal methods.
- **HAZ-5:** For any previously unknown hazardous waste/ material encountered during construction, the procedures outline in Appendix B (Caltrans Unknown Hazard Procedures, Construction Manual, December 2006) shall be followed.

FINDINGS

The Project would have Less Than Significant Impacts with Mitigation Incorporated relating to hazards and hazardous materials.

2.10 HYDROLOGY AND WATER QUALITY

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		\boxtimes		
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the Project may impede sustainable groundwater management of the basin?				\boxtimes
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;		\boxtimes		
 (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; 		\boxtimes		
 (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 		\boxtimes		
(iv) impede or redirect flood flows?		\boxtimes		
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?				\boxtimes
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				\boxtimes

REGULATORY SETTING

Section 401 of the CWA requires water quality certification from RWQCB when a project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the USACE to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the NPDES permit for the discharge of any pollutant into waters of the U.S. The EPA has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Caltrans activities on its highways and facilities. Caltrans construction projects are regulated under the Statewide permit, and projects performed by other entities on Caltrans right-of-way (encroachments) are regulated by the SWRCB's Statewide General Construction Permit. All construction projects over 1 acre require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Caltrans activities less than 1 acre require a Water Pollution Control Program.

Stanislaus County has a Storm Water Management Program (Program), adopted in April of 2003, to meet the terms of the General Permit, regulating storm water discharges from small Municipal

Separate Storm Sewer System. The Program has six control measures, established by the SWRCB, to regulate the discharge of storm water. The control measures include public education and outreach, public involvement, discharge detection and elimination program, construction site storm water runoff control, post-construction storm water management, and pollution prevention/good housekeeping for municipal operations. The County is currently working on developing a Storm Water Resource Plan, in accordance with Senate Bill 985, focused on identifying and prioritizing local, multi-benefit stormwater and dry weather capture projects

AFFECTED ENVIRONMENT

Hydrology

The Project site falls within Central Valley, Region 5, of the RWQCB. The Project area is within the Middle San Joaquin – Lower Merced – Lower Stanislaus watershed within the San Joaquin River Basin (Stanislaus County 2017). The water feature within the Project area is Lone Tree Creek, which originates approximately 3 miles east of the Project area and is a tributary to the San Joaquin River. Lone Tree Creek is a 303(d) listed water with total maximum daily loads necessary (EPA 2017).

Groundwater

The Project is located within the San Joaquin Valley groundwater basin and the Eastern San Joaquin sub-basin. The San Joaquin Valley groundwater basin contains 9 sub-basins and lies within the San Joaquin River and Tulare Lake Hydrologic Regions covering approximately 8.88 million acres (Central Valley RWCQB 2006). Groundwater in this region is primarily used for agricultural and urban entities and accounts for approximately 48% of the groundwater used in California.

The Eastern San Joaquin groundwater sub-basin covers approximately 707,000 acres and is defined by the areal extent of unconsolidated to semi-consolidated sedimentary deposits that are bounded by the Mokelumne River on the north and northwest; San Joaquin River on the west; Stanislaus River on the south; and consolidated bedrock on the east (CDWR 2006). The proposed Project does not anticipate impacting or altering any groundwater basins.

Municipal Supply

Lone Tree Creek is tributary to the San Joaquin River, which is considered a municipal and domestic water supply suitable or potentially suitable for drinking water. The Project will not impact any water reservoirs or water recharge facilities.

Flooding

The Project area is within FEMA Zone X, designated as an area if minimal flood hazard, with a 0.2% annual chance of flooding.

DISCUSSION

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

Less than Significant with Mitigation Incorporated. The Project would follow the Central Valley Region Phase II Small Municipal Separate Storm Sewer System NPDES General Permit,

Construction General Permit 2012-0006-DWQ, as stated in measure **WQ-1**. The permit will address clearing, grading, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This permit will also require that a SWPPP be prepared and implemented throughout construction with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. In addition, measures **BIO-3**, **BIO-5**, and **BIO-6** include BMPs that will be implemented to avoid and minimize effects to water quality, and in doing so will ensure the Project impacts will be **Less than Significant with Mitigation Incorporated**.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the Project may impede sustainable groundwater management of the basin?

No Impact. The Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. Therefore, there would be **No Impact** related to depletion of groundwater supplies or interference with groundwater recharge.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - (i) result in substantial erosion or siltation on- or off-site;

(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

(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

(iv) impede or redirect flood flows?

Less Than Significant with Mitigation Incorporated. The Project would replace an existing two-span bridge with a single-span bridge, removing existing fills within the center of the Lone Tree Creek channel due to the design of the new bridge. Approximately 0.009 acres of the creek would be permanently impacted due to a small amount of fill on the south bank, which would be required as a part of the roadway improvements.

The Bridge Design Hydraulic Study prepared for the Project reports that the selected bridge design would result in a decrease in water surface elevations (WSEs) upstream of the proposed bridge relative to the existing condition for the 100- and 50-year storm events. The Project WSEs would match with the existing WSEs approximately 17 feet downstream of the existing bridge's centerline. In addition, the Project would reduce backwater effects upstream of the bridge and provide more freeboard than the existing bridge during the 100- and 50-year storm events. Currently, the existing bridge is located in an area of minimal flood hazard (Zone X). The Project would result in better water flow through Lone Tree Creek due to the removal of the existing inwater pier, as the replacement structure will span the width of Lone Tree Creek. Negative impacts to currents, circulation or drainage patterns are not anticipated.

Rock slope protection (RSP) has been designed to protect bridge abutments from erosion using the FHWA's *Hydraulic Engineering Circular No.* 23 (HEC-23) (2009), "Bridge Scour and Stream Instability Countermeasures" (2009), and Caltrans' *Highway Design Manual* (2020).

The proposed Project would not add a substantial amount of impervious surface. The bridge will be replaced on the existing alignment and would remain a 2-lane facility. The Project is not

anticipated to impact the surrounding permeable surfaces available for infiltration of rainfall and runoff.

While the Project would minimally alter the WSE of Lone Tree Creek within the Project area, this alteration of the creek would not result in substantial erosion or siltation, would not substantially increase surface runoff in a way that would result in flooding, would not exceed the capacity of existing stormwater drainage systems, and would not impede flood flows. In fact, the increased freeboard of the proposed bridge would allow more space for flood flows, and the RSP design specifications would protect the bridge from erosion and siltation.

Roadways may contain oil, grease, petroleum products, zinc, copper, lead, cadmium, iron, and other trace metals, which could harm water bodies and the associated habitat around them. Concentrations of these pollutants in storm water runoff would be greatest during the "first flush" storm event, generally the first major rains of the season. Due to the low frequency of traffic, concentrations of these pollutants would be minimal at the Project location. Furthermore, the Project would implement measures **WQ-1** and **BIO-2** through **BIO-6**. This, along with the Project's design, would reduce temporary and permanent alteration of the course of Lone Tree Creek during and after Project construction, on and off site, to **Less Than Significant with Mitigation Incorporated.**

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

No Impact. The Project would not create a potential situation for inundation by seiche, tsunami, or mudflow. The Project is located in a dominantly flat landscape, is not located in proximity to a large body of water, and is not near the coastal waters; therefore, **No Impact** would occur.

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

No Impact. The Project would obtain the appropriate permits from the RWQCB; therefore, the Project would not conflict with or obstruct the implementation of the *Water Quality Control Plan (Basin Plan)* for the California Regional Water Quality Control Board Central Valley Region. Furthermore, the Project would not have affects to groundwater and there would be **No Impact** to any applicable water quality control plan or sustainable groundwater management plan.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

In addition to measure **WQ-1**, implementation of biological avoidance, minimization, and mitigation measures **BIO-2** through **BIO-6** as described in Section 2.4 would reduce the water quality impacts to Less Than Significant with Mitigation Incorporated.

WQ-1: The proposed Project will implement all feasible Low Impact Development (LID) BMPs and follow the Central Valley Region Phase II Small MS4 NPDES General Permit of storm water associated with construction activities (Construction General Permit 2012-0006-DWQ).

FINDINGS

The Project would have Less Than Significant Impact with Mitigation Incorporated relating to hydrology and water quality.

2.11 LAND USE AND PLANNING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?				\boxtimes
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?				\boxtimes

AFFECTED ENVIRONMENT

The proposed bridge would replace the existing 2-span Pioneer Avenue over Lone Tree Creek Bridge with a single-span, two-lane bridge constructed in the existing alignment. Existing overhead electrical lines may require relocation. Permanent right of way acquisition may be required to accommodate the relocation of overhead electrical and communication lines. Additionally, temporary construction easements would be required from adjacent properties, west and east of the existing bridge, to complete the proposed creek diversion. Access over Pioneer Avenue bridge will be temporarily unavailable during construction. Detour routes would be available from each direction utilizing Pleasant Valley Road, Victory Avenue, Lone Tree Road, Freelove Road and Valley Home Road. Access to all properties would remain during construction.

DISCUSSION

a) Physically divide an established community?

No Impact. The Project would replace an existing bridge in kind and would not permanently divide an established community. Furthermore, a temporary detour route would be available to the community during construction which would prevent division of the established rural community within the Project vicinity. **No Impact** which would physically divide a community is expected.

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 would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation for the purpose of avoiding or mitigation an environmental effect. Therefore, there would be **No Impact**.

FINDINGS

The Project would have **No Impacts** relating to land use and planning.

2.12 MINERAL RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				\boxtimes
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?				\boxtimes

AFFECTED ENVIRONMENT

According to the Stanislaus County General Plan (2015), which relies upon the State Division of Mines and Geology report, *Mineral Land Classification of Stanislaus County, California* (Special Report 173), mineral commodities mined in the past in Stanislaus County include construction aggregate, industrial minerals, and metallic minerals. Currently, sand and gravel deposits constitute the only commercially significant extractive mineral resource in the region.

DISCUSSION

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. The Project will not affect sand and gravel or any other known mineral resources. Mineral resources are not associated with the Project or located on the Project site and the Project would have **No Impact** to mineral resources.

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 area does not go through lands that are listed as a locally-important mineral resource recovery site in Stanislaus County. Therefore, there would be **No Impact**.

FINDINGS

The Project would have **No Impact** relating to mineral resources.

2.13 NOISE

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

AFFECTED ENVIRONMENT

The Project area is within a rural area of Stanislaus County. Background noise levels are influenced by local roads and the existing surrounding agricultural areas. Vehicle travel remains the dominant noise source at the Project site. The existing noise level ranges from 40 to 50 decibels (dB). As the Project would replace an existing bridge without adding additional travel lanes, no permanent changes in noise generation are expected. Operational noise impacts from the Project will be similar to existing conditions. As such, there are no permanent operational impacts that are anticipated as a result of the Project. The only source of noise associated with the Project is temporary noise impacts generated by construction vehicles and the discussions below only relate to construction noise.

DISCUSSION

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant with Mitigation Incorporated. During construction of the Project, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment is expected to generate noise levels ranging from 75 to 88 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. **Table 4** summarizes noise levels produced by commonly used construction equipment.

Equipment	Typical Noise Level (dBA) 50 feet from Source
Sonic Pile Driver	96
Grader	85
Bulldozers	85
Truck	88
Loader	85
Roller	74

Table 4.	Construction	Equipment No	oise Emissions	Levels
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Air Compressor	81	
Backhoe	80	
Pneumatic Tool	85	
Paver	89	
Concrete Pump	82	

Source: Federal Transit Administration, 1995

Construction equipment associated with the Project would likely include excavators, dozers, concrete trucks, drill rigs, jack hammers and dump trucks. The loudest equipment that will be used is a jack hammer, which has a typical noise level of 88 dB at 50 feet, and an excavator, which has a typical noise level of 85 dB at 50 feet.

Construction noise is also regulated by Caltrans Standard Specifications Section 14-8.02 "Noise Control", which state that noise levels generated during construction shall comply with applicable local, state, and federal regulations, and that all equipment shall be fitted with adequate mufflers according to the manufacturers' specifications. Additionally, Section 14-8.02 states, "Do not exceed 86 dBA L_{max} at 50 feet from the job site from 9:00 p.m. to 6:00 a.m.". However, the Stanislaus County Code of Ordinances specifies a stricter requirement than the Caltrans specifications. Under the Stanislaus County Code of Ordinances, Chapter 10.46.060 Specific noise source standards, no person shall operate any construction equipment that would exceed 75 dBA at or beyond the property, upon which a dwelling unit is located, between the hours of 7 p.m. and 7 a.m. The Stanislaus County Code of Ordinance for noise standards will be upheld as appropriate, but construction hours may vary during certain times of the year to accommodate business operation hours of one business adjacent to the Project (APN 002-011-024). Therefore, measures **NOI-1** and **NOI-2** will be implemented, and the Project will have **Less Than Significant Impact with Mitigation Incorporated** regarding noise.

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

Less than Significant with Mitigation Incorporated. The Project area is within a rural area of Stanislaus County with a limited number of rural residences within the Project vicinity. No significant vibration causing construction activities (such as blasting or pile driving) will be necessary for this Project. The implementation of measures NOI-1 and NOI-2 would further reduce vibration and noise impacts. As a result, the Project will have Less Than Significant Impacts with Mitigation Incorporated.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. The Project is not located within or adjacent to an airport land use plan, or where such a plan has been adopted, or within two miles of a public airport or public use airport; therefore, **No Impact** would occur, and no mitigation is required.

AVOIDANCE, MINIMIZATION, AND/OR ABATEMENT MEASURES

NOI-1: Noise from construction will adhere to the Stanislaus County Code of Ordinance for noise source standards, when applicable. Construction work hours may be adjusted in

coordination with private property and business owners to accommodate operation hours of an adjacent business.

NOI-2: All equipment shall be fitted with adequate mufflers according to the Caltrans manufacturers' specifications.

FINDINGS

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The Project would have Less Than Significant Impacts with Mitigation Incorporated relating to noise.

2.14 POPULATION AND HOUSING

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact	
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?					
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				\boxtimes	
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?					

REGULATORY SETTING

CEQA also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "...discuss the ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

DISCUSSION

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The Project would replace the existing Pioneer Avenue bridge over Lone Tree Creek, in kind, and would not induce substantial population growth in rural Stanislaus County. Therefore, there would be **No Impact**.

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

No Impact. The Project would not displace any existing housing, nor would it necessitate the construction of replacement housing. Therefore, there would be **No Impact**.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The Project would not displace any number of people, nor would it necessitate the construction of replacement housing. Therefore, there would be **No Impact**.

FINDINGS

The Project would have No Impacts relating to population and housing.

2.15 PUBLIC SERVICES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?				\boxtimes
Police protection?				\bowtie
Schools?				\boxtimes
Parks?				\boxtimes
Other public facilities?				\boxtimes

AFFECTED ENVIRONMENT

The nearest fire station is Stanislaus Consolidated Fire located at 3318 Topeka Street, Riverbank, approximately 6.0 miles away from the Project area. The nearest law enforcement office is the Oakdale Police Department located at 245 North 2nd Avenue, Oakdale, approximately 5.0 miles from the Project area. The nearest school is the Valley Home School located at 13231 Pioneer Avenue, approximately 0.54 miles north of the Project area. There are no public parks within 2 miles of the Project area.

DISCUSSION

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

No Impact. There are no public services located within the Project area. The Project is located in rural Stanislaus County, which consists predominantly of agricultural lands. The Project would replace an existing bridge in kind and would not increase the usage of public services such as fire protection, police protection, schools, or parks. The County will work closely with emergency, garbage, and postal services during the design phase. The County will continue to coordinate these services and will be updated on construction start and durations prior to construction. Therefore, the Project will have **No Impact** to these public services.

FINDINGS

The Project would have **No Impacts** relating to public services.

2.16 RECREATION

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
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?				\boxtimes

AFFECTED ENVIRONMENT

Parks within the Project vicinity are located in Oakdale, Riverbank, and Escalon. The Project is not located in close proximity to existing parks or recreation areas.

DISCUSSION

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. The Project is located in a rural agricultural area and would not increase the use of any neighborhood or regional parks or other recreational facilities. Therefore, there would be **No Impact**.

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The purpose of the Project is to replace an existing bridge, in kind, and does not include creation of recreational facilities or require the construction or expansion of recreational facilities. Therefore, there would be **No Impact**.

FINDINGS

The Project would have No Impact relating to recreation.

2.17 TRANSPORTATION/TRAFFIC

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

AFFECTED ENVIRONMENT

According to Stanislaus County General Plan (2015), when measuring levels-of-service (LOS), Stanislaus County uses the criteria established in the *Highway Capacity Manual* published and updated by the Transportation Research Board. LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, freedom to maneuver, volume, density, and capacity. Six levels are defined, from LOS A, as the best operating conditions, to LOS F, or the worst operating conditions. LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

For roadways within Stanislaus County, the Stanislaus County General Plan (2015) states the LOS criteria as, "The County shall maintain LOS C or better for all County roadways and intersections, except, within the sphere of influence of a city that has adopted a lower level of service standard, the City standard shall apply. The County may adopt either a higher or lower LOS standard for roadways and intersections within urban areas such as Community Plan areas, but in no case shall the adopted LOS fall below LOS D."

Access over Pioneer Avenue bridge will be temporarily unavailable during construction. Detour routes would be available from each direction utilizing Pleasant Valley Road, Victory Avenue, Lone Tree Road, Freelove Road and Valley Home Road. Access to all properties would remain during construction.

DISCUSSION

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

No Impact. As the Project would replace an existing bridge with no additional travel lanes, there would be no permanent changes to the existing circulation system including transit, roadway, bicycle, and pedestrian facilities. The post-Project condition would not conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. Therefore, there would be **No Impact**.

b) Would the Project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact. CEQA Guidelines section 15064.3 describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate

measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Subdivision (b) defines the criteria for analyzing transportation impacts. However, as the Project will replace an existing bridge with no additional travel lanes, the Project will have no change on the vehicle miles traveled. Per section 15064.3 (b)(2), projects that have no impact on vehicle miles traveled are presumed to cause a less than significant transportation impact, as there will be no changes in the roadway, the Project would be consistent with CEQA Guidelines section 15064.3 subdivision (b) and **No Impact** is anticipated.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact. As the Project would replace an existing bridge with a structure of similar width and the same lane capacity and complete roadway improvements, the Project would not substantially increase hazards due to a permanent design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

However, construction of the Project may result in temporary traffic hazards due to temporary closure of travel lanes on the existing bridge. The construction of the new bridge will be completed in three stages to allow for minimal full closure of the roadway. Intermittent road closures and one-way traffic control will be needed during the first two stages of construction. During the third stage, the bridge will be closed to traffic and traffic will be directed toward a detour route while the bridge is being removed and replaced.

During the third stage of construction, Pioneer Avenue will be closed at the bridge over Lone Tree Creek. The closure will begin at the Pioneer/Freelove Road crossroad to about 200 feet south of the existing Pioneer Ave Bridge. Freelove Road and access to residents in the area will remain open. The detour route will be signed for vehicles, utilizing Pleasant Valley Road, Aker Road, Victory Avenue, Lone Tree Road, Freelove Road and Valley Home Road. More specifically, vehicles traveling South on Pioneer Avenue will be detoured to Victory Avenue at the Pioneer/Lone Tree Road crossroad. Vehicles traveling north along Pioneer Ave will also be detoured to Victory Avenue at Pleasant Valley Road. The detour length will be about 4.0 miles.

The temporary lane closure may result in additional congestion or unsafe traffic conditions if it is not effectively managed. The traffic diversion will include appropriate signage for the vehicles approaching the construction zone. Since the traffic diversion will be temporary, the Project would have a **Less Than Significant Impact** on sharp curves, dangerous intersections or other incompatible design uses.

d) Result in inadequate emergency access?

Less than Significant Impact. The Project would not change the existing roadway geometry and would not change emergency access during or after Project completion. During construction, lane closures may result in minor increase in congestion but would not be expected to substantially limit emergency access as either a single lane will remain open, or detour routes will be available for emergency use. Due to the temporary nature of lane closures related to the Project, impacts would be Less than Significant.

FINDINGS

The Project would have a Less Than Significant Impact relating to transportation and traffic.

2.18 TRIBAL CULTURAL RESOURCES

TRIBAL CULTURAL RESOURCES:

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

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

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

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
	\boxtimes		

REGULATORY SETTING

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through AB 52. By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and project proponents would have information available, early in the project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a "project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment" (PRC § 21084.2).

To help determine whether a project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the NAHC shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If the tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term "tribal cultural resource" refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California PRC Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

AFFECTED ENVIRONMENT

An APE was established as the area of direct and indirect effects which encompasses an approximately 6-acre area. The APE extends for approximately 1000 feet along Pioneer Avenue and encompasses portions of two adjacent parcels that extend to the east of Pioneer Avenue. The vertical APE consists of a maximum of 20 feet of depth from the existing ground surface to bgs to accommodate earthwork for the construction of bridge abutments. The minimum depth of ground disturbance is approximately 5 feet bgs, required for all roadway approach realignment, vegetation removal, and fill compaction. The Project does not involve relocation of any buried utilities.

An archaeological field survey of the APE was conducted by archaeologist Michelle Campbell, M.A. on March 15, 2021, for the purpose of identifying and recording archaeological resources. The pedestrian survey was conducted at roughly 10-meter transect intervals where conditions allowed. All Project area field conditions and cultural resources were fully recorded in the field notes. Coverage varied in areas with vegetation coverage.

Dokken Engineering obtained a record search (File #11630N) for the Project area and a one-mile radius surrounding the Project area from the CCIC, California State University, Sacramento, on January 19, 2021. The search examined the OHP Historic Properties Directory, the OHP Determinations of Eligibility, and the California Inventory of Historical Resources. Dokken Engineering staff reviewed historic USGS topographic maps, General Land Office maps, and historic aerials. According to the records search from the CCIC, two cultural resources were identified within a one-mile radius of the APE and no resources within the APE. The pedestrian survey did not observe any cultural resources within the APE.

Native American Consultation

To help determine whether the Project may have an effect, Public Resources Code Section 21080.3.1 requires the CEQA lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed Project.

On January 14, 2021, a letter and map figures depicting the Project vicinity and location was sent to the NAHC in West Sacramento, asking the commission to review the Sacred Lands File for any Native American cultural resources that might be affected by the project. On February 5, 2021, Nancy Gonzalez-Lopez, Cultural Resource Analyst, replied via fax that a review of the sacred lands file failed to indicate the presence of Native American cultural resources in the "immediate project area." On April 29, 2021, initial consultation letters were sent to the Native American individuals on the list provided by the NAHC. The letter provided a summary of the project and requested information regarding comments or concerns the Native American community might have about the Project. For those individuals that did not reply to the letter, emails were sent on February 17, 2022.

Project notification letters were sent out to the following tribes:

- North Valley Yokuts Tribe
- Southern Sierra Miwuk Nation
- Tule River Indian Tribe

To date, no responses have been received.

DISCUSSION

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)

Less than Significant with Mitigation Incorporated. The Project is not anticipated to cause a substantial adverse change in the significance of a TCR listed or eligible for listing in the California Register of Historical Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k). No cultural resources were identified during the visual survey, or the record search. No impacts are anticipated for the Project related to archaeological resource; however, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. This impact would be considered potentially significant. Implementation of Mitigation Measure CR-1 and CR-2 would result in Less Than Significant Impact with Mitigation Incorporated.

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

Less than Significant with Mitigation Incorporated. The Project is not anticipated to cause a substantial adverse change to a TCR pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. No cultural resources were identified during the visual survey and record search. No impacts are anticipated for the Project related to archaeological resource; however, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. This impact would be considered potentially significant and implementation of Mitigation Measures CR-1 and CR-2 would result in Less Than Significant Impact with Mitigation Incorporated.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Measures **CR-1** and **CR-2**, included within Section 2.5, will be implemented for any impacts relating to TCRs.

FINDINGS

The Project would have Less Than Significant Impact with Mitigation Incorporated relating to Tribal Cultural Resources.

2.19 UTILITIES AND SERVICE SYSTEMS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry and multiple dry years?				\boxtimes
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?				\boxtimes
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?			\boxtimes	
e) Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes

DISCUSSION

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

Less than Significant Impact. There are existing overhead electrical lines, including communication lines, on the east of Pioneer Avenue within the Project area that may require relocation. Utility relocations would be conducted with close coordination with the utility companies and property owners, as permanent right of way acquisition may be required to accommodate the relocation of overhead electrical and communication lines. Should utility systems require relocation, they would be relocated within the Project area and would be designed to ensure that no new environmental impacts not already discussed in this Initial Study would occur.

Furthermore, the Project would not include the construction of any uses that would increase demand on wastewater, stormwater facilities, electric power, natural gas, or telecommunications facilities. No new utilities would be required and the potential relocation of utilities would have a **Less than Significant Impact**.

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

No Impact. The Project would not result in the need for new or expanded water supplies. **No Impact** would result from development of the Project.

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 would replace an existing bridge and would not involve the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not result in the need for new or expanded wastewater facilities. **No Impact** would occur.

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?

Less Than Significant. No solid waste is expected to be generated through use and operations of the proposed Project. Solid waste may be generated during construction, such as broken up asphalt; however, the amount will not substantially impact landfill capacities. This would not affect landfill capacity because the amounts would not be substantial and would occur for a short period of time during the 10-month construction period. Therefore, impacts associated with development of the Project would be considered Less Than Significant and no mitigation is required.

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

No Impact. The Project would comply with federal, state, and local statutes and regulations related to solid waste; therefore, there would be **No Impact** associated with non-compliance with federal, state, and local statutes and regulations related to solid waste.

FINDINGS

The Project would have Less Than Significant Impacts relating to utilities and service systems.

2.20 WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones: Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				\boxtimes
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?				\boxtimes
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?				
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?				

AFFECTED ENVIRONMENT

Cal Fire has determined that Stanislaus County has no Very High Fire Hazard Severity Zones.

DISCUSSION

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

No Impact. The purpose of the Project is to replace the existing bridge in kind and would not interfere with an emergency response plan. Additionally, the roadways within the Project area are not identified as planned evacuation routes. The Project would have **No Impact** concerning emergency response plans.

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. There is very little to no slope in the Project area and construction of the Project would not expose occupants to pollutant concentrations from a wildfire. Therefore, there would be **No Impact**.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The proposed Project would replace an existing bridge in kind and this infrastructure facility would not exacerbate fire risk. Therefore, there would be **No Impact**.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. The Project would not expose people or structures to downslope or downstream flooding or landslides as the new bridge would replace the existing bridge in kind and would not change any of the existing slopes or grades adjacent to the Project. Therefore, there would be **No Impact**.

.....

FINDINGS

The Project would have No Impact relating to wildfires.

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

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

Detentially

Loss Than

Loop These

DISCUSSION

a) Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. Implementation of the Project would have the potential to impact the quality of the existing environment. Potentially significant impacts have been identified related to Air Quality (2.3), Biological Resources (2.4), Cultural Resources (2.5), Hazards and Hazardous Materials (Section 2.9), Hydrology and Water Quality (2.10), and Tribal Cultural Resources (2.18). Mitigation measures have been identified related to individual resource-specific impacts. The project has the potential to have impacts to the California Tiger Salamander; however, mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered Less than Significant with Mitigation Incorporated.

b) Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?

Less than Significant Impact with Mitigation Incorporated. All potential significant impacts discussed in this Initial Study can be reduced to a less than significant level with avoidance, minimization and mitigation. Past projects in the region have been cleared through the CEQA process and potentially significant impacts from those previous projects would have already been addressed through their own environmental review process. No significant cumulative effects have been identified with incorporation of the measures provided in this Initial Study. Incorporation of these measures would ensure that project level impacts to not contribute to cumulatively significant impacts on a regional level.

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

Less than Significant with Mitigation Incorporated. The Project would not cause significant adverse effects to human beings, either directly or indirectly with mitigation incorporated. Potential impacts have been identified related to Air Quality (2.3), Biological Resources (2.4), Cultural Resources (2.5), Hazards and Hazardous Materials (2.5), Hydrology and Water Quality (2.10), Noise (2.13), and Tribal Cultural Resources (2.18). Mitigation measures have been identified related to individual resource-specific impacts. Mitigation measures would reduce the level of all Project-related impacts to less than significant levels. Therefore, impacts are considered Less than Significant with Mitigation Incorporated.

AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No specific avoidance, minimization, and/or mitigation measures for cumulative impacts are needed for the Project. The following measures discussed in other sections in this document would ensure that cumulative impacts would be less than significant should they occur.

- Measures AQ-1 and AQ-2
- Measures BIO-1 through BIO-18
- Measures CR-1 and CR-2
- Measures HAZ-1 through HAZ-5
- Measure WQ-1
- Measure NOI-1 and NOI-2

3.0 Comments and Coordination

This chapter summarizes the County's efforts to identify, address, and resolve Project-related issues through early and continuing coordination.

3.1 CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES

Coordination with the following agencies was initiated for the Project:

California Department of Fish and Wildlife (CDFW) Native American Heritage Commission (NAHC) United States Fish and Wildlife Service (USFWS) National Marine Fisheries Service (NMFS)

3.2 PUBLIC PARTICIPATION

The public comment period for the Project is from Tuesday, May 17, 2022, through Friday, June 17, 2022.

4.0 List of Preparers

DOKKEN ENGINEERING

Sarah Holm, Environmental Manager Hanna Sheldon, Associate Biologist Clare Favro, Biologist/Environmental Planner Roberto Ramirez, Environmental Planner

STANISLAUS COUNTY

Chuck Covolo, Project Manager

5.0 References

- California Air Resources Board. California Air Basin Map. Available at: https://ww3.arb.ca.gov/ei/maps/statemap/abmap.htm
- California Air Resources Board 2020. Ambient Air Quality Standards. Available at: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf
- CDFW. 1997. Life History Account for California Tiger Salamander. California Department of Fish and Wildlife. (accessed 6/9/2021).
- CDFW. 2021a. The CDFW Biogeographic Information & Observation System
- Central Valley RWQCB. 2006. Groundwater Quality. Available at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/archives/exist_cond_rpt/draft_existing_conditions_rpt/ch04_pt3.pdf> (accessed 4/1/2021).
- CNPS. 2019. Inventory of Rare and Endangered Plants. Available at: (accessed 4/1/2021).
- Department of Conservation. California Important Farmland Finder. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/
- Department of Conservation. Fault Activity Map of California. Available at: https://maps.conservation.ca.gov/cgs/fam/
- Department of Conservation. Mineral Land Classification of Stanislaus County, California. 1993. Special Report 173. Available at: ftp.consrv.ca.gov > dmg > pubs > SR_173 > SR_173_Text
- Department of Toxic Substances Control. EnviroStor. Available at: https://www.envirostor.dtsc.ca.gov/public/map/
- England, A. S., M. J. Bechard, and C. S. Houston. 1997. Swainson's Hawk (Buteo swainsoni). In A. Poole and F. Gill (eds.), The Birds of North America, No. 265. Philadelphia, PA: The Academy of Natural Sciences and Washington, DC: The American Ornithologists' Union.
- Environmental Protection Agency (EPA). 2020. Non-attainment Areas for Criteria Pollutants, https://www.epa.gov/environmental-topics/air-topics
- Environmental Protection Agency (EPA). 2017. Water Quality Assessment and TMDL Information. Available at: < https://ofmpub.epa.gov/waters10/attains_index.home>

Federal Emergency Management Agency (FEMA) 2021

- Jepson eFlora. 2021. Geographic subdivisions. Available at: https://ucjeps.berkeley.edu/eflora/geography.html (accessed 3/16/2021).
- Lichvar, R.W. & McColley, S.M. 2008. A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States. United States Army Engineer Research and Development Center, Hanover, New Hampshire

- United States Department of Agriculture. Natural Resource Conservation Service. Web Soil Survey. Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
- Stanislaus County. 2015. Stanislaus County General Plan 2015. Available at: http://www.stancounty.com/planning/pl/gp/current/gp-introduction.pdf (accessed 4/1/2021)
- USFWS. 2017. Species Information: California Tiger Salamander (Ambystoma californiense). Department of the Interior – Fish and Wildlife Service: Sacramento Fish and Wildlife Office. Available at: https://www.fws.gov/sacramento/es_species/Accounts/Amphibians-Reptiles/ca_tiger_salamander/ (accessed 6/9/2021).

Appendix A: Road Construction Emissions Model Results

Road Construction Emissions Model, Version 9.0.0

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CO2e emosions are estimated by multiplying mass emosion The CO2e emissions are reported as matrix tons per phase

Appendix B: CNDDB, USFWS, and CNPS Special Status Species Database Results From: Hanna Sheldon nmfswcrca.specieslist@noaa.gov To: Pioneer Ave Bridge Replacement Project- NMFS Species List Subject: Wednesday, March 2, 2022 1:46:08 PM Date: Attachments: image001.png

Quad Name Escalon

Quad Number 37120-G8

ESA Anadromous Fish

SONCC Coho ESU (T) -CCC Coho ESU (E) -CC Chinook Salmon ESU (T) -CVSR Chinook Salmon ESU (T) -SRWR Chinook Salmon ESU (E) -NC Steelhead DPS (T) -CCC Steelhead DPS (T) -SCCC Steelhead DPS (T) -SC Steelhead DPS (E) -CCV Steelhead DPS (T) -

X

Eulachon (T) -

sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -CCC Coho Critical Habitat -CC Chinook Salmon Critical Habitat -CVSR Chinook Salmon Critical Habitat -SRWR Chinook Salmon Critical Habitat -NC Steelhead Critical Habitat -CCC Steelhead Critical Habitat -SCCC Steelhead Critical Habitat -SC Steelhead Critical Habitat -X CCV Steelhead Critical Habitat -Eulachon Critical Habitat sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -Leatherback Sea Turtle (E) -North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -Fin Whale (E) -Humpback Whale (E) -Southern Resident Killer Whale (E) -North Pacific Right Whale (E) -Sei Whale (E) -Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

MMPA Species (See list at left) ESA and MMPA Cetaceans/Pinnipeds See list at left and consult the NMFS Long Beach office 562-980-4000 MMPA Cetaceans -

X

MMPA Pinnipeds -

Thank you,



Hanna Sheldon

Associate Biologist/Environmental Planner| Dokken Engineering Phone: 916.858.0642 Email: <u>hsheldon@dokkenengineering.com</u> 110 Blue Ravine Road, Suite 200 | Folsom, CA 95630 www.dokkenengineering.com



Selected Elements by Common Name California Department of Fish and Wildlife California Natural Diversity Database



Query Criteria:

Quad IS (Escalon (3712078) OR Oakdale (3712077) OR Farmington (3712088) OR Avena (3712171) OR Riverbank (3712068) OR Peters (3712181))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Athene cunicularia						
California linderiella	ICBRA06010	None	None	G2G3	S2S3	
Linderiella occidentalis						
California tiger salamander - central California DPS Ambystoma californiense pop. 1	AAAAA01181	Threatened	Threatened	G2G3	S3	WL
Crotch bumble bee	IIHYM24480	None	None	G3G4	S1S2	
Bombus crotchii						
Delta button-celery	PDAPI0Z0S0	None	Endangered	G1	S1	1B.1
Eryngium racemosum						
giant gartersnake	ARADB36150	Threatened	Threatened	G2	S2	
Thamnophis gigas						
Greene's tuctoria	PMPOA6N010	Endangered	Rare	G1	S1	1B.1
Tuctoria greenei						
hardhead	AFCJB25010	None	None	G3	S3	SSC
Mylopharodon conocephalus						
hoary bat	AMACC05030	None	None	G3G4	S4	
Lasiurus cinereus						
legenere	PDCAM0C010	None	None	G2	S2	1B.1
Legenere limosa						
midvalley fairy shrimp	ICBRA03150	None	None	G2	S2S3	
Branchinecta mesovallensis						
moestan blister beetle	IICOL4C020	None	None	G2	S2	
Lytta moesta						
Northern California legless lizard Anniella pulchra	ARACC01020	None	None	G3	S3	SSC
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Hardpan Vernal Pool						
obscure bumble bee	IIHYM24380	None	None	G4?	S1S2	
Bombus caliginosus						
pallid bat	AMACC10010	None	None	G4	S3	SSC
Antrozous pallidus						
steelhead - Central Valley DPS	AFCHA0209K	Threatened	None	G5T2Q	S2	
Oncorhynchus mykiss irideus pop. 11						
Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	
Buteo swainsoni						
tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
Agelaius tricolor						

Commercial Version -- Dated January, 1 2022 -- Biogeographic Data Branch

Report Printed on Wednesday, January 12, 2022



Selected Elements by Common Name California Department of Fish and Wildlife California Natural Diversity Database



						Rare Plant
Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rank/CDFW SSC or FP
valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S3	
Desmocerus californicus dimorphus						
vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S3	
Branchinecta lynchi						
vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G4	S3S4	
Lepidurus packardi						
western bumble bee	IIHYM24250	None	None	G2G3	S1	
Bombus occidentalis						
western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
Eumops perotis californicus						
western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Emys marmorala						
western red bat	AMACC05060	None	None	G4	S3	SSC
Lasiurus blossevillii						
western ridged mussel	IMBIV19010	None	None	G3	S1S2	
Gonidea angulata						
western spadefoot	AAABF02020	None	None	G2G3	S3	SSC
Spea hammondii						
yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Icteria virens						
Yuma myotis	AMACC01020	None	None	G5	S4	
Myotis yumanensis						

Record Count: 30



United States Department of the Interior



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

In Reply Refer To: Project Code: 2022-0014857 Project Name: Pionner Ave/Lone Tree Creek RFP March 02, 2022

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

To Whom It May Concern:

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

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

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

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

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

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/ executive-orders/e0-13186.php.

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

2

03/02/2022

Attachment(s):

Official Species List

Official Species List

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

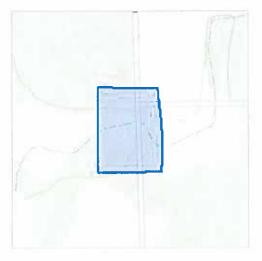
This species list is provided by:

Sacramento Fish And Wildlife Office Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846 (916) 414-6600 03/02/2022

Project Summary

Project Code:2022-0014857Event Code:NoneProject Name:Pionner Ave/Lone Tree Creek RFPProject Type:Bridge - ReplacementProject Description:bridge

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/@37.81973108772365,-120.91496156350215,14z</u>



Counties: Stanislaus County, California

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

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

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

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

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Reptiles

NAME	STATUS
Giant Garter Snake Thamnophis gigas No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened
Amphibians NAME	STATUS
California Red-legged Frog Rana draytonii There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2891	Threatened
California Tiger Salamander <i>Ambystoma californiense</i> Population: U.S.A. (Central CA DPS) There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/2076</u>	Threatened
Fishes NAME	STATUS
Delta Smelt Hypomesus transpacificus	Threatened

Delta Smelt Hypomesus transpacificus Thr There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/321 3

Insects NAME	STATUS
Monarch Butterfly Danaus plexippus No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle <i>Desmocerus californicus dimorphus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/7850</u>	Threatened
Crustaceans NAME	STATUS
Vernal Pool Fairy Shrimp Branchinecta lynchi There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: <u>https://ecos.fws.gov/ecp/species/498</u>	Threatened
Vernal Pool Tadpole Shrimp Lepidurus packardi There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/2246	Endangered
Flowering Plants	STATUS

NAME	STATUS
Greene's Tuctoria Tuctoria greenei	Endangered
There is final critical habitat for this species. The location of the critical habitat is not available.	
Species profile: https://ecos.fws.gov/ecp/species/1573	

Critical habitats

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

IPaC User Contact Information

Agency: Stanislaus County Hanna Sheldon Name: Address: 110 Blue Ravine Road Folsom City: State: CA Zip: 95630 Email hsheldon@dokkenengineering.com Phone: 9168580642

Lead Agency Contact Information Lead Agency: Department of Transportation



Search Results

4 matches found. Click on scientific name for details

Search Criteria: Quad is one of [3712078:3712077:3712088:3712171:3712068:3712181]

SCIENTIFIC	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATÉ LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	рното
Eryngium racemosum	Delta button- celery	Apiaceae	annual/perennial herb	(May)Jun-Oct	None	CE	G1	S1	1 B .1	No Photo Available
<u>Hesperevax</u> caulescens	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	G3	S3	4.2	© 2017 John Doyen
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	18.1	©2000 John Game
Tuctoria greenei	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	51	1B.1	©2008 F. Gauna

Showing 1 to 4 of 4 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 2 March 2022].

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CONTACT US	ABOUT THIS WEBSITE	ABOUT CNPS	CONTRIBUTORS
Send questions and comments	About the Inventory	About the Rare Plant Program	The Calflora Database
to rareplants@cnps.org.	Refease Notes	CNPS Home Page	The California Lichen Society
	Advanced Search	About CNPS	California Natural Diversity
	Glossary	Join CNPS	Database
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Rincon Consultants, Inc.			The Consortium of California
			Herbaria

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CalPhotos

Appendix C: Mitigation Monitoring and Reporting Program

Task an	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
		Air Quality				
AQ-1:	The construction contractor shall comply with the San Joaquin Valley Air Pollution Control District Rule VIII as it pertains to fugitive dust (PM10).	During construction	Contractor			
AQ-2:	 Wind Erosion Control best management practices will be implemented as follows: Water shall be applied on disturbed open soil by means of pressure-type distributors or pipelines equipped with a spray system or hoses and nozzles that will ensure even distribution. All distribution equipment shall be equipped with a positive means of shutoff. Unless water is applied by means of pipelines, at least one mobile unit shall be available at all times to apply water or dust palliative to the Project. If reclaimed water is used, the sources and discharge must meet California Department of Health Services water reclamation criteria and the Regional Water Quality Control Board requirements. Non-potable water shall not be conveyed in tanks or drain pipes that will be used to convey potable water and there shall be no connection between potable and non-potable supplies. Non-potable tanks, pipes and other conveyances shall be marked "NON-POTABLE WATER – DO NOT DRINK." Materials applied as temporary soil stabilizers and soil binders will also provide wind erosion control benefits. 	During construction	Contractor		C 	
		logical Resources	.1			
BIÖ-1:	Every individual working on the Project must attend a biological awareness training session delivered by a biologist. This training program shall include information regarding the sensitive habitats and special-status species occurring or potentially occurring within the Project area, and the importance of avoiding impacts to these species and their habitat.	Prior to construction	County / Contractor		3	
BIO-2:	Prior to the start of construction activities, the Project limits within Lone Tree Creek, the riparian corridor, and annual grassland habitat will be marked with high visibility	Prior to construction	Contractor		°	

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Task an	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
BIO-3:	 Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into sensitive resources. Best Management Practices (BMPs) will be incorporated into Project design and Project management to minimize impacts on the environment including erosion and the release of pollutants (e.g. oils, fuels): Exposed soils and material stockpiles would be stabilized, through watering or other measures, to prevent the movement of dust at the Project site caused by wind and construction activities such as traffic and grading activities; All construction roadway areas would be properly protected to prevent excess erosion, sedimentation, and water pollution; All vehicle and equipment fueling/maintenance would be conducted outside of any surface waters; Equipment used in and around jurisdictional waters must be in good working order and free of dripping or leaking contaminants; 	Timing			Initials	
	 Raw cement, concrete or concrete washings, asphall, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering jurisdictional waters; All erosion control measures and storm water control measures would be properly maintained until the site has returned to a pre-construction state; All temporarily disturbed areas would be revegetated, either through hydroseeding or other means, with native species All construction materials would be hauled off-site after completion of construction; Upon completion of construction activities, any temporary barriers to surface water flow must be removed in a manner that would allow flow to resume with the least disturbance to the substrate. 					

Task and	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
BIO-4:	Vegetation removal will be avoided to the greatest extent practicable. Where feasible, trees and shrubs will be trimmed rather than removed.	During construction	Contractor			
BIO-5:	Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must remain outside of sensitive habitat marked with high-visibility fencing. Any necessary equipment washing must occur where the water cannot flow into sensitive habitat communities.	During construction	Contractor			
BIO-6:	A chemical spill kit must be kept onsite and available for use in the event of a spill.	During construction	Contractor			1
BIO-7:	Following the completion of construction, all sensitive natural areas (Lone Tree Creek, riparian corridor, and annual grassland) disturbed by Project activities would be re-graded as to decompact the soils and seeded with a California native hydroseed mix to allow the site to return to pre-construction conditions.	During construction / Post construction	Contractor			
BIO-8:	A USFWS approved biologist(s) will conduct a visual encounter preconstruction survey of the Project area for CTS no more than 14 days prior to the start of groundbreaking or other general construction activities that could affect the species. The names of the proposed biologists will be sent to USFWS within a certain number of days (no less than 30 days prior to construction), and this/these designated biologist(s) will have stop work authority. The survey will pay particular attention to detecting any burrows that could be used as refugia by the CTS, as well as any potential depressions that may become inundated.	Prior to construction	County			
BIO-9:	The biologist or on-site inspector will perform daily clearance sweeps under equipment, trucks, and other materials prior to commencement of work.	During construction	County			
BIO-10:		During construction	Contractor			

Task and	I Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
BIO-11:	To avoid inadvertent entrapment of animals during construction, all excavated, steep-walled holes or trenches greater than 6 inches deep must be covered at the end of the day or contain at least one escape ramp made of earth fill or wooden planks. All holes must be inspected by a biologist or on-site inspector at the beginning of each workday and before the holes and trenches are filled. Anything stored within the holes or trenches overnight must be inspected for CTS before being moved. If at any time a CTS is discovered, the project manager and agency approved biologist(s) will be notified and the agency approved biologist will contact USFWS for further quidance.	During construction	County / Contractor			
BIO-12:	If a water body will be temporarily dewatered by pumping, pump intakes shall be screened with wire mesh no larger than 5 millimeters. The intake should be placed within a perforated bucket or other method that reduces suction to prevent CTS from entering the pump system. Pumped water shall be managed in a matter that does not degrade water quality and, upon completion of the Project, shall be released back into the water body in a manner that does not cause erosion.	During construction	Contractor		ş <u></u>	
BIO-13:	Prior to the start of construction all burrows that may serve as potential habitat for CTS will be flagged and avoided with a 10-foot buffer. If burrows cannot be reasonably avoided, the burrows will be inspected with a scope by a USFWS Approved biologist. If scoping of the burrows confirms absence of CTS, the burrows will be hand excavated. If scoping cannot determine the presence or absence of CTS, USFWS will be contacted for further coordination.	Prior to construction	County / Contractor			
BIO-14:	Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.	During construction	Contractor			
BIO-15:	All food-related trash must be disposed into closed containers and must be removed from the Project area	During construction	Contractor			

Task and	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
	daily. Construction personnel must not feed or otherwise attract wildlife to the Project area.				_	
	The contractor must not apply rodenticide or herbicide within the Project area during construction.	During construction	Contractor			
BIO-17:	If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed.	During construction	Contractor			
BIO-18:	Prior to vegetation removal or initial ground disturbance during the nesting bird season (February 1st – September 30th) a pre-construction nesting bird survey must be conducted by a Project biologist prior to the start of work. The nesting bird survey must include the Project area plus a 300-foot buffer. Within 2 weeks of the nesting bird survey, the clearing activities must be completed, or a supplemental nesting bird survey is required. A minimum 100 foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 300 foot no-disturbance buffer will be established around any nesting raptor species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist and approved by CDFW.	Prior to construction	County			
		ces/Tribal Cultural Resou	urces			
CR-1:	If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources if necessary. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.	During Construction	County / Contractor			

Task an	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
CR-2:	Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within twenty-four hours of such identification. CEQA details steps to be taken if human burials are of Native American origin.	During Construction	County / Contractor			
HAZ-1:	Hazards If lead-based paints are present within the Project area, to avoid impacts from pavement striping during construction it is recommended that testing and removal requirements for yellow striping and pavement marking materials be performed in accordance with Caltrans Standard Special Provisions for "REMOVE TRAFFIC STRIPE AND	and Hazardous Waste Prior to construction / During construction	County / Contractor			
HAZ-2:	PAVEMENT MARKINGS." A Site Investigation is recommended for asbestos, ACMs, or lead-based paints in the existing bridge that have been disturbed before construction or will be disturbed during construction. This investigation should be implemented before construction and documented as part of the Phase II ISA.	Prior to construction	County			
HAZ-3:	Any leaking transformers observed during the course of the Project should be considered a potential PCB hazard. A detailed inspection of individual electrical transformers was not conducted for this ISA. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation)	During construction	Contractor		<u></u>	

Task and	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
	be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.					
HAZ-4:	Any chemically treated wood must be treated as TWW and disposed of as hazardous waste. For the TWW, the DTSC regulations §66261.9.5 provide alternative managament standards for TWW. Caltrans 2018 SSP for TWW, SSP 14-11.14, is based on DTSCs AMS regulations. This SSP directs the Contractor to follow the AMS including providing training to all personnel that may come in contact with TWW. This training must include, at a minimum, safe handling, sorting and segregating, storage, labeling (including date), and proper disposal methods.	During construction	Contractor			
HAZ-5:	For any previously unknown hazardous waste/ material encountered during construction, the procedures outline in Appendix B (Caltrans Unknown Hazard Procedures, Construction Manual, December 2006) shall be followed.	During construction	Contractor			
		ogy and Water Quality				r
WQ-1:	The proposed Project will implement all feasible Low Impact Development (LID) BMPs and follow the Central Valley Region Phase II Small MS4 NPDES General Permit of storm water associated with construction activities (Construction General Permit 2012-0006-DWQ).	During construction	Contractor			

Task an	d Brief Description	Timing	Responsible Party	Completed	Initials	Notes (optional)
NOI-1:	Noise from construction will adhere to the Stanislaus County Code of Ordinance for noise source standards, when applicable. Construction work hours may be adjusted in coordination with private property and business owners to accommodate operation hours of an adjacent business.		Contractor		(<u> </u>	
NOI-2:	All equipment shall be fitted with adequate mulfilers according to the Caltrans manufacturers' specifications.	During construction	Contractor			

Appendix D: Distribution List

A Notice of Availability was distributed to the following agencies and interested parties.

State Government

California State Clearinghouse P.O. Box 3044 Sacramento, CA 95812-3044

California Air Resources Board 1001 | Street Sacramento, CA 95814

Central Valley Regional Water Quality Control Board 11020 Sun Center Drive, Suite 200 Rancho Cordova, CA 95670

California Department of Fish and Wildlife Region 4 1234 E. Shaw Avenue Fresno, CA 93710

Local Agencies

Stanislaus County Clerk-Recorder 1021 | Street, Suite 101 Modesto, California 95358

Stanislaus County Sheriff 250 E. Hackett Road Modesto, CA 95358

Stanislaus County Office of Emergency Services Attn: Randy Crook 3705 Oakdale Road Modesto, CA 95357

Stanislaus Consolidated Fire Protection District 3324 Topeka Street Riverbank, CA 95367