

**DRAFT INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE
DECLARATION**

**MARK HOPKINS AVENUE OVER PING SLOUGH
CULVERT REPLACEMENT PROJECT**



Prepared by



Prepared for Sutter County

May 2023

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GENERAL INFORMATION ABOUT THIS DOCUMENT

What's in this document:

The Sutter County Development Services Department has prepared this Initial Study, which examines the potential environmental impacts of the Mark Hopkins over Ping Slough Culvert Replacement Project (Project) in Sutter County, California. The document explains the proposed Project details; the existing environment that could be affected by the Project; potential impacts; and proposed avoidance, minimization, and/or mitigation measures.

Project Description

Sutter County is proposing to replace the failed corrugated steel pipe (CSP) culvert with a precast concrete arch culvert at the Ping Slough crossing at Mark Hopkins Avenue, as the Mark Hopkins Avenue over Ping Slough Culvert Replacement Project (Project). The Project site is located approximately 0.2 mile west of State Route (SR) 70, in unincorporated Sutter County, California.

Construction methodology will consist of installing a temporary cofferdam apparatus and diverting flows around the work area, dewatering the work area, removal of the existing culvert, and construction of the new culvert in the same location. The roadway structural section will be placed, compacted, and hot mix asphalt (HMA) paved through the project limits. A traffic rated vehicle barrier will be constructed and attached, including some version of safety hardware to protect the ends of the barriers (Midwest guardrail, crash cushions, etc.).

The purpose of the Project is to remove the existing damaged pipe culvert and install a structure which restores appropriate hydraulic conveyance through the site.

What you should do:

- Please read the document. Hard copies of the document are available for review at:

Sutter County, Development Services Department
1130 Civic Center Boulevard
Yuba City, CA 95993

An electronic copy of the document is also available for review at:

<https://www.suttercounty.org/government/county-departments/development-services/planning-services/project-notices-and-environmental-documents>

- Please submit your comments in writing no later than June 15th, 2023 to:

Sutter County Development Services
ATTN: Mr. Scott Riddle
1130 Civic Center Boulevard
Yuba City, CA 95993

You may also submit your comments via e-mail to sriddle@co.sutter.ca.us. For emailed comments, please include the Project title in the subject line and include the commentor's name and mailing address.

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LIST OF ABBREVIATIONS

AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effects
BMPs	Best Management Practices
BLM	Bureau of Land Management
BSA	Biological Study Area
CAA	Clean Air Act
CalNAGPRA	California Native American Graves Protection and Repatriation Act
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CWA	Clean Water Act
DTSC	California Department of Toxic Substances
DWR	California Department of Water Resources
EOP	Emergency Operations Plan
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rates Maps
FMMP	Farmland Mapping and Monitoring Program
FRAQMD	Feather River Air Quality Management District
GHG	Greenhouse Gases
GLO	General Land Office
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
ITA	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MLD	Most Likely Descendent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resource Conservation Service

NRHP	National Register of Historic Places
OHP	Office of Historic Preservation
Porter-Cologne Act	Porter-Cologne Water Quality Act (Porter-Cologne Act)
RCEM	Roadway Construction Emissions Model
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Office
SHTAC	Swainson's Hawk Technical Advisory Committee
SIP	State Implementation Plan
SLF	Sacred Lands File
SMAQMD	Sacramento Metropolitan Air Quality Management District
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCL	Traditional Cultural Landscapes
TCP	Traditional Cultural Properties
TCR	Tribal Cultural Resource
UCMP	University of California Museum of Paleontology
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WoS	Waters of the State
WOTUS	Waters of the United States
WPCP	Water Pollution Control Program

1.0 Introduction

Sutter County (County) is proposing to replace the failed corrugated steel pipe (CSP) culvert with a precast concrete arch culvert as the Mark Hopkins Avenue over Ping Slough Culvert Replacement Project (Project). The precast concrete arch culvert will provide a waterway opening of at least 75 square feet. The Project site is located approximately 0.2 miles west of State Route (SR) 70, in unincorporated Sutter County (see **Figure 1** and **Figure 2**, below). Funding for the Project will be 100-percent local County funds.

1.1 Project History

Mark Hopkins Avenue is a narrow two-lane, two-way County maintained road surrounded by agricultural parcels. The approximately 20-foot-wide paved surface has a varying width unpaved shoulder on each side. The terrain is generally flat on both sides, with a deep roadside ditch running parallel to the road on the northeast side. The road drains via sheet flow to the unpaved shoulders on both sides.

Ping Slough flows generally north to south and crosses under El Centro Avenue and SR 70 upstream of Mark Hopkins Avenue. Heavy vegetation surrounds the inlet and outlet of the culvert on both sides of the banks. Overhead electrical and communication lines run along the northeast side of the road through the Project site.

Sutter County indicates there was once an old bridge on concrete abutments that carried the road over the slough. Evidence of these existing abutments is visible, and it is likely they are buried under the existing roadway. At some point the bridge was removed, and a 66-inch CSP culvert was installed in its place.

The Mark Hopkins Avenue site has experienced damage due to the existing CSP culvert being undersized for conveying the flow in Ping Slough. Over time, large flows and corrosion have damaged the CSP to the point where the roof has partially collapsed on the upstream side. This has caused the road to sink, resulting in cracking and spalling of the pavement over the culvert. The County has had to close the northbound lane through the Project site to avoid traffic from further loading the failed culvert and has installed a temporary one lane stop controlled configuration. The area around the failed culvert is protected by channelizers to direct vehicles away from the damaged area. The single lane, two-way operation is controlled by line of sight stop signs.

In September 2021, Wood Rodgers, Inc. prepared the *Mark Hopkins Avenue at Ping Slough Crossing Alternatives Evaluation Memorandum*, which provided an evaluation to determine the feasibility of rehabilitating the existing pipe culvert with levee improvements, replacing the existing culverts on the same alignment, and replacing the existing culverts on an offset alignment. After reviewing the analysis provided in the evaluation memo, the County has selected the precast concrete arch culvert alternative as the preferred alternative for the proposed Project.

1.2 Purpose

The purpose of the Project is to remove the existing damaged pipe culvert and install a structure which restores appropriate hydraulic conveyance through the site.

1.3 Need

The Project is needed to restore damaged areas to pre-event conditions and avoid/minimize potential for future damage in the same location.

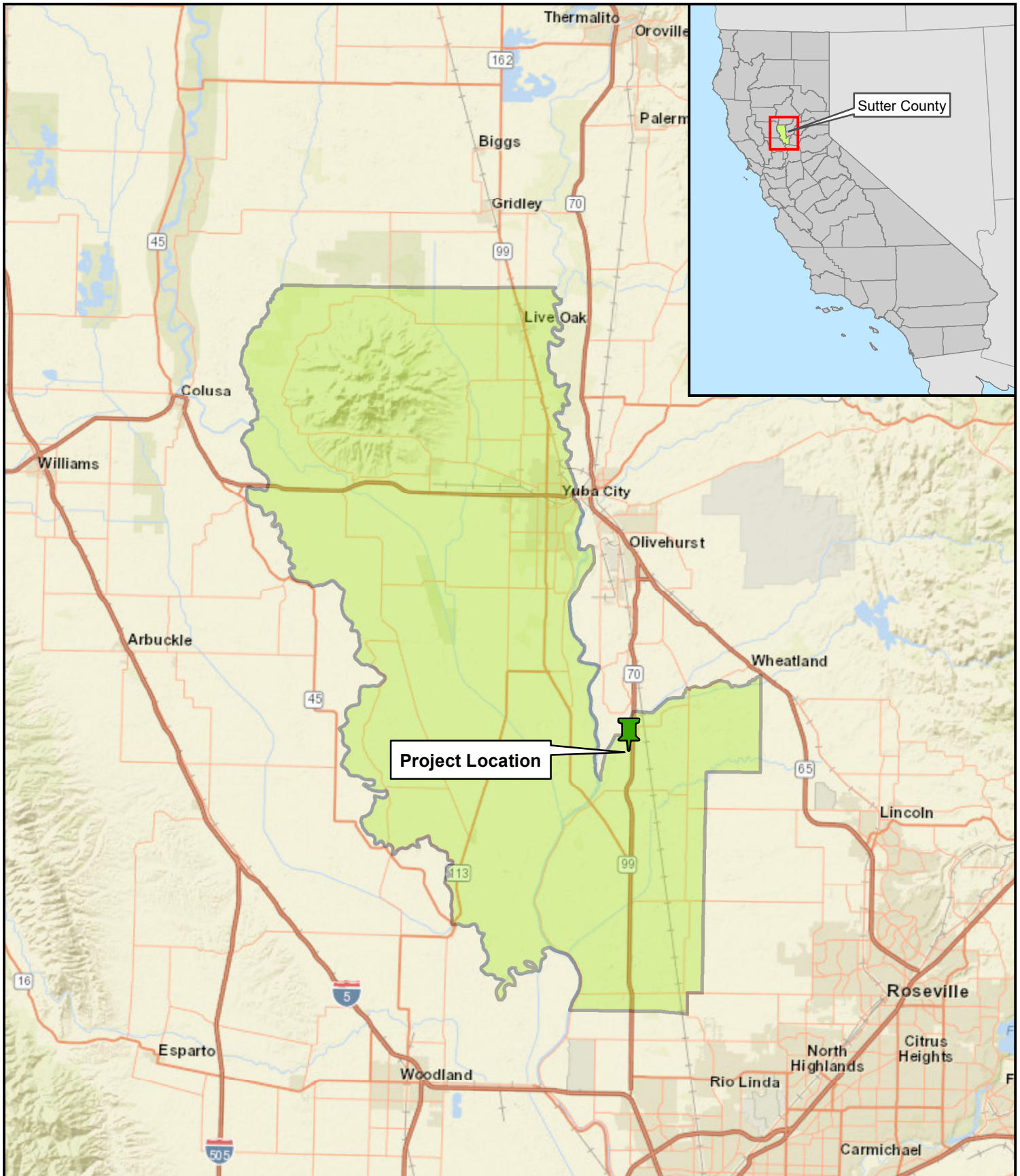
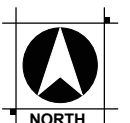
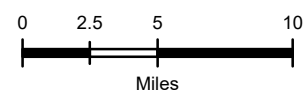


FIGURE 1

PROJECT VICINITY

MARK HOPKINS AVENUE AT PING SLOUGH CROSSING
SUTTER COUNTY, CALIFORNIA
JULY 2022



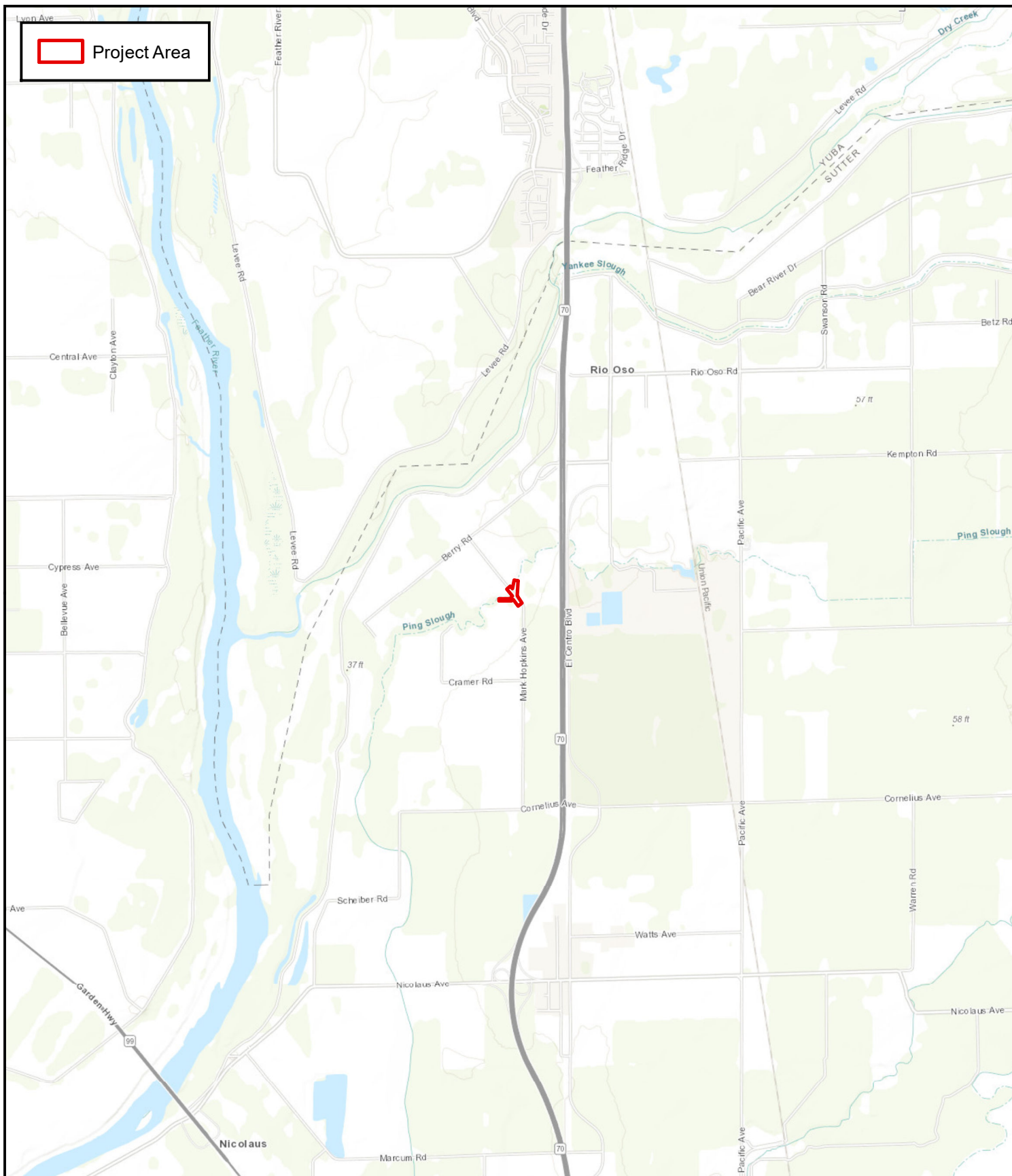
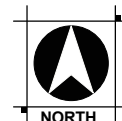


FIGURE 2

PROJECT LOCATION

MARK HOPKINS AVENUE AT PING SLOUGH CROSSING
SUTTER COUNTY, CALIFORNIA
JULY 2022



1.4 Project Description

Sutter County is proposing to replace the failed CSP culvert with a precast concrete arch culvert as the Mark Hopkins Avenue over Ping Slough Culvert Replacement Project. The precast concrete arch culvert will provide a waterway opening of at least 75 square feet. The Project site is located approximately 0.2 miles west of SR 70, in unincorporated Sutter County. Funding for the Project will be 100-percent local County funds.

Construction methodology will consist of installing a temporary cofferdam apparatus and diverting flows around the work area, dewatering the work area, removal of the existing culvert, and construction of the new culvert in the same location. Excavation and removal of the existing damaged CMP would be completed from above on the adjacent roadway or from below in the channel. The footings will be excavated. An additional operation of over-excavation, backfill with granular material, and compaction might be required to ensure suitable bearing resistance for the arch forces. The concrete strip footings will be reinforced, formed, and poured in place. The precast arch segments and wingwalls will then be lowered into place on top of the footings using a small crane or a large loader/excavator, and the foundation keyway will be grouted. The area behind the wingwalls and arch segments will be backfilled and compacted to the bottom of the roadway structural section. The roadway structural section will be placed, compacted, and hot mix asphalt (HMA) paved through the Project limits. A traffic rated vehicle barrier will be constructed and attached, including some version of safety hardware to protect the ends of the barriers (Midwest guardrail, crash cushions, etc.) (see **Figure 3**, below).

The existing overhead lines on the northeast side of the road may limit installation equipment and operations. The use of overhead equipment may require the lines to be temporarily de-energized (if possible) or temporarily relocated. If the lines require relocation, this action would be completed prior to construction.

1.5 Permits and Approvals Needed

The following permits, licenses, agreements, and certifications are required for Project construction:

Table 1. Permits and Approvals Needed

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Clean Water Act Section 404 Certificate of Compliance	To be obtained prior to construction
Regional Water Quality Control Board	Clean Water Act Section 401 Water Quality Certification	To be obtained prior to construction
Regional Water Quality Control Board	Clean Water Act Section 402 NPDES General Construction Permit	To be obtained prior to construction
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	To be obtained prior to construction
Feather River Air Quality Management District	Authority to Construct Permit	To be obtained prior to construction

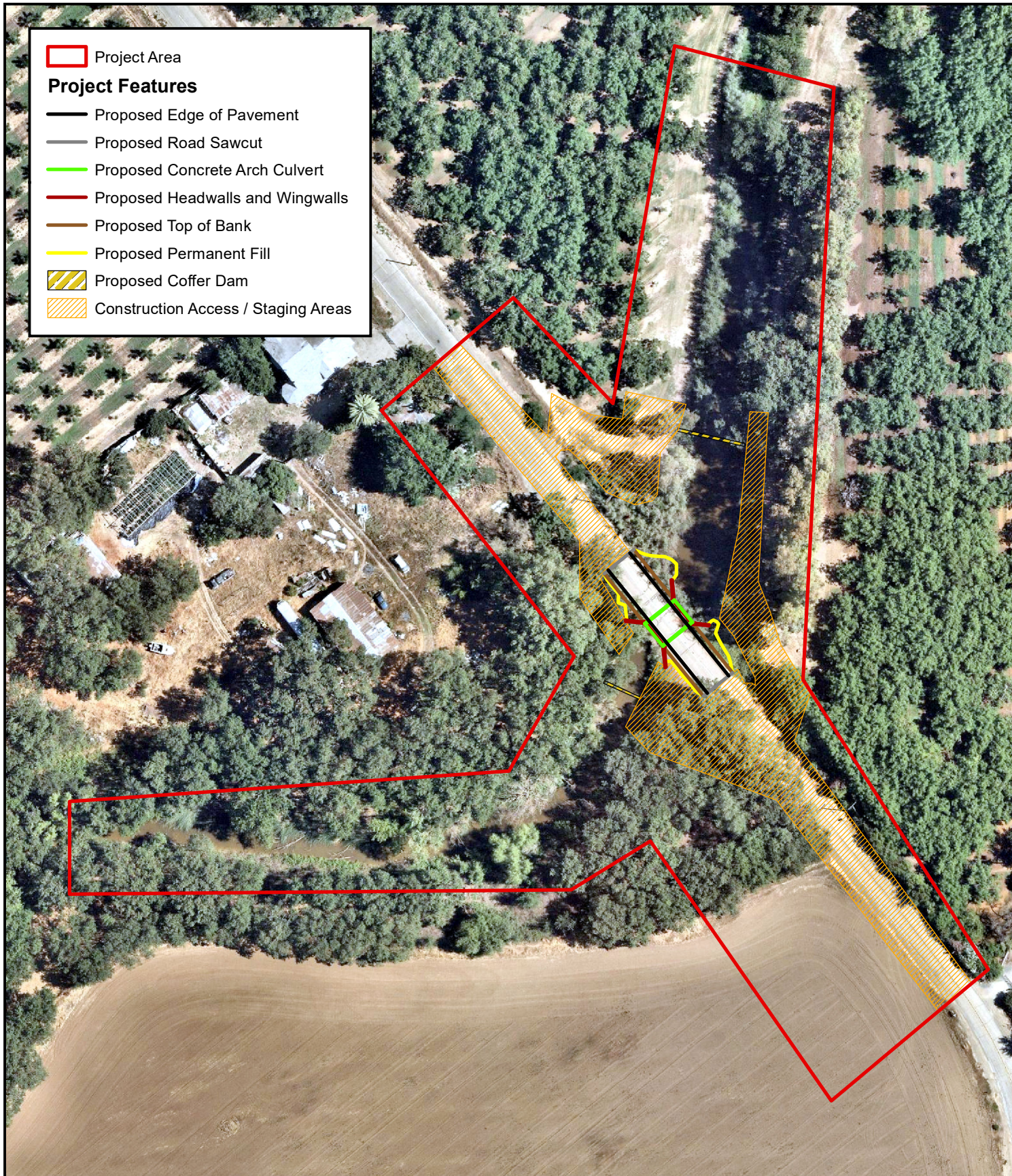
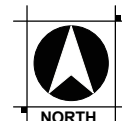
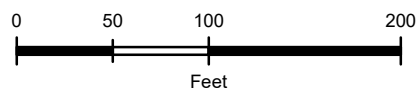


FIGURE 3

PROJECT FEATURES

MARK HOPKINS AVENUE AT PING SLOUGH
 CULVERT REPLACEMENT PROJECT
 SUTTER COUNTY, CALIFORNIA
 FEBRUARY 2023



2.0 CEQA Initial Study Environmental Checklist Form

1. **PROJECT NAME:** Mark Hopkins Avenue over Ping Slough Culvert Replacement Project

2. **LEAD AGENCY / PROJECT APPLICANT**

Sutter County Development Services
1130 Civic Center Boulevard
Yuba City, CA 95993

3. **LEAD AGENCY CONTACT PERSON:**

Mr. Scott Riddle, PE, Senior Civil Engineer, (530) 822-7400 Ext. 307, sriddle@co.sutter.ca.us

4. **PROJECT LOCATION:** The Project is located along Mark Hopkins Avenue at the Ping Slough crossing, approximately 0.2 miles west of State Route (SR) 70, in unincorporated Sutter County.

5. **GENERAL PLAN LAND USE DESIGNATION:** Agriculture – 20 acres (AG-20)

6. **ZONING:** Agricultural

7. **PROJECT DESCRIPTION:** Sutter County is proposing to replace the failed corrugated steel pipe culvert with a precast concrete arch culvert as the Mark Hopkins Avenue over Ping Slough Culvert Replacement Project. The precast concrete arch culvert will provide a waterway opening of at least 75 square feet. Funding for the Project will be 100-percent local County funds.

8. **ENVIRONMENTAL SETTING/SURROUNDING LAND USES:** Land uses surrounding the proposed Project is predominantly agricultural. There are two rural residences situated approximately 300 feet from the Ping Slough crossing where most of the proposed work would occur. Dominant land cover and vegetative communities within the Biological Study Area (BSA) consists of barren land, urban areas, disturbed/ruderal, orchards, ditches, valley riparian woodland, and stream channel.

Mark Hopkins Avenue is a narrow two-lane, two-way County-maintained road surrounded by agricultural parcels. The approximately 20-foot-wide paved surface has a varying width unpaved shoulder on each side. The terrain is generally flat on both sides, with a deep roadside ditch running parallel to the road on the northeast side. The road drains via sheet flow to the unpaved shoulders on both sides. The Mark Hopkins Avenue site has experienced damage due to the existing CSP culvert being undersized for conveying the flow in Ping Slough. Over time, large flows and corrosion have damaged the CSP to the point where the roof has partially collapsed on the upstream side. This has caused the road to sink, resulting in cracking and spalling of the pavement over the culvert.

9. **OTHER REQUIRED AGENCY APPROVALS (e.g., permits, financing approval, or participation agreement.):** Yolo-Solano Air Quality Management District, California Department of Fish and Wildlife, Central Valley Regional Water Quality Control Board, and U.S Army Corps of Engineers.

10. CALIFORNIA NATIVE AMERICAN TRIBES CONSULTATION:

- a. Have California Native American Tribes traditionally and culturally affiliated with the Project area requested consultation pursuant to Public Resources Code Section 21080.3.1?

☒ Yes☐ No

- b. If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

☒ Yes☐ No**11. PREVIOUS ENVIRONMENTAL DOCUMENTATION:** None**12. SUMMARY OF ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The summary of environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” or a “Less-Than-Significant Impact with Mitigation Incorporated” as indicated by the checklist on the following pages.

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

13. PREPARATION: This Initial Study for the subject Project was prepared by:


Andrew Dellas, PWS, Senior Biologist / Environmental Planner
Wood Rodgers, Inc.

5/15/2023

Date

14. DETERMINATION: (TO BE COMPLETED BY THE LEAD AGENCY)

Based on the initial evaluation:

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

A copy of the Initial Study documenting reasons to support the Mitigated Negative Declaration is on file at Sutter County Development Services, 1130 Civic Center Boulevard, Yuba City, CA 95993.

Scott Riddle, PE
Senior Civil Engineer
Sutter County Development Services

Date

Evaluation of Environmental Impacts

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

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Less than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. **Supporting Information Sources:** A source list should be attached, and other sources used, or individuals contacted should be cited in the discussion.
8. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.
9. Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

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

DISCUSSION

a) *Would the project have a substantial adverse effect on a scenic vista?*

No impact. No designated scenic vistas are located within or near to the Project site. Therefore, no impact would occur.

b) *Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

No impact. The Project is not within a state scenic highway, and it would not substantially damage scenic resources within a state scenic highway. Therefore, no impact would occur.

c) *Would the project, in nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

No Impact. The Project would replace the failing culvert under Mark Hopkins Avenue over Ping Slough. The Project would require roadwork and minor vegetation removal; however, the Project site would be returned to previous conditions or better post-construction conditions. Therefore, the Project would not substantially degrade the existing visual character or quality of public views along Mark Hopkins Avenue, and no impact would occur.

d) *Would the project 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 any new sources of light or glare. Therefore, no impact would occur.

FINDINGS

The Project would not adversely affect any designated scenic resource or vista, nor substantially change the current visual environment. The Project would have **No Impact** relating to aesthetics.

2.2 AGRICULTURE AND FOREST RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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.

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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

The land use within the Project area is designated by the Sutter County 2030 General Plan (Sutter County 2011) as Agriculture – 20 acres. According to the California Department of Conservation (CDC), Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP), and the Sutter County Important Farmland Map 2018, the Project area falls within the FMMP categories of “Prime Farmland”, and “Other Land”.

Prime Farmland is defined as the best combination of physical and chemical features able to sustain long-term agricultural operations. Other Land is land not included in any other mapping category and is commonly used for brush, timber, wetland, and riparian areas not suitable for livestock grazing, as well as water bodies smaller than 40 acres.

DISCUSSION

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

No Impact. According to the Sutter County FMMP Important Farmland Map 2018, the Project would not require the conversion of Prime Farmland to non-agricultural use. All permanent effects of the Project would occur within FMMP “Other Land” areas. Therefore, the Project would not convert any FMMP protected farmland classifications to non-agricultural use and no impact would occur.

b) *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*

No Impact. Based on a review of the existing zoning within the Project area and Sutter County FMMP Map (CDC 2018a), the Project would not result in changes to zoning of parcels within the Project area. Therefore, the proposed Project would not conflict with existing zoning for agricultural use or Williamson Act contract, and no impact would occur.

c) *Would the project 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 is no 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)) within the Project area. Therefore, the Project would have no conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned as Timberland Production, and no impact would occur.

d) *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

No Impact. There are no designated forest lands or forest resources located within the Project area. Therefore, the Project would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

e) *Would the project 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 would not involve changes in the existing environment that, due to their location or nature, could result in the conversion of farmland or forest land to non-agricultural use or non-forest use. Therefore, the Project would have no effects to farmland or forest land resources, and no impact would occur.

FINDINGS

Portions of the Project would occur within areas of Prime Farmland. The Project is anticipated to require temporary construction easements; however, no permanent acquisition of any property is anticipated. As a result, the Project would not directly or indirectly cause the conversion of farmland, forest land, or timberland. The Project would have **No Impact** relating to agricultural and forest resources.

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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

REGULATORY SETTING

Federal Regulations

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 found 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. These criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM), lead (Pb), and sulfur dioxide (SO₂).

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 these standards are to be achieved through district-level air quality management plans that will be incorporated into the State Implementation Plan (SIP). In California, the United States Environmental Protection Agency (USEPA) 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 while 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 state implementation plans.

The 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 the environmental documents required by CEQA.

AFFECTED ENVIRONMENT

The Project, located within Sutter County, is situated in the Sacramento Valley Air Basin and is subject to the Feather River Air Quality Management District (FRAQMD) requirements and regulations.

DISCUSSION

- a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

No Impact. The Project is consistent with the site land use and zoning; construction of the Project would not conflict with or obstruct implementation of any air quality plan.

- b) *Would the project 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 Impact. 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 area air quality attainment status of Sutter County is shown below on **Table 2**.

Table 2. NAAQS and CAAQS Attainment Status for Yolo County

Pollutant	Designation/Classification	
	Federal Standards	State Standards
Ozone – 8-Hour	Unclassified/Attainment	Nonattainment
PM ₁₀	Unclassified	Nonattainment
PM _{2.5}	Unclassified/Attainment	Attainment
Carbon Monoxide	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Lead	Unclassified/Attainment	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified
<i>Sources: CARB 2018</i>		

Operational Emissions

The completed Project would have no operational emissions. Therefore, no impact relating to air quality would occur due to operation of the completed Project.

Construction Emissions

Construction activities associated with the Project would result in temporary incremental increases in air pollutants (such as ozone precursors and particulate matter) due to the operation of gas-powered equipment and earth-moving activities. According to the FRAQMD CEQA Guidelines (FRAQMD 2010), projects with construction-generated emissions are distinguished as two types of projects: Type 1 and Type 2. The proposed Project would fall within the Type 2 category as a Project with no land use component, no operational phase, and the construction phase emissions being the only emissions generated by the Project. With Type 2 projects, significance thresholds are based solely on the construction phase emissions. FRAQMD recommends that a Roadway Construction Emissions Model (RCEM) be used to calculate emissions levels from project construction for Type 2 projects. However, the RCEM is not suitable for minor linear projects, such as the proposed Project. Therefore, the Project utilized the FRAQMD-approved California Emissions Estimator Model (CalEEMod) for the construction phase only.

A Type 2 project is considered to have a less than significant impact if the average project emissions do not exceed 25 lbs./day of nitrogen oxide (NO_x) or reactive organic gases (ROG) and daily emissions of 80 lbs./day of PM₁₀. If the Project exceeds the designated thresholds, it would be required to implement the FRAQMD *Best Available Mitigation Measures for Construction Phase* measures and any other mitigations to reduce the impact below the significance thresholds.

A CalEEMod was completed for the Project, and it concluded that project construction emissions would be well below FRAQMD thresholds of significance. It also determined that construction phase mitigation measures would not be required (see **Appendix A**, attached).

Although the Project's construction phase emissions would not require additional mitigation measures to reduce project emissions to a less than significant level, the FRAQMD requires every project to submit an Authority to Construct Permit, to implement FRAQMD construction phase BMPs (Version 7/25/2016) for all projects within the district, and to include the submittal of a Fugitive Dust Control Plan (FDCP).

With incorporation of FRAQMD air quality BMPs (including construction phase BMPs), and implementation of an approved FDCP, Project impacts related to air quality would be considered less than significant in accordance with FRAQMD CEQA Guidelines.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The nearest sensitive receptor to the Project is located approximately 300 feet northeast of the Project area. However, the proposed Project would not generate any substantial pollutant concentrations and, with the implementation of BMPs, temporary incremental increases of air pollutants would be minimized and reduced in accordance with FRAQMD rules and regulations. Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations and the Project would have a less than significant effect.

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

Less Than Significant Impact. Short-term air quality impacts may occur due to the release of particulate emissions (airborne dust and combustion) generated by construction activities; however, the Project would not result in other emissions (such as those leading to odors) and, with the implementation of BMPs, temporary incremental increases in air pollutants would be minimized and reduced in accordance with FRAQMD rules and regulations. Therefore, the Project would not result in other emissions adversely affecting a substantial number of people, and the Project would have a less than significant impact.

BEST MANAGEMENT PRACTICES

Prior to construction, the Project proponent or Project contractor shall obtain an approved FRAQMD Authority to Construct Permit and an approved FDCP and shall implement all FRAQMD construction phase BMPs (Version 7/25/2016), where applicable.

FINDINGS

The Project would not cause operational long-term air quality impacts; however, the Project would cause temporary incremental emissions from construction. With the implementation of FRAQMD construction BMPs, the Project would comply with all federal, state, and FRAQMD regulations, and would result in a **Less Than Significant Impact** 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, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

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). Applicable permits and approvals that will be required before construction of the Project are provided in Section 1.5.

Federal Regulations

Federal Endangered Species Act

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

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 (WOTUS). 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 USEPA to set national water quality standards and effluent limitations, and it 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 stormwater 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.

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into WOTUS. 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 it 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 that may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those of the USACE (i.e., WOTUS, including any wetlands). The RWQCB also asserts authority over “waters of the State” (WoS) under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

State Regulations

California Environmental Quality Act

California State law created the CEQA 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.

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 (those species under consideration for listing).

The CESA also requires the CDFW to comply with CEQA (Pub. 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 that 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 that have jurisdiction over the Project or activity [California Code Regulations, Title 14, Section 783.5(d)(3)]. The 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)].

Natural Community Conservation Planning Act

The Natural Community Conservation Planning Act (NCCP) of 1991 was intended to provide an alternative and/or a collaborative approach to FESA and CESA. It was designed to represent a new approach to conservation. Instead of focusing on individual species (e.g., FESA/CESA), the NCCA focuses on protecting intact ecosystems across an entire region or landscape. NCCP programs have become increasingly common in the development of regional plans that combine the habitat conservation plan (HCP) and NCCP processes.

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 occur during the environmental process. When an existing fish or wildlife resource might 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 Migratory Bird Treaty Act (MBTA) or any part of such migratory non-game bird except as provided by the rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Local Regulations

Sutter County 2030 General Plan

The Sutter County 2030 General Plan (2011) contains numerous policies that support habitat conservation and open space preservation. They are found in all elements of the general plan and work together as a framework for extraordinary landscape protections. Specifically, the Environmental Resources Element focuses on balanced management of Sutter County's multiple natural and cultural resources.

AFFECTED ENVIRONMENT

This section describes the natural resources present within and immediately surrounding the Project area designated as the project BSA. The project BSA was defined as the area necessary for all Project activities, plus an additional 100-foot buffer. The project BSA encompasses approximately 11.52 acres.

This section provides the following: 1) discussion on the special-status species and sensitive habitats that have been identified or are potentially occurring in the project BSA; 2) an analysis of the impacts that could occur to biological resources due to implementation of the Project; and 3) appropriate mitigation measures to reduce or avoid significant impacts. The analysis of biological resources presented in this section is based on a review of the current Project description, literature research, biological field survey, and aquatic resources delineation conducted by a Wood Rodgers qualified biologist.

The Project occurs in unincorporated Sutter County in the California Dry Steppe Province ecological subregion, Great Valley Section, and ecological subsection 262Af (River Alluvium) of California (USDA 2007). The region receives an average of 18 inches of precipitation annually in the form of rain. The average annual high temperature is 73 degrees Fahrenheit (°F), and the average annual low temperature is 48 °F (U.S. Climate Data 2022).

Physical Conditions

Topography

The BSA is located within the USGS *Nicolaus* 7.5-Minute Quadrangle. The Project area occurs within a single distinct topographic region of the Sacramento Valley floor, and the natural elevation within the Project area ranges from approximately 35 to 50 feet above mean sea level. The topography of the valley floor consists of low-elevation fluvial plains formed on nonmarine sedimentary rock with gently rolling terrain located on the Sacramento Valley floor.

Soils

The Natural Resource Conservation Service (NRCS) Custom Soil Resource Report for the Project (NRCS 2022) identifies soils within the BSA as:

- Marcum clay loam, siltstone substratum, 0 to 1 percent slopes
- Nueva loam, 0 to 1 percent

Hydrological Resources

The BSA includes one surface water feature: Ping Slough. Ping Slough is an agricultural drainage used primarily for water resources to the adjacent farmlands that are dominated by stone fruit orchards. Ping Slough also contributes to an upland riparian woodland corridor on either side of the channel. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the entire proposed Project site falls within FEMA Zone A, designated as a Special Flood Hazard Area subject to inundation by the 1% annual chance of flood (see **Appendix B**). Ping Slough is not a regulated stream under the jurisdiction of the Central Valley Flood Protection Board and, therefore, no encroachment permit would be required.

An aquatic resource delineation was conducted on August 29, 2022, by Wood Rodgers biologist Andrew Dellas. The delineation followed *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008a), and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008b). Delineation efforts examined the presence of primary and secondary indicators of the OHWM of the roadside drainages and Ping Slough stream channel. Additionally, riparian woodland habitats adjacent to the Ping Slough stream channel were assessed for the presence of the three (3) wetland parameters (hydric soils, hydrophytic vegetation, and wetland hydrology). Delineation data points were taken in the field using a Trimble R1 Integrated Global Navigation Satellite System (GNSS) and ArcCollector software.

Vegetation Communities

The BSA is dominated by natural vegetation communities including riverine and associated riparian habitat. Land use within the Project vicinity is designated by the Sutter County General Plan (2011) as Agriculture 20-acre (AG-20), and land use zoning as Agriculture (AG). Dominant land cover and vegetative communities within the BSA consist of barren, urban, disturbed/ruderal, orchard/vineyard, ditches, valley riparian woodland, and stream channel (**Figure 4**).

Barren

Barren habitats are man-made infrastructures and are defined by the absence of any vegetation. Any habitat with <2% total vegetation cover by herbaceous, desert, or non-wildland species and <10% cover by tree or shrub species would be considered barren habitat (CDFW 1988). Barren habitats within the BSA consists of the roadways and gravel roadside shoulders.

Urban

Urban habitats have a variety of vegetation structures and are generally categorized as five types of vegetation areas: tree grove, street strip, shade tree/lawn, lawn, and shrub cover. Urban habitats within the BSA consist of rural-residential lots composed of ornamental planting and non-native grass lawns intermixed with agricultural grasslands, cropland, and orchards.

Disturbed/Ruderal

The disturbed/ruderal land cover type is defined as areas that have been subject to previous or ongoing disturbances such as areas located along roadsides, roadside drainages, and other anthropogenic disturbances. Disturbed/ruderal habitat within the BSA consists of a recently cleared orchard.



FIGURE 4

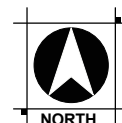
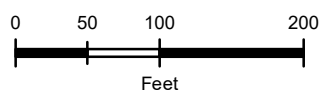
WATERS AND VEGETATION COMMUNITIES

MARK HOPKINS AVENUE OVER PING SLOUGH

CULVERT REPLACEMENT PROJECT

SUTTER COUNTY, CALIFORNIA

FEBRUARY 2023




WOOD RODGERS

Roadside drainage ditches on the east side of Mark Hopkins Avenue flow through culverts and distribute stormwater flows into Ping Slough from the north and south. In accordance with the December 2022 final rule “*Revised Definition of 'Waters of the United States'*” (effective March 20, 2023), the roadside ditches within the Project study area are excluded from potential waters of the U.S. These roadside ditch features did not exhibit the three necessary wetland parameters, are excavated wholly in upland, drain only dry land, and do not carry a relatively permanent flow of water. Therefore, the roadside ditches are considered uplands and were classified as disturbed/ruderal upland habitat.

Orchard

This habitat type is recognizable by a single species of tree or shrub-dominated developed habitat. Depending on the tree type and pruning methods employed in an orchard, they are usually low, bushy trees with an open understory to facilitate harvest. Trees such as citrus, avocados, and olives are evergreen; other trees are deciduous. The understory is usually composed of low-growing grasses and other herbaceous plants, but may be managed to prevent understory growth totally or partially, such as along tree rows (CDFW 1988). Within the BSA, the orchards to the northwest and southwest areas are comprised of English walnut (*Juglans regia*). Tree rows are bare ground with some strips of mowed/managed Bermuda grass (*Cynodon dactylon*).

Valley Foothill Riparian

Valley foothill riparian habitat is recognized as partially closed canopy or dense stands of winter-deciduous, broad-leaved species such as valley oak, cottonwood, and California sycamore along rivers and drainages throughout the Sacramento Valley. Valley foothill riparian habitat within the BSA occurs above the OHWM of Ping Slough to the top-of-bank and stretches outward toward the boundary of agricultural operations.

Stream Channel (Ping Slough)

Stream channel habitat is defined as the average wetted extent (ordinary high water mark) contained within a channel and bounded on the landward side by upland, by the channel bank, or by wetland dominated by trees, shrubs, and persistent emergent vegetation. Stream channel habitat within the BSA consists of Ping Slough, a perennial stream channel, flowing east to west carrying agricultural releases south to the North Cross Canal and the Sacramento River.

DISCUSSION

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

Less Than Significant with Mitigation. The following section provides a summary of the Biological Resources Report (BRR) prepared for the Project (Wood Rodgers Inc. 2023). The BRR is a review and evaluation of the potential impacts to threatened, endangered, proposed listed or special status species and protected habitat resources as a result of the proposed Project.

Prior to field work, literature research was conducted through the USFWS Information for Planning and Consultation (IPaC) official species list generator, National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Protected Resources Application, the CDFW California Natural Diversity Database (CNDDDB), and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Plants. Literature and database searches (see **Appendix C**) were completed to identify habitats and special-status species that have the potential to occur in the Project vicinity. These searches identified 28 regional species of special concern with potential to occur in the vicinity of the project area.

Field surveys, habitat assessments, and analyses of special status species occurrences were conducted to determine the potential for species to occur within the BSA. Field surveys were conducted on August 29, 2022. Field surveys included walking meandering transects through the entire BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife.

In addition, a giant garter snake (GGS) habitat assessment was conducted by Eric Hansen (E. Hansen Consulting Biologist) and Wood Rodgers biologist Andrew Dellas on August 29, 2022, to identify habitat quality and assess suitability of aquatic and upland habitat for the GGS. Information on the distribution of giant garter snakes in the vicinity of the Project area was compiled from several sources prior to conducting fieldwork. These included the CDFW CNDDDB, *The Draft Recovery Plan for the Giant Garter Snake* (USFWS 1999), *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003), published accounts of surveys conducted in the area, and email communications with other biologists who conducted surveys in the vicinity.

The results of the assessment indicate that potential habitats on the project site, limited to Ping Slough, are marginal, at best. Features on the project site were deemed marginal due to their location relative to verified occurrence records, the dominance of dense overstory vegetation limiting thermoregulatory behavior and understory cover, and the incompatibility of surrounding, orchard-dominated land cover. Although marginal and therefore meeting the minimum requirements for supporting GGS temporarily, it is highly unlikely that GGS occupy features within the project site due to its location and isolation relative to occupied habitat, its position at the easternmost edge of the species' documented range, and its position relative to modeled probability of occurrence based on soil and landscape characteristics (Hansen 2022; Appendix B. GGS Habitat Assessment). Subsequently, GGS has been presumed absent from the BSA, and the County is proposing a "No Effect" determination for the Project; therefore, the Project is not anticipated to require Section 7 ESA Consultation with USFWS, or CESA Section 2081 Incidental Take Permitting requirements for Project effects to GGS. If it is determined that the Project may affect GGS, during the regulatory waters permitting, the project would incorporate additional avoidance, minimization and/or mitigation measures for project effects under NEPA and CESA, where required.

After biological surveys were conducted, the potential for species to occur within the BSA was determined by analyzing the habitat requirements for each species, comparing them to available habitat within the BSA, and analyzing the regional occurrences of the species. Based on these analyses, it was determined that three special status wildlife species Swainson's hawk (*Buteo Swainsonii*), white-tailed kite (*Elanus leucurus*), and western pond turtle (*Emys marmorata*) would have the potential to occur within the BSA. No special status plant species were determined to have the potential to occur within the BSA.

The following is a discussion of these special status species, potential Project effects, and any avoidance, minimization and/or mitigation measures required to reduce Project impacts to a less than significant level.

Discussion of Special Status Wildlife Species

Swainson's Hawk

Swainson's hawk is state-listed as threatened, and is a Covered Species under the Yolo HCP/NCCP. Swainson's hawk migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawks nest throughout the Sacramento Valley in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields. The breeding season extends from late March through late August, with peak activity from late May through July (England et al. 1997). In the Sacramento Valley, Swainson's hawks forage in large, open agricultural habitats, including alfalfa and hay fields (CDFW 1994). The breeding population in California has declined

by an estimated 91% since 1900; this decline is attributed to the loss of riparian nesting habitats and the conversion of native grassland and woodland habitats to agriculture and urban development (CDFW 1994).

White-tailed Kite

White-tailed kite is not a state- or federally-listed species but is a CDFW “Fully Protected” species. White-tailed kites inhabit rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. The species prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees they prefer for nesting and perching. In southern California, it will occasionally roost in saltgrass and Bermuda grass. The species is often found near agricultural lands, and nests are typically placed near the tops of dense oak, willow, or other tree stands. The species is known to breed from approximately February through October.

Western Pond Turtle

The western pond turtle (WPT) is not a state- or federally-listed species, but is a CDFW Species of Special Concern. WPTs are native to the West Coast and are found from Baja California, Mexico north to Klickitat County, Washington. The WPT is a fully aquatic turtle, inhabiting ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. The species requires suitable basking sites such as logs, rocks, and exposed banks, and suitable upland habitat for reproduction consisting of sandy banks or grassy open fields. The species is omnivorous, consuming aquatic wildlife and vegetation. The WPT is known to hibernate underwater beneath a muddy bottom in colder climates and reproduce from March to August (Zeiner 1990). Nests are generally found in flat areas with low vegetation and dry, hard soil.

Special Status Species Survey Results

Swainson’s Hawk Survey Results

No Swainson’s hawk individuals or nest sites were observed during the biological surveys. The BSA does contain potentially suitable, large-diameter nesting trees, and suitable foraging habitat surrounds the BSA. Numerous recent (<20 years) CNDDDB occurrences of the species are located within three miles of the BSA. The species is considered to have a moderate to high potential of foraging and/or nesting within the BSA based on the presence of suitable habitat and the high number of recent local occurrences. No large nests, or Swainson’s hawk individuals were observed during the biological surveys.

White-tailed Kite Survey Results

No white-tailed kite or their nests were observed during the biological surveys. The BSA does contain the potentially suitable nesting habitat of large riparian trees within and adjacent to the BSA. There are no CNDDDB occurrences of the species within 10 miles; however, there are numerous recent ebird.org occurrences within two miles of the BSA located in the Feather River riparian corridor. The species is considered to have a low potential to occur within the BSA based on the presence of suitable nesting trees, but no historic or recent occurrence within the BSA vicinity. Pre-construction nesting surveys would remove the potential for impacts to the species, and no take is anticipated.

Western Pond Turtle Survey Results

No WPTs or WPT nest sites were observed during the biological surveys. The BSA does include potentially suitable habitat elements for the species (permanent water source, basking sites, upland habitat for reproduction). There are no recent CNDDDB occurrences of the species within 10 miles of the BSA; however, there are two “research grade” iNaturalist 2021 documented occurrences of the species approximately at locations two miles west of the BSA within the Bobelaine Audubon Sanctuary. The species is considered to have a low potential to occur within the BSA based on the presence of suitable habitat and the low number of recent occurrences.

Project Impacts to Special Status Wildlife Species

Project Effects to Swainson's Hawk

No current or historic nesting locations are known to occur within the Project impact area. Therefore, the Project does not anticipate direct impacts to Swainson's hawk nesting sites or known Swainson's hawk nesting trees. To ensure no Swainson's hawk nesting sites are directly impacted by the vegetation removal that is necessary for construction of the Project, measure **BIO-11** (see the "**HABITAT AND SPECIES-SPECIFIC MITIGATION MEASURES**" section below) would be incorporated into the Project design.

Project construction would require large equipment and the presence of the human form, which may have the potential to disturb any nesting Swainson's hawk within the vicinity of the Project. To prevent disturbance of any nesting Swainson's hawk, measure **BIO-12** (see below) would provide species-specific pre-construction nesting surveys (consistent with survey methods recommended by the *Swainson's Hawk Technical Advisory Committee*) within ¼ mile of the Project. Therefore, no disturbance to nesting Swainson's hawk are anticipated. With the implementation of project avoidance, minimization measures, and the use of Standard BMPs, the Project will not result in take of Swainson's hawk. With the avoidance of take, the Project does not anticipate that a CDFW Section 2081 Incidental Take Permit (ITP) for Swainson's hawk will be necessary.

Project Effects to White-tailed Kite

No current or historic nesting locations are known to occur within the Project impact area. Therefore, the Project does not anticipate direct impacts or take of white-tailed kite or white-tailed kite nesting sites. To ensure no white-tailed kite are directly impacted by the vegetation removal that is necessary for construction of the Project, measure **BIO-13** (see below) would be incorporated into the Project design.

Project Effects to Western Pond Turtle

The proposed Project would cause temporary and permanent effects to the Ping Slough aquatic habitat and to upland habitat that is potentially suitable for the species. The Project is anticipated to permanently impact approximately 0.01 acre of aquatic habitat and approximately <0.001 acre of upland habitat. Additionally, the Project is anticipated to have temporary impacts to approximately 0.28 acre of aquatic habitat and approximately 0.35 acre of upland habitat. With the implementation of the species-specific avoidance and minimization measures **BIO-14** through **BIO-16** (see below), no direct impacts to WPTs are anticipated.

Project Effects to Migratory Birds

Native birds, protected under the MBTA and similar provisions under the CFG Code, have the potential to nest within the Project area. To avoid and minimize potential impacts to migratory birds, measure **BIO-13** (see below) shall be implemented as part of the Project. Therefore, no take is anticipated of migratory birds or raptors protected under the MBTA and CFG Code.

With the incorporation of avoidance, minimization, and species-specific mitigation measures, the Project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species. Project impacts would be considered less than significant with mitigation incorporated.

- b) *Would the project 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. Potential jurisdictional aquatic resources within the BSA were assessed and potential wetland features were evaluated for the presence of the following wetland indicators: hydrophytic vegetation, hydric soils, and wetland hydrology. Surveys of potential jurisdictional aquatic

resources were confirmed using aerial imagery and field verification, and they followed the guidelines provided in the USACE *Wetland Delineation Manual* (USACE 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). Wetlands that exhibit all three wetland indicators are considered WOTUS if they are hydraulically connected to another WOTUS. All WOTUS are also considered WoS by the RWQCB under Section 401 of the CWA. These aquatic resources and associated riparian woodlands are also considered fish and wildlife habitat under the jurisdiction of the CDFW under California FGC Section 1600 (see **Table 3** below).

A jurisdictional delineation was conducted by Wood Rodgers biologist Andrew Dellas on August 29, 2022, to identify jurisdictional aquatic resources present within the BSA. Observed OHWM and riparian woodland habitats were mapped in the field with a R1 GNSS Receiver and ArcGIS software. Delineation efforts identified three jurisdictional resources: stream channel (Ping Slough), drainage ditches, and associated riparian woodland. An Aquatic Resources Delineation Report (ARDR) has been prepared as part of the preliminary jurisdictional analysis. The ARDR will be submitted to the USACE for confirmation of the extent of WOTUS during regulatory permitting requirements under CWA Section 404 and Section 401.

Table 3. Jurisdictional Resources Survey Results

Waters of the U.S., State and CDFW Waters (acres)			
Aquatic Resource	Waters of the U.S.	Waters of the State	CDFW Jurisdiction
Riverine – Ping Slough	1.04	1.04	1.04
Riparian Woodland	--	--	2.87
Total	1.04	1.04	3.91

Sensitive Natural Communities Survey Results

Riverine – Ping Slough

As a result of the preliminary jurisdictional delineation, approximately 1.04 acres (1,465 linear feet) of Ping Slough were identified within the BSA. Ping Slough flows east to west through the BSA, then turns south for approximately 6.7 miles where the stream confluences with Coon Creek into what is called Main Canal. Main Canal then runs approximately 11 miles further south and connects to the North Cross Canal which confluences with the Sacramento River. Therefore, it is anticipated that the Ping Slough stream channel would be considered a WOTUS, due to the connection to traditional navigable waters. The USFWS Wetlands Mapper defines Ping Slough as an intermittent channel; however, the channel was observed to have flowing water during the August 2022 biological survey and throughout the summer months according to an analysis of recent (approximately 10 years) aerial imagery. Therefore, the channel was classified as perennial using the Cowardin Classification System as R2UBH (Riverine (R), Lower Perennial (2), Unconsolidated Bottom (UB), Permanently Flooded (H)). The channel was delineated using OHWM primary indicators and completion of the USACE Arid West OHWM Datasheet. Subsequently, these waters are also considered WoS, and are considered fish and wildlife habitat under jurisdiction of the CDFW (see **Table 3**).

Riparian Woodland

Riparian woodland associated with the Ping Slough was delineated above the Ping Slough OHWM. Approximately 2.87 acres of riparian woodland were delineated within the BSA. During delineation efforts, areas above the OHWM within riparian woodland were sampled to determine wetland conditions and an Arid West Wetland Delineation Datasheet was completed. Results of the sampling and datasheet

determined the areas above the OHWM were not considered wetlands, due to the lack of hydrophytic vegetation and wetland hydrology. Therefore, areas of riparian woodland are considered non-wetland uplands, and areas above the top of bank would not be considered WoS. However, these areas are still considered sensitive fish and wildlife habitat under FGC Section 1600 and would be considered jurisdiction habitats of the CDFW (see **Table 3**)

Project Impacts to Sensitive Natural Communities

The Project will result in both permanent and temporary effects to jurisdictional WOTUS, WoS, and CDFW jurisdictional habitats. Approximately 0.01 acre of stream channel will have permanent effects due to construction of the new culvert and roadway embankment. Approximately 0.28 acre of stream channel will have temporary effects due to construction access requirements and dewatering operations.

Additionally, approximately <0.001 acre (15 sq. ft.) of permanent effects and 0.12 acre of temporary effects to riparian woodland habitat would occur as part of the Project. Permanent and temporary impacts to jurisdictional resources resulting from the proposed Project are shown below in **Table 4** and **Figure 5**.

Table 4. Project Effects to Jurisdictional Resources

Waters of the U.S., State and CDFW Waters (acres)						
Jurisdictional Waters	Permanent Impacts WOTUS	Temporary Impacts WOTUS	Permanent Impacts WoS	Temporary Impacts WoS	Permanent Impacts CDFW	Temporary Impacts CDFW
Stream Channel (Ping Slough)	0.01	0.28	0.01	0.28	0.01	0.28
Riparian Woodland	--	--	--	--	<0.001	0.12
Total	0.01	0.28	0.01	0.25	0.01	0.40

The Project has been designed to minimize temporary and permanent impacts to jurisdictional waters to the maximum extent practicable. Prior to construction, regulatory permits will be obtained from USACE, RWQCB, and CDFW. In addition to all measures specified in these permits, BMPs **BIO-1** through **BIO-8** (see the “**BEST MANAGEMENT PRACTICES**” section below) will be incorporated into the design to further avoid and minimize construction impacts to jurisdictional waters and sensitive natural communities within the BSA.

Further, measures **BIO-9** through **BIO-10** (see the “**HABITAT AND SPECIES SPECIFIC MITIGATION MEASURES**” section below) are proposed by the Project to provide compensatory mitigation requirements for permanent and temporary impacts to jurisdictional resources. Consultation efforts with the USACE, RWQCB, and CDFW through Section 404, Section 401, and Section 1602 permitting processes will determine final mitigation ratios for permanent impacts to WOTUS, WoS and CDFW waters.

With the incorporation of avoidance, minimization, and compensatory mitigation measures, the Project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. Project impacts would be considered less than significant with mitigation incorporated.

- a) *Would the project 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 BSA does not include any state or federally-protected wetlands as determined by the aquatic resource delineation report prepared by Wood Rodgers.

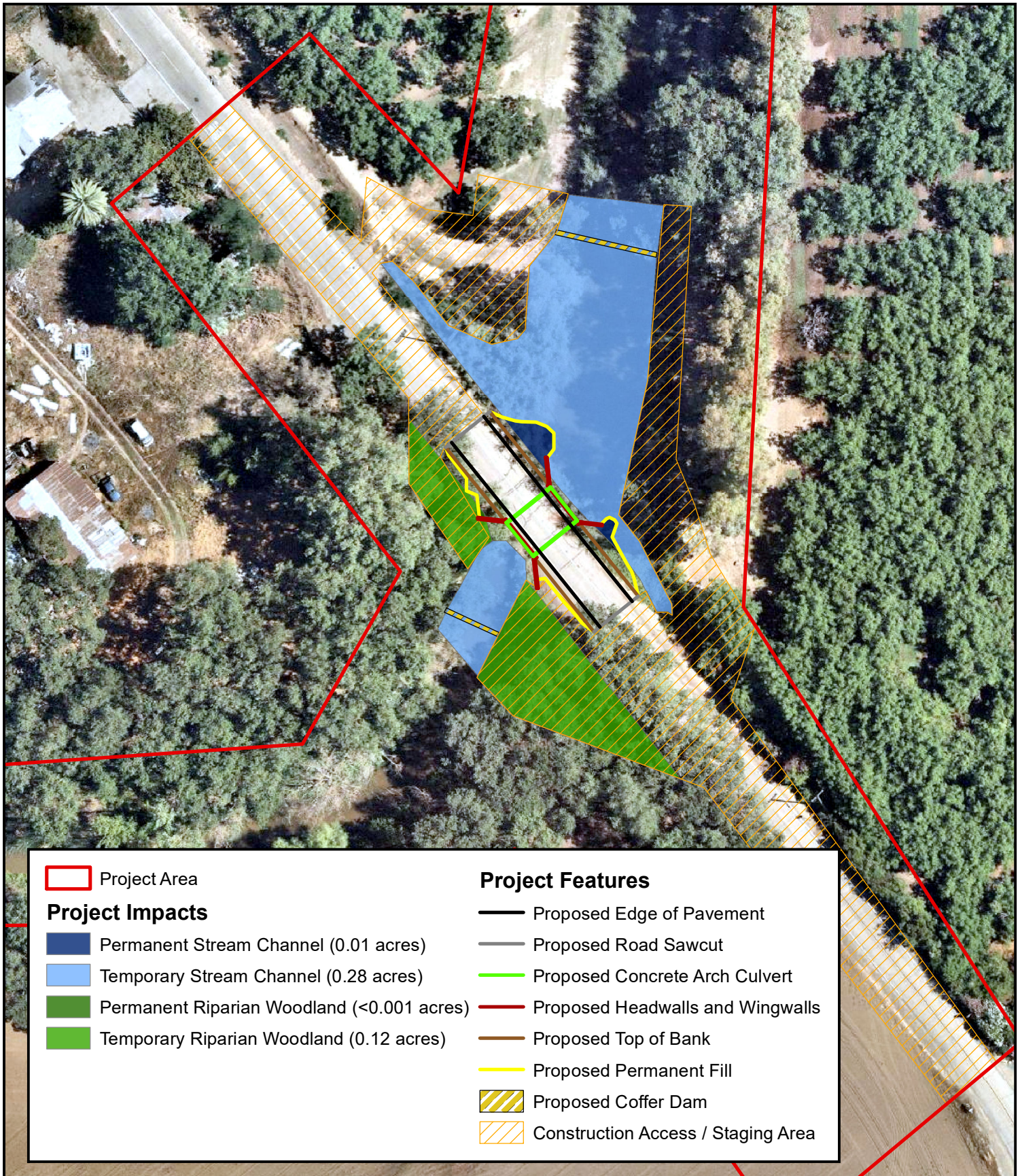


FIGURE 5

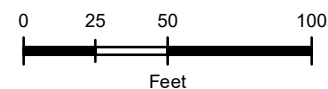
PROJECT EFFECTS TO JURISDICTIONAL RESOURCES

MARK HOPKINS AVENUE OVER PING SLOUGH

CULVERT REPLACEMENT PROJECT

SUTTER COUNTY, CALIFORNIA

FEBRUARY 2023



WOOD RODGERS

As indicated in section b) (above), potential wetland features were evaluated for the presence of the following wetland indicators: hydrophytic vegetation, hydric soils and wetland hydrology. Surveys of potential jurisdictional aquatic resources were confirmed using aerial imagery and field verification, and they followed the guidelines provided in the USACE *Wetland Delineation Manual* (USACE 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a), and California State Water Board, *State Policy for Water Quality Control: State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State* (2021).

According to the results of the wetland delineation, all riparian habitats were observed within upland non-wetland areas above the OHWM. Riparian woodland habitat did not meet wetland parameters (hydrophytic vegetation, hydric soils and/or wetland hydrology) or did not exhibit primary OHWM indicators and were classified as non-wetland (upland) habitat and were mapped as such. A wetland sampling point (SP-1) was taken above the OHWM to determine if wetland parameters existed within the riparian woodland habitat in the southwest quadrant of the BSA. Hydric soils, a dominance of hydrophytic vegetation, and/or wetland hydrology were not present, and the riparian woodlands habitat would be considered to occur within non-wetland upland area.

Therefore, based on the results of the aquatic resource delineation report, there are no state or federally-protected wetland resources within the BSA, and the Project would have no substantial adverse effect on state or federally-protected wetlands through direct removal, filling, hydrological interruption, or other means. No impact would occur.

- b) *Would the project 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. According to CDFW’s Biogeographic Information and Observation System (BIOS), the Project area lies within a “Terrestrial Connectivity, Area of Conservation Emphasis (ACE) level 4 hexagon supporting “Conservation Planning Linkages” (CDFW 2022). The Terrestrial Connectivity dataset summarizes information on terrestrial connectivity by ACE hexagon including the presence of mapped corridors or linkages and the juxtaposition to large, contiguous, natural areas. This dataset was developed to support conservation planning efforts by allowing the user to spatially evaluate the relative contribution of an area to terrestrial connectivity based on the results of statewide, regional, and other connectivity analyses.

Though the Project would occur within a Level 4 hexagon, the Project does not include any permanent impoundments or barriers to native wildlife migration within the Project area. Rather, any disruption to native migration or habitat connectivity would be temporary in nature during construction activities, then return to normal conditions post-construction. Therefore, the Project would not interfere substantially with the movement of any native resident, migratory fish, or wildlife species, and Project effects would be considered less than significant.

- c) *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

Less Than Significant Impact. The Project is anticipated to require the removal of vegetation and trees within the Project impact area. The Project would comply with the Sutter County 2030 General Plan, Environmental Resources Policy ER 3.7 to “*Preserve native oak trees when possible, through the review of discretionary development projects and activities.*” Implementation of Policy ER 3.7 is conducted through General Plan Implementation Program ER 3-B, which requires an arborist report when a project requiring discretionary approval has the potential to affect native oak trees. Thus, during final design of the

Project, the County would prepare an arborist report to ensure that native oak trees are protected in place to the greatest extent possible. Therefore, any Project effects to native oak trees would be considered as part of discretionary approval of the Project and the Project would not conflict with any local policies or ordinance protecting biological resources. The Project effects would be considered less than significant.

- d) *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

No Impact. The Project is not located within the planning area of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project would not conflict with any such plan and no impact would occur.

BEST MANAGEMENT PRACTICES

- BIO-1:** Prior to the start of construction activities, the Project limits in proximity to jurisdictional resources shall be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters. The Project biologist will periodically inspect the ESA to ensure that sensitive locations remain undisturbed.
- BIO-2:** Before on-site Project activities begin, all construction personnel will participate in a worker environmental awareness program. A qualified biologist will inform all construction personnel about sensitive natural communities of concern in proximity to the Project, and the life history and ecology of special-status plant and wildlife species with the potential to occur in the vicinity of the Project.
- BIO-3:** Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:
- Implementation of the Project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
 - Existing vegetation shall be protected in place where feasible to provide an effective form of erosion and sediment control;
 - Stabilizing materials shall be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities;
 - Roughening and/or terracing shall be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed.
 - Soil exposure shall be minimized through the use of temporary BMPs, groundcover, and stabilization measures;
 - The contractor shall conduct periodic maintenance of erosion- and sediment-control measures.

BIO-4: To conform to water quality requirements, the Project must implement the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants shall be a minimum of 100 feet from the Natomas Cross Canal. Any necessary equipment washing shall occur where the water cannot flow into surface waters. The Project specifications shall require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment shall not be operated in flowing water; if necessary, equipment buckets and arms may be used within flowing water.
- Construction work shall be conducted according to site-specific construction plans that minimize the potential for sediment input to waters of the U.S. and State;
- 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 surface waters;
- Equipment used in and around surface waters shall be in good working order and free of dripping or leaking contaminants; and,
- Any surplus concrete rubble, asphalt, or other debris from construction shall be taken to an approved disposal site.

BIO-5: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds must be cleaned to reduce the spreading of noxious weeds.

BIO-6: All hydro seed and plant mixes must consist of a Project Biologist-approved native seed mix.

BIO-7: The contractor must not use herbicides to control invasive, exotic plants or apply rodenticides during construction.

BIO-8: The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction.

HABITAT AND SPECIES SPECIFIC MITIGATION MEASURES

BIO-9: Following the completion of construction, all temporary effects to stream channel and riparian habitats would be recontoured and revegetated (where appropriate) at a 1:1 ratio, to allow for the habitat to return to its previous function or better. Where possible, vegetation shall be trimmed rather than fully removed with the guidance of the Project Biologist. All disturbed areas will be hydroseeded with a Project Biologist-approved native seed mix specific to each habitat type.

BIO-10: Permanent effects to the stream channel and riparian habitats (including impacts to protected trees) will be provided compensatory mitigation to result in no net loss of aquatic resources or habitat, at an agency-approved mitigation ratio via one of the follow compensatory mitigation options:

- payment of an in-lieu fee or mitigation credits to an agency-approved mitigation site;
- compensatory off-site mitigation at an agency-approved mitigation site;
- compensatory on-site mitigation; or
- a combination of the above compensatory mitigation options.

BIO-11: Large diameter trees within the Project impact area will be protected in place to the greatest extent practicable. Any large diameter trees that cannot be protected within the Project impact area shall be removed outside of the Swainson's hawk nesting season (February 1 – August 31), one year prior to construction.

BIO-12: In accordance with the *Swainson's Hawk Technical Advisory Committee Recommended Timing and Methodology For Swainson's Hawk Nesting Surveys in California's Central Valley* (2000), protocol level surveys will be conducted during the appropriate survey periods immediately prior to construction to determine the presence/absence of the species. If Swainson's hawk nests are discovered within one-quarter of a mile of the Project Area, appropriate protective measures will be developed in coordination with CDFW.

BIO-13: Vegetation removal or earthwork shall be minimized during the nesting season (February 1 – August 31). If vegetation removal is required during the nesting season, a pre-construction nesting bird survey must be conducted within three days prior to vegetation removal.

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 area until the appropriate buffer is established and is prohibited from conducting work in the buffer area that could disturb the birds (as determined by the Project Biologist and in consultation with wildlife agencies) 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.

BIO-14: To avoid impacts to western pond turtles, the Project Biologist will conduct a pre-construction survey of all aquatic and upland habitats within the Project area. Surveys will be conducted no more than 24 hours prior to onset of construction. If a turtle is located within the construction area, a qualified biologist will capture the turtle and relocate it to an appropriate habitat at a safe distance from the construction site, as determined by the Project Biologist.

BIO-15: During construction activities, the Project Biologist shall periodically survey the Project area for western pond turtle individuals to ensure no individuals shall become entrapped within the dewatered Project area. If any western pond turtles are found within the Project area, a qualified biologist shall relocate the species outside of the construction area to an appropriate habitat at a safe distance from the construction site, as determined by the Project Biologist.

BIO-16: If water pumps are used to dewater the Project area, pump intakes will be screened and equipped with an energy dissipater to protect aquatic species. The energy dissipater should be large enough to reduce approach velocity to 0.33 foot per second (ft/s) or less and be enclosed with ½ inch metal screen. The surface area of the energy dissipater shall be determined by dividing the maximum diverted flow, by the allowable approach velocity (example: 1.0 ft³ per second/ 0.33 ft/s = 3.0 ft² surface area).

FINDINGS

Considering the information obtained for literature search, biological surveys, and analysis of potential impacts from Project design, and in conjunction with the implementation of project-specific avoidance, minimization and compensatory mitigation measures, project effects relating to biological impacts would be considered **Less Than Significant with Mitigation**.

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?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

REGULATORY SETTING

Federal Regulations

National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires federal undertakings to consider the effects of the action on historic properties. Historic properties are defined by the Advisory Council on Historic Preservation (ACHP) regulations (36 Code of Federal Regulations [CFR] Part 800) and consist of any prehistoric or historical archaeological site, building, structure, historic district, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP) maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to Native American tribes or Native Hawaiian organizations that meet the National Register criteria (36 CFR Part 800.16[1]).

To determine whether an undertaking could affect NRHP-eligible properties, cultural resources (including archaeological, historical, and architectural properties) must be inventoried and evaluated for listing in the NRHP.

For projects involving a lead federal agency, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP. For a property to be considered for inclusion in the NRHP, it must be at least 50 years old and meet the criteria for evaluation set forth in 36 CFR Part 60.4.

The quality of significance in American history, architecture, archaeology, engineering, and culture must be present in districts, sites, buildings, structures, and objects that possess integrity of design, setting, materials, workmanship, feeling, and association. For inclusion on the NRHP, these properties must also meet one or more of the four criteria listed here:

1. Criterion A – They are associated with events that have made a significant contribution to the broad patterns of our history;
2. Criterion B – They are associated with the lives of persons significant in our past;
3. Criterion C – They embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. Criterion D – They have yielded or may be likely to yield, information important in prehistory or history.

If a cultural resources professional meeting the Secretary of Interior's Qualification Standards determines that a particular resource meets one of these criteria, it is considered as an eligible historic property for listing in the NRHP. Among other criteria considerations, a property that has achieved significance within the last 50 years is not considered eligible for inclusion in the NRHP unless certain exceptional conditions are met.

Resources listed on the NRHP, or that are eligible to be listed on the NRHP are automatically considered historical resources for the purposes of CEQA.

Native American Graves Protection and Repatriation Act of 1990 (PL 101-601; 25 U.S.C. 3001)

Under the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. 3001) and implementing regulations 43 CFR Part 10, federal agencies are responsible for the protection of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony that are discovered on lands under the agency's jurisdiction. All human remains and potential human remains must be treated with respect and dignity at all times.

State Regulations

California Register of Historical Resources: Public Resources Code (PRC) Section 5024

The term "historical resource" includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of PRC (PRC Section 5020.1[j]).

Historical resources may be designated as such through three different processes:

1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k]);
2. A local survey conducted pursuant to PRC Section 5024.1(g); or
3. The property is listed in or eligible for listing in the NRHP (PRC Section 5024.1[d][1]).

The process for identifying historical resources is typically accomplished by applying the criteria for listing in the California Register of Historical Resources (CRHR), which states that a historical resource must be significant at the local, state, or national level under one or more of the four criteria listed below. It is associated with events that have made a significant contribution to the broad patterns of:

1. It is associated with California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history. (CCR 14 Section 4852).

To be considered a historical resource for the purpose of CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials,

workmanship, feeling, and association. It must also be judged with reference to the particular criteria under which a resource is eligible for listing in the CRHR (CCR 14 Section 4852[c]).

Unique Archeological Resources

The PRC also requires the Lead Agency to determine whether or not a project would have a significant effect on unique archaeological resources (PRC Section 21083.2[a]).

The PRC defines a unique archaeological resource as follows.

- An archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:
 - Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
 - Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
 - Is directly associated with a scientifically-recognized important prehistoric or historic event or person (PRC Section 21083.2).

In most situations, resources that meet the definition of a unique archaeological resource also meet the definition of a historical resource. As a result, it is current professional practice to evaluate cultural resources for significance based on their eligibility for listing in the CRHR.

California Health and Safety Code Section 7050.5

Regarding the discovery of human remains on non-federal lands, Section 7050.5 of the California Health and Safety Code (CHSC) states the following:

- a) *Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [PRC]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the [PRC] or to any person authorized to implement Section 5097.98 of the [PRC].*
- b) *In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the California Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the CGC or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.*
- c) *If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) (CHSC Section 7050.5).*

Of particular note to cultural resources is subsection (c). After notification, NAHC would follow the procedures outlined in PRC Section 5097.98, which include notification of the most likely descendants (MLD), if possible, and recommendations for treatment of the remains. The MLD would have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).

California Graves Protection and Repatriation Act of 2001

Sections 8010 and 8011 of the CHSC also address the protection of Native American human remains and cultural items and state:

8010. This chapter shall be known, and may be cited as the California Native American Graves Protection and Repatriation Act (CALNAGPRA) of 2001.

8011. It is the intent of the Legislature to do all of the following:

- (a) Provide a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect.*
- (b) Apply the state's repatriation policy consistently with the provisions of the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.), which was enacted in 1990.*
- (c) Facilitate the implementation of the provisions of NAGPRA with respect to publicly funded agencies and museums in California.*
- (d) Encourage voluntary disclosure and return of remains and cultural items by an agency or museum.*
- (e) Provide a mechanism whereby lineal descendants and culturally affiliated California Indian tribes that file repatriation claims for human remains and cultural items under the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.) or under this chapter with California state agencies and museums may request assistance from the commission in ensuring that state agencies and museums are responding to those claims in a timely manner and in facilitating the resolution of disputes regarding those claims.*
- (f) Provide a mechanism whereby California tribes that are not federally recognized may file claims with agencies and museums for repatriation of human remains and cultural items.*

Local Regulations

Sutter County 2030 General Plan

The County's 2030 General Plan adopted a single overarching goal related to cultural resources, Goal ER 8: *"Identify, protect, and enhance Sutter County's important cultural and paleontological resources to increase awareness of the County's heritage"*, and it includes nine (9) Policies (Policies ER 8.1 through ER 8.9). Implementation of the specific policies is established within the General Plan regarding projects with discretionary approval requirements and/or when the County has determined that the proposed action could cause a substantial adverse change in the significance of an archaeological, historical, or tribal cultural resource (Sutter County 2011).

AFFECTED ENVIRONMENT

This section presents an overview of information on the local prehistory and history of the proposed Project area and vicinity. Understanding local cultural history is critical in defining important local, state, and/or regional events, trends, or patterns in prehistory and history by which the significance of prehistoric and historical cultural resources may be evaluated and their significance may be established.

Prehistory

The following discussion follows the outlines of California prehistory set out by Rosenthal et al. (2007:150-157). Those interested in the primary articles are directed to that source for further information. Human populations entered the Great Central Valley of California in the late Pleistocene epoch. The actual timing is uncertain but human bone from the southern San Joaquin Valley has been dated to almost 16,000 years ago (Rosenthal et al. 2007). Very little (in fact, effectively nothing) is known about these earliest populations. Aside from isolated skeletal remains such as the find above and the better-known Arlington Springs find in the Channel Islands no artifacts or other data linked to early human presence have been unequivocally identified.

Paleo-Indian Period: Calibrated (Ca.) 13,000-10,000 Before Present (B.P.) Between about 16,000 and 11,500 years ago the regional climate underwent an abrupt transition from the Tioga (Wisconsin) glacial maximum to the Early Holocene interstadial (Hill 1984, 2006). A climatic episode known as the Recess Peak glacial advance (Younger Dryas) between about 13,500 and 11,500 B.P., marked by an abrupt cooling and drying, was accompanied by glacial advances in the Sierra Nevada. This period marks the earliest recognized archaeological cultural patterns in the Americas. In California this period is poorly represented in the archaeological record at present. Two localities are particularly noted for site deposits that contain clear evidence of Paleo-Indian occupations. These include the Borax Lake site in Lake County, where numerous fluted points were recovered, and the Witt Site on the southwestern shore of Tulare Lake in Tulare County, where some fluted points and numerous concave-based but unfluted points have been found in association with the remains of large mammals - mostly bison (Rosenthal et al. 2007:151).

Archaic: Ca. 10,000-800 B.P. Following the end of the Pleistocene, between about 10,000 and 8,000 B.P., climatic conditions continued warming and peaked during the Early Holocene (Rosenthal et al. 2007:151-157). Since then, California's climate has very slightly cooled to the present. Over that span, shorter term climatic shifts have periodically swung to both warmer and colder extremes than the present. The Archaic is a transitional cultural period characterized in the beginning by relatively small, mobile groups or bands that practiced a mobile subsistence with an emphasis on hunting and seed processing. By the Late Archaic in the Central Valley this had changed to "complex Hunter-Gather" social patterns with large, permanent villages and extensive evidence of material exchange (Fredrickson 1973; Rosenthal et al. 2007:151-157).

Increasingly warmer climates saw extensive desertification in southeastern California and the general disappearance of the pluvial lakes except for a very few, such as Tulare Lake and Buena Vista Lake in the southern Great Valley. Geoarchaeological evidence suggests that the Central Valley landscape may have undergone a period of instability during this period reflected in the number of Middle Holocene Archaic sites that are known from buried contexts. The lack of a well-documented occupation sequence on the Valley floor during this period is likely evidence of the burial of sites rather than the absence of prehistoric peoples. Rosenthal et al. (2007) call out two adaptations in Central California during the mid-Archaic that they term "Foothill Traditions" and "Valley Traditions." The latter are poorly represented likely because of the obscuration of the sites through geomorphic processes including sea level changes, and resultant alluviation and stream course changes (Rosenthal et al. 2007:153). Rosenthal et al. (2007) note that they perceive an emerging pattern of logistically organized subsistence and concomitant increasing sedentism along the major waterways.

Within interior Central California the Late or Upper Archaic (ca. 2,500 – 800 B.P.) is frequently associated with the archaeologically recognized Middle Horizon or Berkeley Pattern, so named because of the apparent spread of material culture and social patterns outward from the San Francisco Bay region to surrounding areas. Increasing sedentism is noted in the Great Valley with massive middens marking Upper Archaic settlements along major stream courses in the Great Valley and in the Sacramento-San Joaquin delta region.

Emergent Period: Ca. 800 – 200 B.P. The transition between the Upper Archaic and the Emergent is marked by changes in technology – the bow and arrow displace or emplace beside other weapons systems, the bedrock mortar milling practice becomes important in some regions, and social complexity appears to increase dramatically (Rosenthal et al. 2007:157-159). This period is associated with the Sweetwater complex in northern Sacramento Valley (Kowta 1988). The term "Emergent" was coined by D. A. Fredrickson (1973) to set off the complex, extensively sedentary societies, of this later time period. Fredrickson argued that the complex hunter-gatherer societies that occupied much of California during the late prehistoric were effectively similar to early agricultural "Formative" societies elsewhere on the continent. These societies, including the Konkow of the project region practiced a number of social patterns considered uncharacteristic of typical hunter-gatherers. The Konkow were particularly notable in this regard with specific families controlling essential equipment, rites, and knowledge for essential enterprises.

Ethnographic Era

The project area is located along the southwestern edge of Maidu (Nisenan) territory, bordering near eastern Patwin territory and northwestern Miwok territory. Numerous villages have been reported near the confluence of the Sacramento and Feather rivers, roughly 11.5 miles south-southwest of the project area. These include *Olo*, *Wollok*, *Leuchi*, and *Nawe* (Wilson and Towne 1978:388). There are two close villages that Kroeber depicts: *Ola*, located about 11 miles to the southwest of the APE, and *Yikulme*, approximately 3 miles to the northwest. Both are on the Feather River (Kroeber 1976: Plate 37).

Nisenan settlement patterns in the valley focus on higher elevation areas such as natural levees near the major streams. Villages varied considerably in population with anywhere from three to 50 houses (Wilson and Towne 1978). Ethnographies all note that Nisenan political units consisted of "village communities" composed typically of one or more settlements including a main village and one or more outlying settlements (Kroeber 1976:398; Riddell 1978:373; Wilson and Towne 1978:387). Cemeteries seem to have been located in or very near villages (Riddell 1978; Wilson and Towne 1978).

Subsistence relied on the local productivity of tribal lands, streams, and rivers. A wide range of prey and plants were taken for food and other uses. Useful stone for tools and wood for weapons could be traded for or acquired through exchange. Shell beads served as a form of money at the time of historic contact. Archaeological evidence suggests that this use of shell "ornaments" may date back to at least the beginning of the Emergent period (ca. 800 to 200 B.P.).

In 1833, what is thought to be a widespread malaria epidemic killed an estimated 75% of the Valley Maidu population. Much of the remainder of the population retreated into the foothills. The Nisenan hunting and gathering cycle was again altered drastically with the discovery of gold in Coloma in 1848, which severely disrupted Nisenan culture and lifestyle. Farming in the valley began around this time, impacting native culture in the lowlands. Stephen Powers, after traveling through the region in the 1870s, noted that the *"Nishinam [sic] had the misfortune to occupy the heart of the Sierra mining region, in consequence of which they have been miserably corrupted and destroyed"* (1976:317). By the time of his visit, Nisenan were surviving as best they could, working for Euro-Americans in mines or on ranches, panning for gold, or adopting even more abstract forms of survival (Wilson and Towne 1978:396-397).

History

Early Exploration

The land that is now within Sutter County remained relatively unexplored by Europeans until 1808, when Lieutenant Gabriel Moraga led an expedition up the Sacramento River to the lower reaches of the Feather River and northward to the Oroville area (Hoover et al. 1990:492). In 1817, a group led by Father Narciso

Durán, accompanied by Luís Argüello and Father Ramón Abella traveled up the Sacramento River, likely as far north as the Feather River (Hoover et al. 1990:492).

During this time, parties of trappers began to penetrate the Central Valley region in search of pelts for the Hudson's Bay Company. This had devastating consequences for the local tribes as it introduced previously foreign diseases, including smallpox, which devastated the population (Cook 1976:12; Jensen 2010:6).

Early Growth and Settlement

The earliest GLO map for this township and range depicts Ping Slough and fields, with no development within the APE. In the northwest corner of Section 29, a telegraph line is mapped spanning to a property titled the "Bear River House" on the Bear River. This telegraph crosses the slough in the southwest corner of the Section, outside of the proximity of the APE (USDA 1863). It does not appear that any patents or sales of land occurred in the immediate APE prior to its development in the late 1940s.

Agriculture

Agriculture has traditionally played an important role in the history of the area, with wheat, alfalfa, and livestock raising being the primary economic contributors. In the 1870s, more than 70 percent of the wheat exported from California came from the Sacramento and Northern San Joaquin valleys (Wee et al. 1994a:11). The "*mild climate, concentration of winter rainfall, and shallow water table, allowed many grains and deep-rooted plants to thrive without irrigation*" (Wee et al. 1994a:24). The development of flood control and irrigation allowed farmers to diversify their crops and grow fruit, rice, and vegetables. In the late 1880s, Sutter County farmers Joe Phillips and A.F. Abbott developed the "Phillips Canning Cling Peach" variety. It was preferred by canners over other peach varieties because of its durability and firm flesh. Its popularity and ability to grow well in Sutter County made Sutter County the "Peach Bowl of the World" through the 1960s (Northern California Water Association [NCWA] 2015; Wee et al. 1994a:26). The first successful rice crop in the Yuba-Sutter County region was grown by Frank Fisher near Meridian in northwestern Sutter County during World War I (Wee et al. 1994a:28).

Most farms and residences were clustered along the levee roads paralleling the Sacramento and Feather rivers. An 1888 advertisement placed by a W. P. Coleman in *The Record-Union* advertises land at \$42.50 per acre in Pleasant Grove and states that the property is on level land, with "*rich soil; all fenced and crossfenced [sic]; good dwelling; large barns; windmills, and other improvements; fine Fruit Land [sic]*" and that it is a "*fine farm to subdivide*" (*The Record-Union* [TRU], 4 May 1888:2). One of the largest ranches in this area was called the Spanish Ranch, contained 2,000 acres, and was owned by State Senator Frederick Cox of Sacramento County. In the 1890s, the land was leased by Reese D. Murphy, who farmed it for many years (Wagner 1943:10).

Transportation

Roads in or very near the APE (Mark Hopkins and Berry Road) began as informal agricultural routes to service orchard lands in the late 1940s. Berry Road and Mark Hopkins Road (not yet "Avenue") appear for the first time on the 1952 *Nicolaus, California* USGS topographical quadrangle map (United States Geologic Survey [USGS] 1952). Neither road is depicted on the 1947 edit of the 1910 topographic map (USGS 1910). Highway 70 first appears on the 1974 edited version of the 1952 *Nicolaus, California* USGS topographical quadrangle map in place of the Northern Electric Railroad Main Line (USGS 1952).

By the mid-to-late-1900s several railroads, the Central Pacific, the Southern Pacific, and the Sacramento Valley Railroad were operating in the Sacramento area – although none directly served the river lands north of Sacramento (Wee et al. 1994a:32). In the summer of 1903, a survey gang for the Western Pacific Railroad Company was running lines in the vicinity of Pleasant Grove, and laying out a route for the area (*Plumas National Bulletin* [PNB], 20 August 1903). According to the *Plumas National Bulletin*, crews were employing the "rocket method" to lay tracks, similar to what was being used in work between

Marysville and Oroville (PNB, 20 August 1903). The Western Pacific Railroad (WPRR) tracks and the Northern Electric Tracks are depicted on the 1910 *Nicolaus, California* USGS topographic quadrangle map along with Rio Oso Station located around a mile north of the APE. The WPRR carried both passengers and freight east-to-west from San Francisco, California to Salt Lake City, Utah and north-south along the Feather River Canyon up to Bieber, California. In 1923, WPRR entered into a contract with Pacific Fruit Express, one of the major suppliers of refrigerated rail cars in the United States at this time, to provide refrigerator cars to WPRR customers (Brehm 2019).

On September 15, 1906, grading for the Northern Electric Company Railroad (NER) line between Sacramento and Pleasant Grove had begun, with work expected to be completed on the track within the following few weeks (*Sacramento Union* [TSU], 15 September 1906). The NER, which traverses just east of the project area, had its headquarters in Chico. It was incorporated in 1905 and one week later staged its first full-scale run between Chico and Sacramento. Initially all trains from Chico ran through Sacramento with a terminus at Woodland (Rio Linda-Elverta Chamber of Commerce 1997). In 1907, the NECR was absorbed into the Northern Electric Railway Company (NE).

Northern Electric Railway Company tracks are depicted on the 1910 *Nicolaus, California* USGS topographic quadrangle map about a quarter-mile east of the APE (USGS 1910). By 1910, the NE had laid 122 miles of track, and an additional 17 miles of local street railway systems (Van Norden 1910:370). At this time, fourteen trains per day made the trip from Marysville to Yuba City, seven northward to Chico, and seven south to Sacramento (Ryan 1975:21).

Tracks were standard gauge, 60, 72, and 73-pound rail with six by six by eight-inch cross ties from pine or fir timber, laid on roadbeds that were 16 feet wide on fills and 18 feet wide in cuts (Van Norden 1910:370; Wee et al. 1994b:7). In urban areas like Sacramento and Chico, the NE employed a catenary electric system, but in rural areas, conductors lowered the electric poles and switched to using conducting shoes on an electrified third rail (Wee et al. 1994b:7). This third, or electric rail, was made of 60 pounds of steel mounted on a special insulator, consisting of a wooden maple block that was fitted to a cast-iron base that supported a flared iron top to which the rail was fastened (Van Norden 1910:374). Sidings were located at all the main stations; additional sidings were located at various points in rural areas and contained a telephone box that a train conductor could use to reach the train dispatcher to “*readily ascertain the position of any and all trains he has orders to meet*” (Van Norden 1910:371).

Power was supplied to the tracks via several substations owned by the NE and located between Sacramento and Chico, including one at East Nicolaus. Power came from Pacific Gas and Electric Company transmission lines, which provided up to 60,000 volts, with a frequency of 60 cycles and who furnished the transformers and high-tension devices used at the substations (Van Norden 1910:386). Most substations were housed in simple corrugated metal sheds, such as Tres Vias and Del Paso. Others, however, like the one at East Nicolaus, were more elaborate, poured concrete buildings (Groff 2011a). NE also employed portable substations consisting of one or two standard freight cars that had been repurposed for use (Van Norden 1910:387).

Shelter stations were located at various points along the railroad where no attendant was present or necessary, usually in rural areas. It is likely that the NE stop at Rio Oso, Esmeralda, and Stolp (all were less than one mile from the project area) were shelter stations named after the families who owned the land acquired for the railroad’s right-of-way (**Figure 6**) (Ryan 1975). Shelter stations were equipped with a manually-operated semaphore, which lit a series of five lamps for nighttime use. The cost to construct a shelter station with a semaphore and 100-foot platform was \$450 (Van Norden 1910:375).

(Interurbans Electric Railway Publications 1939.)

Many of the original passenger shelter stations were old streetcars that were placed by the side of the tracks. These were later replaced starting in 1915, when the NE began constructing more permanent, wood frame, gable-roofed depot stations measuring 20 by 30 feet or larger, such as the one at Pleasant Grove less than ten miles from the project area (Wee et al. 1994b:8). More elaborate stations were located on the main line at Live Oak, East Nicolaus (the nearest main line station to the project area, located approximately 2.25 miles south), Thermolito, and Meridian, and were designed in a rustic Craftsman style, with wood frames supported by half-height cobblestone walls, a hip roof, and a wrap-around porch (**Figure 7**). The roof overhanging the porch was supported by “cobblestone piers and wood posts along the sides of the building and by cribbed cobblestone piers at the four corners, each extending some distance above the plane of the roof” (Wee et al. 1994b:8). These larger stations also had a waiting room, fireplace, office, freight room, and baggage storage area.

In 1914, the NE went into bankruptcy and was eventually sold at auction to the new Sacramento Northern Railroad Company (SN) (Hammon 1995), a subsidiary of the Southern Pacific Railroad, on June 28, 1918. In 1928, the SN was acquired by Western Pacific Railroad to create the longest interurban route in North America at that time (Bay Area Electric Railroad Association 2019). However, it continued to be called the Sacramento Northern.

In its early years of operation, the NE/SN served primarily interurban commuters and tourists and freight trains only operated between midnight and six in the morning. As irrigation systems in the Sacramento Valley improved and more land was reclaimed for farming, the need for additional freight shipments increased. According to Wee et al., “by 1912 some thirty percent of Northern Electric revenues came from freight and in 1919 freight finally exceeded passenger revenue” (1994a:34). A variety of agricultural products, including dairy products and fresh fruits; as well as staples such as rice, beans, and grains, were shipped on the NE/SN where they would be transferred to other rail connections or to steamers and barges at the rail hub of Sacramento.

During the 1920s and 1930s, improved roads and increasing use of private vehicles began to impact public transportation, including railroads. By the 1930s, passenger service was becoming a financial liability. The last regular SN passenger train ran in 1936 (Bastian 2002), although freight service continued through the mid to late-1960s. Trains were converted from electric to diesel power starting in 1946, and a full switch to diesel was made in 1965 (Groff 2011c). Freight service on the railroad ended in the mid-to late 1960s. Around this time, the freight buildings were either moved or demolished.



Figure 7. Photograph of East Nicolaus Northern Electric Railroad Depot, ca. 1920s
(Courtesy of Sutter County Library)

Methods

Records Search

PAR Environmental Services, Inc conducted a record search of the APE and a one-quarter-mile buffer around the APE through the Northeast Information Center (NEIC) of the California Historical Resources Information System (CHRIS) on August 15, 2022. The records search included a review of previous cultural resources studies, recorded resources, and the OHP historic properties data files. Cultural resource reports and records on file at PAR and on-line sources were also reviewed for the project area. Additional research was sought from the Sutter County Museum and PAR's in-house library and unpublished grey literature. The record search included the following sources:

- NEIC resource records on file as of August 2022;
- NEIC reports on file as of August 2022;
- Office of Historic Property Data File as of August 2022;
- California Inventory of Historic Resources (1976 – obsolete);
- California State Historical Landmarks (1996a and updates as of August 2022);
- California Points of Historical Interest (1992 and updates as of August 2022);
- Historical Maps including United States Geological Survey (USGS);
- General Land Office Surveys, Diagrams, and Supplemental Plats of T13N, R4E M.D.M. 1863
- Historic aerials (NETR 1970s-2000s);
- *California Register of Historical Resources* (CRHR) (1996b and updates as of August 2022); and
- *National Register of Historic Places* (NRHP) (1966 and updates as of August 2022).

No previously recorded cultural resources in the APE were identified. One previous cultural resources survey and report were conducted within one-quarter-mile of the APE.

Consultation

PAR Environmental Services, Inc. contacted the Native American Heritage Commission (NAHC) with a request to search the Sacred Lands File (SLF) for any information pertaining to the APE on July 29, 2022. The NAHC responded on November 21, 2022 stating that the SLF search was **negative**. On behalf of Sutter County, PAR Environmental Services, Inc. sent digital letters to 13 tribes who have requested to be included in consultation for Sutter County projects under AB 52. Consultation is ongoing and will continue throughout the life of this project.

The Sutter County Museum was contacted on December 13, 2022 for any information regarding the history of the immediate area that it could provide, and to initiate communication for any interest or public concerns regarding cultural resources already known or likely to be present within the project area.

Pre-field Research

Pre-field research was conducted by PAR staff to identify documentary or narrative information regarding the history and ethnography of the APE to inform survey design and preliminary report writing. This work included searches of on-line maps (United States Geological Survey; General Land Office Plat and Mineral maps; county maps), examination of historical aerial photographs available on line, searches of newspaper.com for information on Ping Slough or surrounding agricultural land.

Field Methods

On August 30, 2022, PAR Senior Archaeologist, Andrea E. Maniery, conducted a cultural resources survey of the APE. The APE was completely surveyed save where access was not granted by private landowners

on the northwest boundary of the APE. No pre-contact or historical resources were identified. The proposed project will result in a no historic properties affected finding in accordance with 36 CFR § 800.4(d)(1).

DISCUSSION

- a) *Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?*

No Impact. As described above, the results of the record search and field survey were negative for the presence of archaeological resources in the Project site; therefore, no historical resources exist within the Project site. In this case, the proposed Project would not cause an adverse change in the significance of a historically-built environment or archaeological resource.

- b) *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

Less Than Significant with Mitigation. As described above, the results of the record search and field survey were negative for the presence of archaeological resources in the Project site and, consequently, the proposed Project would not cause an adverse change in the significance of a known archaeological resource. However, with any project that requires ground disturbance and excavation, there is always the potential that previously unidentified archaeological resources could be identified during Project implementation.

To avoid or minimize impacts to previously unidentified archaeological resources that may be determined significant per CEQA, all construction personnel would receive mandatory cultural resources awareness training conducted by a qualified archaeologist, as specified in measure **CR-1**. Additionally, in the event that cultural materials are encountered during Project implementation, all work would cease within 50 feet of the find and a qualified archaeologist would determine the appropriate next steps, as specified in measure **CR-2**. With implementation of measures **CR-1** and **CR-2**, potential impacts to significant archaeological resources would be less than significant.

- c) *Would the project disturb any human remains, including those interred outside of dedicated cemeteries?*

Less Than Significant Impact. No evidence for prehistoric or early historic interments has been found in the Project area in surface contexts and, to the extent documented, none of the archaeological sites as described were associated with human remains. However, this does not preclude the possibility of the existence of buried human remains. California law recognizes the need to protect historic-era and Native American human burials, skeletal remains, and items associated with Native American interments from vandalism and inadvertent destruction.

Damage to or destruction of human remains during Project construction or other Project-related activities would be considered a significant impact. However, in accordance with the California Health and Safety Code Sections 7050.5 and 7052, Public Resources Code Section 5097.98, and CEQA Section 15064.5, if human remains are uncovered during ground-disturbing activities, all such activities in the vicinity of the find would be halted immediately, and Sutter County's designated representative would be notified. The County's representative would immediately notify the Sutter County Coroner and a qualified professional archaeologist. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the NAHC by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]).

The County's responsibilities for acting upon notification of a discovery of Native American human remains are identified in detail in the California Public Resources Code Section 5097.9. The County or its appointed representative and the professional archaeologist would contact the Most Likely Descendent (MLD), as determined by the NAHC, regarding the remains. The MLD, in cooperation with Sutter County and the landowner, would determine the ultimate disposition of the remains. Since the proposed Project would be in compliance with the existing regulations of the California Health and Safety Code, the Public Resources Code, and CEQA, impacts to human remains would be less than significant and no mitigation is required.

MITIGATION MEASURES

CR-1: Before any ground-disturbing work (including vegetation clearing, grading, and equipment staging) commences, a qualified archaeologist will conduct a mandatory cultural resources awareness training for all construction personnel. The training will cover the cultural history of the area, characteristics of archaeological sites, applicable laws, and the avoidance and minimization measures to be implemented. Proof of personnel attendance will be provided to overseeing agencies as appropriate. If new construction personnel are added to the proposed Project, the contractor will ensure that the new personnel receive the mandatory training before starting work.

CR-2: If unrecorded cultural resources are encountered during Project-related ground-disturbing activities, even in the absence of an on-site archaeological monitor, a qualified cultural resources specialist shall be contacted to assess the potential significance of the find. If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during Project-related construction activities, ground disturbances in the area of the find will be halted, and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist will determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation, such as avoidance or data recovery.

If the find is determined to be an important cultural resource, the County will make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work can continue on other parts of the project while archaeological mitigation takes place.

FINDINGS

The Project would have a **Less Than Significant Impact with Mitigation** 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?	☐	☐	☐	☒
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

DISCUSSION

- a) *Would the project 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 would comply with standard construction BMPs and the Sutter County 2030 General Plan relating to the efficient use of energy resources. Therefore, the Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during Project construction or operation, and no impact would occur.

- b) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

No Impact. The Project would not conflict with or obstruct any state or local plans for renewable energy or energy efficiency. Therefore, no impact would occur.

FINDINGS

The Project would have **No Impact** relating to energy or energy resources.

2.7 GEOLOGY AND SOILS

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

AFFECTED ENVIRONMENT

The Project is located in the Sacramento Valley portion of the Great Valley Geomorphic Province, which is characterized by a thick sequence of sedimentary rock units overlain by alluvial sediments derived primarily from erosion of the Sierra Nevada Mountains to the east. Overlying the bedrock units in the mid-basin areas of the Sacramento Valley are Late Pleistocene Age and Holocene Age alluvial deposits. Natural soils within the Project area consist exclusively of Marcum clay loam and Nueva loam.

DISCUSSION

- a) *Would the project 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. According to the CDC Fault Activity Map of California (CDC 2015), there are no known active faults within the Project area or directly adjacent to the Project area. The nearest fault is the Spenceville Fault (Late Quaternary), located approximately 17 miles east of the Project area. The Project would consist of minor ground disturbance and would not substantially change the existing conditions in such a way that it would result in new risks for exposing 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). Therefore, no impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The Project would have a disturbed soil area greater than one acre; therefore, a Construction General Permit (CGP) is required to address storm water runoff, including minimizing soil erosion. The permit will address clearing, grading, grubbing, and disturbances to the ground such as stockpiling or excavation. The permit also requires the County and the contractor to prepare and implement a SWPPP 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 stormwater runoff.

The Project would also be required to be in compliance with the Sutter County Improvement Standards (Sutter County 2010), which include construction BMPs for erosion and sediment control, and all regulatory permitting regarding soil erosion (e.g., CWA Section 404 and Section 401). These permits would include design standards as well as construction BMPs for erosion and sediment control. The majority of excavation and ground disturbance would occur below the existing roadway surface; therefore, a substantial loss of topsoil is not anticipated. With implementation of construction BMPs and compliance with state and federal permitting requirements, impacts associated with erosion and loss of topsoil would be considered less than significant.

c) Would the project 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 area is not located on a geologic unit or soil that is known for unstable conditions. During construction, soils may become unstable during de-grading activities; however, the area of ground disturbance and construction activities necessary for the construction of the Project would not occur on unstable soils, and would not result or potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Backfilling and compaction of the de-graded areas would occur as part of the Project to return the site to pre-construction conditions and contours. Therefore, no impact would occur.

d) Would the project 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. Natural soils within the Project area consist exclusively of Marcum clay loam and Nueva loam. These soil types are not known as expansive soils, as defined in Table 18-1-B of the Uniform Building Code, and construction within these soil types would not create substantial risks to life or property. Therefore, no impact would occur.

e) Would the project 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 would not utilize septic tanks or an alternative waste water disposal system on site. Therefore, the Project would have no impact due to soils incapable of adequately supporting septic systems.

- f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

No Impact. According to the University of California Museum of Paleontology (UCMP), there are no known recorded findings of fossils within the Project area (UCMP 2022). Additionally, no findings of unique paleontological resources, sites, or unique geological features were identified within the Project area during the record search and pedestrian survey. Therefore, no impact would occur.

FINDINGS

With the compliance of the Sutter County Improvement Standards and all required regulatory permitting, the Project would have a **Less Than Significant Impact** relating to geology and soils.

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

REGULATORY SETTING

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to the human activities that include CO₂, CH₄, NO_x, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

On June 1, 2005, California Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010; 2) 1990 levels by 2020; and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan which includes market mechanisms, and implement rules to achieve "*real, quantifiable, cost-effective reductions of greenhouse gases.*" Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels was reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the U.S. EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the U.S. EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.^[1]

According to the Association of Environmental Professionals white paper, "Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents" (June 29, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change creates a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." (See CEQA Guidelines sections 15064(i)(1) and 15130.) To make this determination, the incremental impacts of the Project must be compared with the effects of past, current,

^[1] <http://www.epa.gov/climatechange/endangerment.html>

and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As the Project would have no effects on traffic capacity, any additional GHG emissions would only occur during, and result from, necessary temporary construction activities.

DISCUSSION

- a) *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less Than Significant Impact. The Project would not generate GHG emissions through operation of the completed Project. Short-term GHG emissions would occur during construction through the use of gas-powered construction vehicles. GHG emissions generated from temporary construction activities would not exceed the FRAQMD CEQA thresholds of significance for criteria pollutants. However, the District has not yet established GHG thresholds, nor does the County's Climate Action Plan (CAP) include GHG emissions reduction measures that are applicable to the proposed Project. In the absence of locally adopted methodology or thresholds for assessing GHG emissions, the thresholds of significance adopted by the Sacramento Metropolitan Air Quality Management District (SMAQMD) have been used to determine the significance of GHG emissions. For typical land use projects, SMAQMD recommends the use of a construction threshold of 1,100 metric tons (MT) CO₂e per year to determine whether construction would result in the generation of GHG emissions sufficient to result in a significant impact on the environment (SMAQMD 2022).

Using the RCEM results for the proposed Project, the Project construction is anticipated to generate an annual maximum of approximately 14 MT CO₂e. This is well below SMAQMD's threshold of significance of 1,000 MT CO₂e per year. Therefore, the Project is not expected to generate GHG emissions in quantities that would individually or cumulatively contribute to a significant impact on the environment, and the Project is considered to have a less than significant impact relating to the generation of GHG emissions. No mitigation is required.

- b) *Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

No Impact. The Project would generate short-term GHG emissions during construction. As indicated under section (a) above, the short-term construction GHG emissions would not exceed SMAQMD's significance thresholds which are based on Senate Bill 32 GHG reduction targets. Further, the CAP does not include GHG emissions reduction measures that are applicable to the proposed Project. Therefore, the Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. No impact would occur, and no mitigation would be required.

FINDINGS

The Project would have a **Less Than Significant Impact** 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?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
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?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

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

The Project occurs within a rural area, that is zoned for agricultural land use. Construction access would be available via Mark Hopkins Avenue, with staging areas and temporary construction easements within adjacent private property. The Project would occur within relatively close proximity (approximately 300 feet) to two rural residential homes. The Project is not expected to require permanent acquisition of any property. A review of the California Department of Toxic Substances (DTSC) EnviroStor database (DTSC 2022) and the State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB 2022) found no known cleanup sites within one mile of the Project area. The nearest cleanup site identified within the

GeoTracker Database is a “Completed – Case Closed” school site (Brown’s Elementary School) located approximately 1.5 miles east of the Project area.

DISCUSSION

- a) *Would the project 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 Project would involve the use of heavy equipment for the grading, filling, and 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 significant hazard to the public or the environment. As a part of the Clean Water Act Section 402, NPDES, and conservation measure BIO-3 (Section 2.4, Biological Resources), a SWPPP is required when obtaining a general construction permit. Compliance under water quality regulations and the SWPPP would require the use of standard conservation measures and BMPs to avoid or minimize the potential for accidental release of hazardous materials from spills or fuel leaks during Project construction. Therefore, the Project would have a less than significant impact.

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

Less Than Significant Impact. The Project would involve ground disturbance and excavation within the Project area. With any project conducting ground disturbance, there is a potential for unknown contaminants or accident conditions involving the release of hazardous materials into the environment, as well as upset or accident related to machinery. A review of the SWRCB GeoTracker database and the DTSC EnviroStor database found no known hazardous materials sites or hazardous materials cleanup sites within one mile of the Project area. Therefore, it is unlikely for the Project to have the potential of unknown contaminants or accidents due to excavation. Additionally, the Project would be required to follow Sutter County Municipal Code Chapter 1790 specifically 1790-140 “Containment and Notification of Spills” which includes BMPs for the containment and notification for hazardous waste spills.

Additionally, as a part of the Clean Water Act Section 402, NPDES, and conservation measure BIO-3 (Section 2.4, Biological Resources), a SWPPP is required when obtaining a general construction permit. Compliance under water quality regulations and the SWPPP would require use of standard conservation measures and BMPs to avoid or minimize the potential for accidental release of hazardous materials from spills or fuel leaks during Project construction:

With inclusion of construction BMPs regarding handling of hazardous materials, the Sutter County Code regarding containment of accidental spills, and compliance with NPDES to avoid accidental release of hazardous materials, the Project would have a less than significant impact.

- c) *Would the project 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 located within one-quarter mile of the Project site. Therefore, no impact would occur.

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

No Impact. A review of the SWRCB GeoTracker and DTSC EnviroStor databases found no known hazardous materials sites or hazardous materials cleanup sites within one mile of the Project area. Therefore, the Project would not create a significant hazard to the public or the environment by being located on a known hazardous waste site, and no impact would occur.

- 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 is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the Project would not result in a safety hazard or excessive noise for people residing near or working in the Project area, and no impact would occur.

- f) *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

No Impact. There is no known adopted emergency response plan or emergency evacuation plan within the Project area. Therefore, the Project would not impair implementation of or physically interfere with any emergency plan and no impact would occur.

- g) *Would the project 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 occur within a designated wildland area, or where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no impact would occur.

FINDINGS

The Project would have a **Less Than Significant Impact** relating to hazards and hazardous materials.

2.10 HYDROLOGY AND WATER QUALITY

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

REGULATORY SETTING

Federal Regulations

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 WOTUS. 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 USEPA 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 stormwater 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 the CWA's primary regulatory tool.

The USACE regulates discharges of dredged or fill material into WOTUS. 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 RWQCB has jurisdiction under Section 401 of the CWA and regulates any activity that may result in a discharge to surface waters. Typically, the areas subject to jurisdiction of the RWQCB coincide with those

of USACE (i.e., WOTUS, including any wetlands). The RWQCB also asserts authority over WoS under waste discharge requirements pursuant to the Porter-Cologne Water Quality Control Act.

On April 21, 2020, the U.S. EPA and the USACE published the “Navigable Waters Protection Rule” to redefine the extent of the WOTUS, and CWA jurisdiction. Under the final rule, four categories of water are federally regulated under: 1) the territorial seas and traditional navigable waters; 2) the perennial and intermittent tributaries to those waters; 3) certain lakes, ponds, and impoundments; and 4) wetlands adjacent to jurisdictional waters. The final rule also detailed 12 categories of exclusions or features that are not considered “waters of the United States” that include features that only contain water in direct response to rainfall (e.g., ephemeral features), groundwater, many ditches, prior converted cropland, and waste treatment systems.

Porter-Cologne Water Quality Act

Also known as the California Water Code, the Porter-Cologne Water Quality Act (Porter-Cologne Act), was created in 1969 to govern water quality regulation in California and protect water quality as well as beneficial uses of water. The Porter-Cologne Act applies to all WoS, including surface water, groundwater, and wetlands at both point and non-point sources of pollution. The act established the overarching California State Water Resources Control Board and nine semiautonomous Regional Water Boards. The Porter-Cologne Act requires the adoption of water quality control plans that give direction to managing water pollution in California. Usually, basin plans get adopted by the Regional Water Boards and are updated when needed. The plans incorporate the beneficial uses of the WoS and then provide objectives that should be met in order to maintain and protect these uses.

State Wetland Definition and Procedures for Discharges of Dredged or Fill Materials to Waters of the State

In response to the EPA and USACE “Navigable Waters Protection Rule” and reduction in water quality protections under CWA jurisdiction, the SWRCB adopted the “*State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*” (Procedures). On April 6, 2021, the SWRCB adopted the Procedures for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

According to the SWRCB, Procedures were adopted to address several important issues:

- strengthening protection of waters of the state that are no longer protected under the CWA since those waters of the state have historically relied on CWA protections in dredged or fill discharge permitting practices;
- inconsistency across the Regional Water Boards in requirements for discharges of dredged or fill material into waters of the state, including wetlands;
- no single accepted definition of wetlands at the state level;
- the Regional Water Boards may have different requirements and levels of analysis with regard to the issuance of water quality certification; and,
- current regulations have not been adequate to prevent losses in the quantity and quality of wetlands in California, where there have been especially profound historical losses of wetlands.

AFFECTED ENVIRONMENT

Hydrology

The Project area occurs within a single distinct topographic region of valley floor. The topography of the valley floor consists of low-elevation fluvial plains formed on nonmarine sedimentary rock with gently rolling terrain located on the Sacramento Valley floor. The Project site is at an elevation of approximately 35-50 feet above mean sea level within the Valley-America hydrologic unit, Coon Creek watershed, Ping Slough-Coon Creek subwatershed (HUC 180201610204).

Hydrological resources with the Project area include one surface water feature: Ping Slough. Ping Slough is an agricultural drainage channel used primarily to deliver water resources to the adjacent farmlands that are dominated by stone fruit orchards. Ping Slough also contributes to an upland riparian woodland corridor on either side of the channel through the Project area.

Groundwater

Seasonal groundwater level data was reviewed through the Groundwater Information Center Interactive Map Web Application (<https://gis.water.ca.gov/app/gicima/>) provided by the California Department of Water Resources (DWR) (DWR 2021). In the Project vicinity, the most recent (2020) readings of groundwater depths range from 10 feet to 30 feet water surface elevation in relation to the ground surface elevation. General groundwater depth may be influenced by local pumping, rainfall, and irrigation patterns. The proposed Project is within the Sacramento Valley Groundwater Basin, and more specifically, the Sacramento Valley – North American Subbasin. The Sacramento Valley – North American Subbasin is defined by the Sacramento River to the west, and bounded by Bear Creek/Dry Creek to the north and the American River to the south.

Flooding

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), the entire proposed Project site falls within FEMA Zone A, designated as a Special Flood Hazard Area subject to inundation by the 1% annual chance of flood (Appendix B).

DISCUSSION

- a) *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Less Than Significant Impact. The Project would have a disturbed soil area greater than one acre; therefore, a stormwater Construction General Permit (CGP) is required to address stormwater runoff. The permit will address clearing, grading, grubbing, and disturbances to the ground such as stockpiling or excavation. The permit also requires the County and the contractor to prepare and implement a SWPPP 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 stormwater runoff.

Further, the Project would be required to comply with Sutter County Improvement Standards Chapter 9 “Storm Drainage” and all regulatory permitting regarding water quality standards and waste discharge requirements (e.g., CWA Section 404 and Section 401), which would include design standards as well as construction BMPs for erosion and sediment control. In addition to the CGP, SWPPP, and County Improvement Standards, the regulatory permits will condition the Project to implement measures that will prevent degradation of water quality. Therefore, construction and operation of the Project would not violate any water quality standards or waste discharge requirements established by the Central Valley RWQCB in its Basin Plan for the Sacramento River and San Joaquin River Basins. Impacts would be considered less than significant.

- b) *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?*

Less than Significant Impact. The Project would not directly or indirectly result in the construction of uses that would utilize groundwater supplies. The Project design will include a minor increase in impervious surface for the replacement of the degraded Mark Hopkins Avenue; however, this is not anticipated to alter the drainage patterns in such a way that the minor increase would interfere with groundwater recharge. Additionally, the Project would not be constructed immediately above a pre-existing well, nor would areas known to contain wells be disturbed by construction of the proposed Project. Therefore, impacts to groundwater supplies would be less than significant.

- c) *Would the project 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 Impact. The Project would replace the Mark Hopkins Avenue over Ping Slough damaged CMP with a new, fully-functioning water conveyance facility. The Project would cause minor loss of vegetation and general disturbance of soil for construction within the Project footprint. Removal of vegetation and soil can accelerate erosion processes and increase the potential for sediment to enter into Ping Slough. The Project design will include a minor increase in impervious surface for the replacement of the Mark Hopkins Avenue road surface; however, the increase is minor and surface water would follow existing flow patterns.

Although construction activities are expected to alter the current conditions of the existing damaged culvert, these activities are not anticipated to alter the drainage pattern in a way that would result in substantial erosion, surface runoff, flooding on-site or off-site, or otherwise substantially degrade water quality. Minor increases in impervious surfaces resulting from the slightly wider roadway would not create run-off that would exceed the capacity of existing or planned stormwater drainage systems, and the Project would restore hydraulic capacity of the damaged CMP culvert. To support adherence with federal, state, and local regulations, regarding water quality, the Project would adhere to CGP, SWPPP, County Improvement Standards, and the Project's regulatory permit conditions. Measures to prevent substantial erosion or siltation would be implemented as part of the project.

The Project is located within a Zone A Special Flood Hazard Area; however, the Project would increase the current conditions flood capacity of the creek and restore hydraulic capacity of the Ping Slough crossing by replacing the existing damaged culvert. Therefore, the Project would not impede or redirect flood flows but, instead, would improve current conditions of the site during flood events.

Therefore, the construction and operation of the Project would not substantially alter the existing drainage patterns of the site or area; therefore, it would not cause adverse environmental effects related to hydrology and water quality, and impacts would be considered less than significant.

- d) *Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

No Impact. The Project is located within a FEMA Special Flood Hazard Area; however, construction of the Project would occur outside of the flood season. Additionally, as a culvert replacement Project, the operation of the Project would create no risk for release of pollutants due to Project inundation after Project completion. Therefore, no impact would occur.

- e) *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

No Impact. The Project would not conflict with or obstruct a water quality control plan or sustainable groundwater management plan. Therefore, no impact would occur.

FINDINGS

With compliance of the Sutter County Improvement Standards and all required regulatory permitting, the Project will have a **Less Than Significant Impact** 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

DISCUSSION

a) *Would the project physically divide an established community?*

No Impact. The Project would remove the existing damaged pipe culvert and install a structure that restores appropriate hydraulic conveyance through the site. The Project would not physically divide an established community. Therefore, no impact would occur.

b) *Would the project 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 be consistent with the Sutter County 2030 General Plan, Sutter County Improvements Standards, and applicable Sutter County Ordinances. Therefore, the Project would not cause a significant environmental impact due to conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, no impact would occur.

FINDINGS

The Project would not physically divide an established community or conflict with any land plan, policy or regulation. Therefore, the Project would have **No Impact** 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

DISCUSSION

- a) *Would the project 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. According to the Sutter County 2030 General Plan (2011), Sutter County contains areas classified by the State Geologist as Mineral Resource Zone (MRZ)-1 and MRZ-3. MRZ-1 indicates an area where little likelihood exists for the presence of significant mineral deposits. MRZ-3 indicates areas containing mineral deposits, the significance of which requires further evaluation. There are no areas within Sutter County designated by the State Mining and Geology Board to have regional or statewide significance.

Sutter County does have deposits of mineral resources that are composed predominantly of sand, gravel, soil for construction projects, and crushed stone. The CDC California Geological Survey is responsible for identifying and classifying mineral resource areas throughout the state. According to the “Mineral Land Classification: Concrete Aggregate in the Greater Sacramento Area Production-Consumption Region” (CDC 2018b), the Project area is not located within a known mineral resource deposit that would be of value to the region and the residents of the state. Therefore, the Project would not result in the loss of availability of a known mineral resource, and no impact would occur.

- b) *Would the project 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 is not located within an identified locally-important mineral resource recovery site delineated with the Sutter County 2030 General Plan (2011), specific plan or other land use plan. Therefore, the Project would not result in the loss of availability of a known mineral resource recovery site, and no impact would occur.

FINDINGS

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

2.13 NOISE

Would the project result in:	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?	☐	☐	☒	☐
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

Noise-sensitive land uses generally include those uses where exposure to noise would result in adverse effects, as well as uses where quiet is an essential element of their intended purpose. The Sutter County 2030 General Plan (2011) defines noise-sensitive land uses as: residences, schools, child-care centers, hospitals, long-term health care facilities, convalescent centers, and retirement homes. The Project area is located within land use designated as Agriculture – 20 acres. The Project would be situated within relatively close proximity (approximately 300 feet) from two rural residential homes.

DISCUSSION

- a) *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Less Than Significant Impact. Sutter County 2030 General Plan (2011) Policy N 1.6 and the Sutter County Municipal Code Article 1500-21.5 “Noise Control” establish noise standards for discretionary construction projects. The General Plan and Municipal Code establish standards and procedures to protect the health and safety of County residents from the harmful effects of exposure to excessive, unnecessary or offensive noise. Specifically, Policy N 1.6 and Section 1500-21.5-070 “Exceptions to Noise Standards” subsection (b) set the applicable timeframes for public works construction noise project effects:

“Construction. Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property or public works project located within 1,000 feet of noise-sensitive uses (i.e., residential uses, daycares, schools, convalescent homes, and medical care facilities), provided such activities take place between:

1. 7:00 a.m. to 6:00 p.m. on weekdays
2. 8:00 a.m. to 5:00 p.m. on Saturdays

Construction is prohibited on Sundays and legal holidays unless permission has been applied for and granted by the County.”

During construction, noise from equipment would cause short-term localized increases in ambient noise levels. The actual noise levels at any particular location would depend on a variety of factors, including the

type of construction equipment or activity involved, the distance to the source of the noise, the obstacles to noise that exist between the receptor and the source, the time of day, and similar factors. Construction of the proposed Project would result in a temporary, periodic increase in ambient noise levels. However, this increase would be temporary, intermittent, and limited to the daytime hours specified in the Sutter County 2030 General Plan and Municipal Code Article 1500-21.5. The Project would have no operational noise effects. Therefore, the Project would not be considered to generate a substantial temporary or permanent increase in ambient noise levels as established by Sutter County in relation to noise-sensitive receptors, and the Project would have a less than significant impact.

- b) *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Less Than Significant Impact. Ground-borne vibration related to human annoyance is generally related to root mean square (rms) velocity levels expressed in VdB. The Sutter County 2030 General Plan Policy N 1.7 establishes vibration standards for residences based upon the Federal Transit Administration (FTA) vibration criteria (see **Table 5**).

Table 5. Ground-Borne Vibration Impact Criteria for General Assessment

Land Use Category	Impact Levels (VdB)		
	Frequent Events ¹	Occasional Events ²	Infrequent Event ³
Category 1: Buildings where vibration would interfere with interior operations	65	65	65
Category 2: Residences and buildings where people normally sleep	72	75	80
Category 3: Institutional land uses with primarily daytime uses	75	78	83
Source: Federal Transit Administration, Transit Noise Impact and Vibration Assessment, May 2006.			
1. "Frequent Events" is defined as more than 70 vibration events of the same source per day.			
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.			
3. "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.			

According to the FTA *Transit Noise and Vibration Impact Assessment* (FTA 2006) vibration source levels for construction equipment (such as a large bulldozer) at 25 feet from the sensitive receptor result in vibrations of 87 VdB. At 300 feet, anticipated temporary construction vibratory effects would be dispersed well below the vibration impact criteria established in General Plan Policy N 1.7. Similar to noise effects to rural residential sensitive receptors, groundborne vibration would be temporary and intermittent and would not expose persons to or generate excessive groundborne vibrations or groundborne noise levels. Therefore, the Project would have a less than significant impact.

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

No Impact. The Project is not located within the vicinity of a private airstrip or an airport land use plan and is not within two miles of a public airport or public use airport. Therefore, the Project would not expose people residing or working in these areas to excessive noise levels, and no impact would occur.

FINDINGS

The Project would cause temporary construction-related noise and vibration; however, the Project would be required to be compliant with noise regulations provided in General Plan Policy N 1.6 and Municipal Code 1500-21.5. Therefore, the Project would have a **Less Than Significant Impact** 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 unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, 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) *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

No Impact. The purpose of the Project is to remove the existing damaged pipe culvert at the Mark Hopkins Avenue over Ping Slough crossing and install a replacement culvert facility which restores appropriate hydraulic conveyance through the site. The Project would not induce population growth, directly or indirectly, and no impact would occur.

- b) *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

No Impact. The purpose of the Project is to remove the existing damaged pipe culvert at the Mark Hopkins Avenue over Ping Slough crossing and install a replacement culvert facility which restores appropriate hydraulic conveyance through the site. Construction of the Project would not require permanent right-of-way acquisition and would not displace any existing housing or necessitate the construction of replacement housing elsewhere. Therefore, no impact would occur.

FINDINGS

The Project would have **No Impact** relating to population or 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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

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. The Project area is located in unincorporated Sutter County and consists solely of parcels zoned for agricultural use. The Project would construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing. Construction and operation of the Project would not result in substantial adverse physical impacts associated with provision of the new conveyance facility; nor would it result in the need for new or altered government facilities, construction of which would cause environmental effects in order to maintain acceptable service ratios. Therefore, the Project would have no impact to fire protection, police protection, schools, parks, or other public facilities.

FINDINGS

The Project would have **No Impact** 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?	☐	☐	☐	☒

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 would construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing to restore appropriate hydraulic conveyance through the site. The construction and/or operation of the completed Project would not increase the use of existing parks or other recreational facilities due to the location and nature of the Project, and no impact would occur.

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

No Impact. The Project does not include recreational facilities, nor does it require the construction or expansion of other recreational facilities, and no impact would occur.

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?	☐	☐	☐	☒
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d) Result in inadequate emergency access?	☐	☒	☐	☐

DISCUSSION

- a) *Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

No Impact. The Project would construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing to restore the appropriate hydraulic conveyance through the site. Construction of the Project would require degrade of the roadway to replace the existing damaged culvert; however, this construction would be temporary, and the roadway would be restored to its existing condition or better. The Project would be consistent with Sutter County Improvement Standards (Sutter County 2010), and would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Therefore, the Project would have no impact.

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

No Impact. The Project is not a transportation project that would increase or alter vehicle miles traveled within the circulation system and would not conflict with CEQA Guidelines section 15064.3. Therefore, the Project would have no impact.

- c) *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

No Impact. The Project would construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing in order to restore the appropriate hydraulic conveyance through the site. Construction of the Project would require degrade of the roadway to replace the existing damaged culvert; however, this construction would be temporary, and the roadway would be restored to its existing condition or better. The Project would not increase hazards due to a geometric design feature. Therefore, no impact would occur.

- d) *Would the project result in inadequate emergency access?*

Less Than Significant With Mitigation. Mark Hopkins Avenue is classified as a Local Road on the California Department of Transportation (Caltrans) California Road System Maps (Ref. Map 06H35). Primary access to the site is available off Berry Road from the north and off Cornelius Avenue from the

south. The average daily traffic is low; farming and other agricultural equipment regularly pass through the Project site to access the orchards and fields on both sides of the slough.

Mark Hopkins Avenue would be required to be closed for the duration of construction (estimated at approximately six months). The full closure will create an approximate 5.23-mile, 13-minute detour around the Project site using Berry Road, El Centro Boulevard, and Cornelius Avenue (**Figure 8**). During final design and approval of the Project, the proposed detour will be included in the Project's final plans and specifications package. Prior to construction, the County or the construction contractor would be required to prepare a Traffic Management Plan which will include the proposed detour route and locations of sign placement. The Traffic Management Plan will then be reviewed and approved by the Project Engineer. With the incorporation of the **TRA-1**, including the requirement for the Project to prepare a traffic management plan, the Project would not result in inadequate emergency access in the Project vicinity. Therefore, impacts would be considered less than significant with mitigation.

MITIGATION MEASURES

TRA-1: Prior to construction, the County or construction contractor will prepare a Traffic Management Plan which will include the proposed detour route and locations of sign placement. The Traffic Management Plan will be submitted for review and approval by the Project Engineer.

FINDINGS

The Project would have a **Less Than Significant Impact With Mitigation** relating to transportation/traffic.

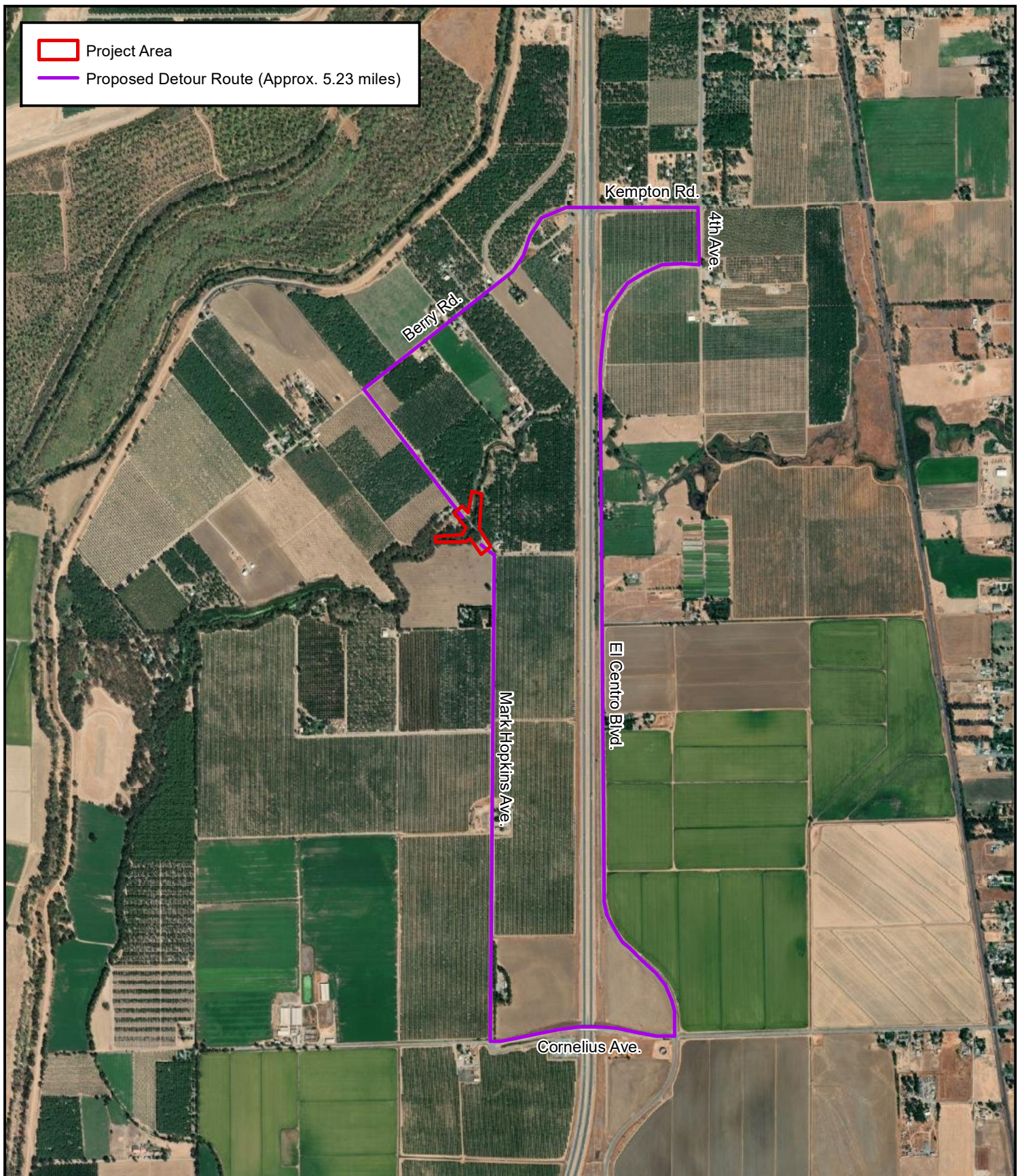
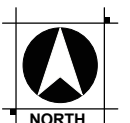
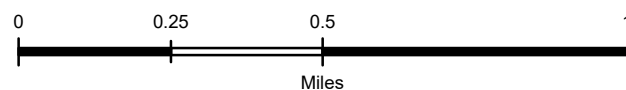


FIGURE 8

PROPOSED DETOUR ROUTE
 MARK HOPKINS AVENUE AT PING SLOUGH
 CULVERT REPLACEMENT PROJECT
 SUTTER COUNTY, CALIFORNIA
 FEBRUARY 2023



2.18 TRIBAL CULTURAL RESOURCES

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

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☐	☒
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.	☐	☐	☐	☒

REGULATORY SETTING

Federal Regulations

Indian Trust Assets

Indian Trust Assets (ITAs) are legal interests in property that is held in trust by the United States for Native American tribes or individuals. Examples of potential ITAs are lands, minerals, fishing rights, and water rights. Management of ITAs is based on the following orders, agreements, and regulations:

- Executive Order 13175, Consultation and Coordination with Indian Tribal Governments 65 FR 67249
- Memorandum on Government-to-Government Relations With Native American Tribal Governments (FR Volume 59, Number 85, signed April 29, 1994)
- Secretarial Order No. 3175 – Departmental Responsibilities for Indian Trust Resources
- Secretarial Order No. 3206 – American Indian Tribal Rights, Federal -Tribal Trust Responsibilities, and the Federal Endangered Species Act (ESA)
- Secretarial Order No. 3215 – Principles for the Discharge of the Secretary’s Trust Responsibility
- Secretarial Order No. 3342 – Identifying Opportunities for Cooperative and Collaborative Partnerships with Federally Recognized Indian Tribes in the Management of Federal Lands and Resources
- Secretarial Order No. 3335 – Reaffirmation of the Federal Trust Responsibility to Federally Recognized Tribes and Individual Indian Beneficiaries

American Indian Religious Freedom Act of 1978

The American Indian Religious Freedom Act of 1978 (AIRFA; 42 U.S.C. § 1996) protects the rights of Native Americans to exercise their traditional religions by ensuring access to sites, the use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites.

Historic Sites Act of 1935

The Historic Sites Act of 1935 (54 U.S.C. 320101–320106, formerly 16 U.S.C. 461–467) declares “...that it is a national policy to preserve for public use historic sites, buildings, and objects of national significance...,” asserting historic preservation as a government duty under jurisdiction of the United States Secretary of the Interior.

National Historic Preservation Act

As discussed and defined in Section 2.5, Cultural Resources, Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. For purposes of the discussion regarding tribal cultural resources, it is important to underscore that historic properties include properties of traditional religious and cultural importance to a Native American tribe or Native Hawaiian organization that meet the National Register criteria (36 C.F.R. § 800.16[1]).[1]

Traditional Cultural Properties and Traditional Cultural Landscapes

Traditional Cultural Properties (TCPs) are properties associated with cultural practices or beliefs of a living community that are: 1) rooted in that community's history; and 2) important in maintaining the continuing cultural identity of a community. TCPs can refer to properties of importance to any community, including Indigenous communities. The appropriate terminology for sites of importance to Native American/Indian tribes is *‘historic property of religious and cultural significance to an Indian tribe [and Native Hawaiian organization]’* (ACHP 2008:19; ACHP 2011:14). Traditional cultural landscapes (TCL) encompass the same meaning and utility, as well as inclusivity of Indigenous communities. The Secretary of the Interior’s Guidelines for the treatment of cultural landscapes define a cultural landscape as “*a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values*” (Birnbaum and Peters 1996:4). Historic vernacular landscapes “*evolved through use by the people whose activities or occupancy shaped them*” and ethnographic landscapes “*contain a variety of natural and cultural resources that associated people define as heritage resource*” (Birnbaum and Peter 1996:4; Ball et al. 2015:7).

National Register Bulletin 38 provides examples of TCPs and TCLs that fit the definition in the guidelines (Parker and King 1998:1):

- A location associated with the traditional beliefs of a Native American group about its origins, its cultural history, or the nature of the world;
- A rural community whose organization, buildings and structures, or patterns of land use reflect the cultural traditions valued by its long-term residents;
- An urban neighborhood that is the traditional home of a particular cultural group, and that reflects its beliefs and practices;
- A location where Native American religious practitioners have historically gone, and are known or thought to go today, to perform ceremonial activities in accordance with their traditional cultural rules of practice; and
- A location where a community has traditionally carried out economic, artistic, or other cultural practices important in maintaining its historic identity.

TCPs and TCLs are eligible for inclusion on the NRHP if they meet the criteria set forth in 36 C.F.R. § 60.4, National Register Criteria for Evaluation. The steps in the identification and evaluation of TCPs are the following (abbreviated from Parker and King 1998:11-14):

1. Potential Traditional Cultural Properties must be identified through consultation with the affected community or Tribe.
2. The investigation must consider the beliefs and practices associated with a potential Traditional Cultural Properties from the perspective of the community or Tribe
3. The potential Traditional Cultural Properties must be a property, that is, a tangible place on the landscape, rather than an intangible belief or practice.
4. The property must retain integrity of relationship with the beliefs and practices that give it meaning to the community or Tribe.
5. The property must retain integrity of condition, such that the elements of the property associated with the beliefs and practices that give it significance are present.
6. The property must meet one or more of the four criteria for eligibility on the National Register (see Section 2.5.1.1 Cultural Resources – Regulatory Setting – Federal).

Cultural resources routinely not considered for eligibility for inclusion in the NRHP are religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties achieving significance within the past 50 years. However, these resources, can be evaluated as eligible if they meet one or more of the NRHP eligibility criteria for evaluation, retain integrity, and meet special criteria requirements called criteria considerations. The most notable of the seven considerations (A through G) is Criteria Consideration G, which specifies that a property that has achieved significance within the last 50 years can qualify for the NRHP only if it is of exceptional importance. As noted by Parker and King (1998:17–18), *“a significance ascribed to a property only in the past 50 years cannot be considered traditional.”* However, they also note: *“The fact that a property may have gone unused for a lengthy period of time, with use beginning again only recently, does not make the property ineligible for the [National] Register”* (Parker and King 1998:14).

If a property is determined to be a TCP, it becomes the responsibility of the lead agency to assess whether the proposed Project would have an effect on the property, and should the effect be adverse, would it alter or destroy the elements that make the property significant and eligible. If a proposed project is determined to have an adverse effect, the lead agency is responsible for seeking measures that would mitigate the adverse effects to TCPs.

State Regulations

Tribal Cultural Resources

As defined at PRC § 21074, a tribal cultural resource (TCR) is a site, feature, place, cultural landscape, sacred place or object that is of cultural value to a California Native American tribe and is either: 1) on or eligible for the CRHR or a local historic register; or 2) the lead agency, at its discretion, chooses to treat the resource as a TCR. TCRs are similar to TCPs in terms of their characteristics, identification, and treatment, and may include a cultural landscape to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Additionally, as defined at PRC § 21074(c), a historical resource, a unique archaeological resource, or a non-unique archaeological resource may also be a TCR if it conforms to the criteria of a TCR in PRC § 21074(a). CEQA mandates that lead agencies determine whether a project will have a significant impact on TCRs that are eligible for listing on the CRHR (i.e., a historical resource), or are determined to be significant by the lead agency in order to appropriately mitigate any such impacts.

Under the CEQA Guidelines, even if a resource is not included on any local, state, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource (i.e., TCR) for the purposes of CEQA if there is substantial evidence supporting such a determination (CEQA Guidelines § 15064.5[a]). A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR. A resource may be eligible for inclusion in the CRHR if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage (Criterion 1);
- Is associated with the lives of persons important in our past (Criterion 2);
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of an important creative individual or possesses high artistic values (Criterion 3); and
- Has yielded, or may be likely to yield, information important in prehistory or history (Criterion 4).

In accordance with CEQA Guidelines, cultural resources investigations are necessary to identify TCRs that may have significant impacts as a result of a project (14 CCR §15064.5). The following steps are routinely implemented in a cultural resources investigation for CEQA compliance:

1. Identify cultural resources in the proposed Project area.
2. Evaluate against the CRHR criteria of significance (listed below).
3. Evaluate the impacts of the proposed Project on all cultural/tribal resources.
4. Develop and implement measures to mitigate proposed Project impacts on historical resources or resources deemed significant by the lead agency.

As TCRs hold cultural value to a California Native American tribe, consultation with local Native American tribes is an integral component of each of the cultural resources investigation steps described above.

Assembly Bill 52 and Consultation

The lead agency for CEQA is responsible for consultation with Native American tribes regarding the potential for a project to impact TCRs, pursuant to Assembly Bill 52 and PRC §§ 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2, 21084.3, and 5097.94(m). Assembly Bill 52 recognizes that “...tribes may have expertise with regard to their tribal history and practices, which concern the tribal cultural resources with which they are traditionally and culturally affiliated...” and that consultation will occur between a lead agency and Native American tribes for covered projects.

PRC §21080.3.1 (a) and Government Code §65352.4 define consultation as “*the meaningful and timely process of seeking, discussing, and considering carefully the views of others, in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement. Consultation between government agencies and Native American tribes shall be conducted in a way that is mutually respectful of each party's sovereignty. Consultation shall also recognize the tribes' potential needs for confidentiality with respect to places that have traditional tribal cultural significance.*”

As described in Section 2.5, Cultural Resources, a proposed project may induce a significant impact to a historical resource, unique archaeological resource, or a TCR if it causes a substantial adverse change

(i.e., physical demolition, destruction, relocation, or alteration) to the resource or immediate surroundings (14 CCR 15064.5[b]), thereby demolishing or significantly altering the physical characteristics that qualify it for listing on the CRHR or local registers (PRC §§ 5020.01[k] and 5024.1[g]). A project 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). A lead agency shall establish measures to avoid impacts that would alter significant characteristics of a TCR, when feasible (PRC § 21084.3). As such, the County is committed to working together with tribes, and consultation efforts with California Native American tribes are described below.

Native American Historical, Cultural, and Sacred Sites

Pursuant to PRC 5097.94 the NAHC has authority and duty to “*identify and catalog places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands*” and has the power and duty to make recommendations for acquisition by the state or other public agencies regarding Native American sacred places that are located on private lands, are inaccessible to Native Americans, and have cultural significance to Native Americans.

California Native American Graves Protection and Repatriation Act of 2001

The California Native American Graves Protection and Repatriation Act of 2001 (CalNAGPRA) requires all state agencies and museums that receive state funding and that have possession or control over collections of human remains or cultural items to provide a process for the identification and repatriation of these items to the appropriate tribes.

Local Regulations

Sutter County 2030 General Plan

The County’s 2030 General Plan adopted a single overarching goal related to cultural resources, Goal ER 8: “*Identify, protect, and enhance Sutter County’s important cultural and paleontological resources to increase awareness of the County’s heritage*” and includes nine (9) Policies (Policies ER 8.1 through ER 8.9). Implementation of the specific policies is established within the General Plan regarding projects with discretionary approval requirements and/or when the County has determined that the proposed action could cause a substantial adverse change in the significance of an archaeological, historical, or tribal cultural resource (Sutter County 2011).

AFFECTED ENVIRONMENT

The Project area is located along the southwestern edge of Maidu (Nisenan) territory, bordering near eastern Patwin territory and northwestern Miwok territory. Numerous villages have been reported near the confluence of the Sacramento and Feather Rivers, which is located roughly 11.5 miles south-southwest of the Project area. These villages include Olo, Wollok, Leuchi, and Nawe (Wilson and Towne 1978:388). There are two close villages that Kroeber depicts: Ola (located about 11 miles to the southwest of the APE) and Yikulme (located approximately three miles to the northwest.) Both are on the Feather River (Kroeber 1976: Plate 37).

Methodology

A record search and field survey were conducted for the Project. Please see Section 2.5 (Cultural Resources) for more information on the results of the record search and field survey.

PAR Environmental Services, Inc. contacted the NAHC with a request to search the Sacred Lands File (SLF) for any information pertaining to the APE on July 29, 2022. The NAHC responded on November 21, 2022 stating that the SLF search was negative. On behalf of Sutter County, PAR Environmental Services, Inc.

sent digital letters to 13 tribes who have requested to be included in consultation for Sutter County projects under AB 52.

DISCUSSION

If a lead agency determines that a project may cause a substantial adverse change to a TCR, 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.

- a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, 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)*

No Impact. As described above, on behalf of Sutter County, PAR Environmental Services, Inc. provided formal notification to tribal representatives who represent groups with traditional and cultural ties to the Project site. To date, no requests for consultation have been received. As such, the proposed Project would not cause an adverse change in the significance of a listed or eligible tribal cultural resource.

- b) Would the project cause a substantial adverse change in the significance of 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.*

No Impact. As described above, on behalf of Sutter County, PAR Environmental Services, Inc. provided formal notification to tribal representatives who represent groups with traditional and cultural ties to the Project site. To date, no requests for consultation have been received, and no information regarding potential tribal cultural resources in the APE have been received. As such, the proposed Project would not cause an adverse change in the significance of a listed or eligible tribal cultural resource.

MITIGATION MEASURES

No mitigation is required.

FINDINGS

The Project would have **No Impact** 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☒	☐
e) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

AFFECTED ENVIRONMENT

Mark Hopkins Avenue is a narrow two-lane, two-way County maintained road surrounded by agricultural parcels. The approximately 20-foot-wide paved surface has a varying width unpaved shoulder on each side. The terrain is generally flat on both sides, with a deep roadside ditch running parallel to the road on the northeast side. The road drains via sheet flow to the unpaved shoulders on both sides.

Ping Slough flows generally north to south and crosses under El Centro Avenue and SR 70 upstream of Mark Hopkins Avenue. Heavy vegetation surrounds the inlet and outlet of the culvert on both sides of the banks. Overhead electrical and communication lines run along the northeast side of the road through the Project site.

Sutter County indicates there was once an old bridge on concrete abutments that carried the road over the slough. Evidence of these existing abutments is visible, and it is likely that they are buried under the existing roadway. At some point, the bridge deck was removed and a 66-inch CSP culvert was installed in its place.

The Mark Hopkins Avenue site has experienced damage due to the existing corrugated steel pipe culvert being undersized for conveying the flow in Ping Slough. Over time, large flows and corrosion have damaged the CSP to the point where the roof has partially collapsed on the upstream side. This has caused the road to sink, resulting in cracking and spalling of the pavement over the culvert. The County has had to close the northbound lane through the Project site to avoid traffic from further loading the failed culvert and has installed a temporary one-lane stop controlled configuration. The area around the failed culvert is protected by channelizers to direct vehicles away from the damaged area. The single lane, two-way operation is controlled by line-of-sight stop signs.

DISCUSSION

- a) *Would the project 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. The Project would construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing to restore appropriate hydraulic conveyance through the site. Construction methodology will consist of installing a temporary cofferdam apparatus and diverting flows around the work area, dewatering the work area, removal of the existing culvert, and construction of the new culvert in the same location. The existing overhead lines on the northeast side of the road may limit installation equipment and operations, and the use of overhead equipment may require the lines to be temporarily de-energized (if possible) or temporarily relocated.

Project construction would require the removal of vegetation and impacts to sensitive natural communities. Project effects to biological resources are discussed in Section 2.4 and, with the incorporation of avoidance, minimization and mitigation measures BIO-1 through BIO-16, impacts would be considered less-than-significant with mitigation.

Similarly, ground disturbance associated with construction activities could contact unknown cultural resources within the Project's APE. Project effects to cultural and historic resources are discussed in Section 2.5 and Section 2.18. With the incorporation of measures CUL-1 through CUL-2, potentially significant impacts related to inadvertent discovery of cultural or historic resources during construction would be mitigated to a less-than-significant level.

Therefore, the Project would not cause significant environmental effects related to replacement of water conveyance facilities or the temporary relocation of overhead utility lines, and the Project would have a less-than-significant impact.

- b) *Would the project 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 construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing to restore appropriate hydraulic conveyance through the site. The Project would not result in the need for new or expanded water supplies, and no impact would occur.

- c) *Would the project 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 not include the construction of any wastewater-generating uses, and no impact to wastewater service or capacity would occur.

- d) *Would the project 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 Impact. Construction activities are anticipated to generate typical amounts of solid waste; however, this amount would not be 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. Therefore, the Project would have a less than significant impact.

- e) *Would the project comply with federal, state, and local statutes and regulations related to solid waste?*

No Impact. The construction contractor would be required to dispose of all solid waste at an appropriate waste disposal facility or landfill, and in compliance with all federal, state, and local statutes and regulations regarding solid waste, and no impact would occur.

FINDINGS

The Project would have a **Less Than Significant Impact** 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
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?	☐	☐	☐	☒

DISCUSSION

- a) *Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

No Impact. The Sutter County Emergency Operations Plan (EOP) was approved by the Board of Supervisors in October 2011 and updated in January 2015. The EOP addresses the planned response to emergency situations associated with natural disasters, technological incidents, and national security emergencies in or affecting Sutter County. According to the EOP, the responsibility for fire suppression rests with the local fire protection agencies (Sutter County 2015). Project construction or operation would not impair the adopted EOP, and no impact would occur.

- b) *Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

No Impact. The Project would construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing to restore appropriate hydraulic conveyance through the site. According to the Sutter County CAL FIRE, Fire Hazard Severity Zone Map (CAL FIRE 2007), the Project area is not within a State-Responsibility or Local-Responsibility Area listed as having a high or moderate potential for wildfire. Therefore, the Project is not anticipated to exacerbate wildfire risks due to slope, prevailing winds, or other factors. No impact would occur.

- c) *Would the project 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. According to the Sutter County CAL FIRE, Fire Hazard Severity Zone Map (CAL FIRE 2007), the Project area is not within a State-Responsibility or Local-Responsibility Area listed as having a high or moderate potential for wildfire. Project construction would involve the temporary relocation of utility lines and does have roadway components that may require maintenance in the future; however, maintenance activities would not be part of the Project, and the Project would not exacerbate fire risk, or result in temporary or ongoing impacts to the environment. No impact would occur.

- d) *Would the project 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 construct a replacement culvert facility at the Mark Hopkins Avenue over Ping Slough crossing to restore appropriate hydraulic conveyance through the site. Project construction and operation would not expose people or structures to significant risks.

FINDINGS

The Project would have **No Impact** relating to wildfire.

2.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than 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?	☐	☐	☒	☐

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. Based upon the review and analysis of potential adverse effects to the environment provided in this Initial Study (including the project-specific mitigation measures) the proposed Project would not substantially degrade the overall quality of the environment within the Project area.

Respectively, the analysis determined that Section 2.4 Biological Resources, Section 2.5 Cultural Resources, Section 2.18 and Tribal Cultural Resources must be mitigated to a less-than-significant level with incorporation of project-specific mitigation measures. The Project has the potential to impact the Swainson's Hawk and migratory birds, and also has the potential for inadvertent discovery of cultural resources, including tribal cultural resources. However, mitigation measures would reduce the level of all project-related impacts to less-than-significant levels. Therefore, the Project impacts would be considered less-than-significant with mitigation.

- 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. Implementation of the Project, in conjunction with other approved or pending projects in Sutter County, would not have adverse environmental impacts at a significant level or result in cumulatively considered impacts to the environment. Project-specific, potentially significant impacts would be mitigated to a less than significant level and would not result in cumulatively considerable impacts. Therefore, the Project would have a less than significant impact.

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

Less Than Significant Impact. The Project would not have environmental effects which will cause substantial adverse effects on human beings. With respect to the analysis provided in this Initial Study, potential effects of the Project on human beings would be temporary and related to Project construction. Specifically, any project impacts on human beings would be considered less-than-significant relating to air, noise, hazards and hazardous materials, transportation/traffic and utilities and service systems. No significant adverse effects to human beings would occur, and project effects are considered less than significant.

FINDINGS

Through compliance with applicable Sutter County codes, regulations, and regulatory permitting, along with the project-specific mitigation measures noted previously, the Project will not have a significant impact relating to degradation of the quality of the environment, nor have impacts that are individually limited, but cumulatively considerable; nor have environmental effects which would cause substantial adverse effects, either directly or indirectly, on human beings. Therefore, there are no potentially significant determinations for mandatory findings of significance.

3.0 Comments and Coordination

This chapter summarizes Sutter County efforts to identify, address and resolve project-related issues through early and continuing coordination.

3.1 CONSULTATION AND COORDINATION WITH PUBLIC AGENCIES

Consultation and/or coordination with the following agencies was, or will be initiated for the Project:

- Feather River Air Quality Management District
- California Department of Fish and Wildlife
- Central Valley – Regional Water Quality Control Board
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service

3.2 PUBLIC PARTICIPATION

The public comment period for the Project will occur from May 16, 2023, to June 15, 2023. All written comments received by Sutter County will be incorporated into the Final IS/MND and added in an appendix. Any additions or corrections to the IS/MND subsequent to public comments will be addressed within the final document.

4.0 Distribution List

A Notice of Availability was prepared and posted with the Sutter County Clerk-Recorder Office, the Appeal Democrat Newspaper, and distributed to all owners and occupants of property parcels contiguous to the Project area. Additionally, the Draft IS was distributed to the following agencies and interested parties (unless IS hardcopies specified).

Sutter County, Development Services Department
1130 Civic Center Boulevard
Yuba City, CA 95993
(IS hardcopies)

State Government

Governor's Office of Planning and Research – California State Clearinghouse
CEQA Submit Online Database

Local Agencies

Sutter County Clerk-Recorder
433 Second Street
Yuba City, CA 95991

5.0 List of Preparers

Wood Rodgers, Inc.

Andrew Dellas, MS, PWS, Senior Biologist / Environmental Planner

Tim Chamberlain, Senior Environmental Planner

Chris Hodges, PE, Principal Engineer

Stacey Randall, PE, Senior Engineer

PAR Environmental Services, Inc.

Ellie Maniery, MA, RPA, Project Manager, Senior Archaeologist

Sutter County

Scott S. Riddle, PE, Sutter County Development Services

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Appendix A.

CalEEMod Summary Report

Mark Hopkins Ave. over Ping Slough Culvert Replacement Project Summary Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mark Hopkins Ave. over Ping Slough Culvert Replacement Project
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	39.6
Location	38.942694685365126, -121.54903413947673
County	Sutter
City	Unincorporated
Air District	Feather River AQMD
Air Basin	Sacramento Valley
TAZ	308
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	1.00	Mile	1.90	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.99	0.83	8.09	7.64	0.01	0.35	1.60	1.95	0.33	0.82	1.15	—	1,213	1,213	0.05	0.01	0.00	1,217
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.05	0.49	0.50	< 0.005	0.02	0.07	0.09	0.02	0.03	0.05	—	84.6	84.6	< 0.005	< 0.005	0.00	84.8
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.09	0.09	< 0.005	< 0.005	0.01	0.02	< 0.005	0.01	0.01	—	14.0	14.0	< 0.005	< 0.005	0.00	14.0
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	80.0	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	—	—	—	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	25.0	25.0	—	—	80.0	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	—	No	No	—	—	No	—	—	—	—	—	—	—	—	—	—	—	—

6. Climate Risk Detailed Report

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	0	0	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	5	1	1	4
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

7. Health and Equity Details

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	52.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

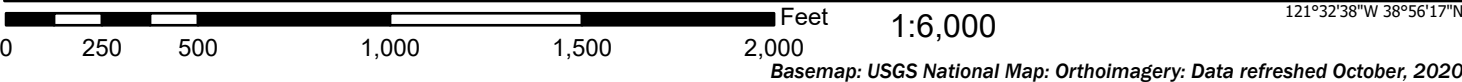
Appendix B.

FEMA FIRMette Map

National Flood Hazard Layer FIRMMette



121°33'16"W 38°56'45"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>
		Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>
		Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>
		Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>
		Effective LOMRs
		Area of Undetermined Flood Hazard <i>Zone D</i>
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **8/31/2021 at 6:01 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix C.

Special Status Species Database Query Results



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:

June 27, 2022

Project Code: 2022-0058064

Project Name: Mark Hopkins Avenue at Ping Slough Crossing

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.

Attachment(s):

- Official Species List

Official Species List

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

This species list is provided by:

Sacramento Fish And Wildlife Office

Federal Building

2800 Cottage Way, Room W-2605

Sacramento, CA 95825-1846

(916) 414-6600

Project Summary

Project Code: 2022-0058064

Event Code: None

Project Name: Mark Hopkins Avenue at Ping Slough Crossing

Project Type: Bridge - Replacement

Project Description: Ping slough bridge rehabilitation or replacement.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.942775749999996,-121.54907094241779,14z>



Counties: Sutter County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

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

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

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

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

Birds

NAME	STATUS
Yellow-billed Cuckoo <i>Coccyzus americanus</i> Population: Western U.S. DPS 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/3911	Threatened

Reptiles

NAME	STATUS
Giant Garter Snake <i>Thamnophis gigas</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4482	Threatened

Fishes

NAME	STATUS
Delta Smelt <i>Hypomesus transpacificus</i> 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	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> 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: https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS
Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> 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/498	Threatened
Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> 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

Critical habitats

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

IPaC User Contact Information

Agency: Wood Rodgers, Inc.

Name: Andrew Dellas

Address: 3301 C St. #100B

City: Sacramento

State: CA

Zip: 95816

Email: adellas@dokkenengineering.com

Phone: 9165861695



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad> IS >(Nicolaus (3812185)> OR >Olivehurst (3912115)> OR >Wheatland (3912114)> OR >Sheridan (3812184))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Antioch Dunes anthicid beetle <i>Anthicus antiochensis</i>	IICOL49020	None	None	G1	S3	
bank swallow <i>Riparia riparia</i>	ABPAU08010	None	Threatened	G5	S2	
California linderiella <i>Linderiella occidentalis</i>	ICBRA06010	None	None	G2G3	S2S3	
chinook salmon - Central Valley spring-run ESU <i>Oncorhynchus tshawytscha</i> pop. 11	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	ICBRA03010	Endangered	None	G2	S2	
dwarf downingia <i>Downingia pusilla</i>	PDCAM060C0	None	None	GU	S2	2B.2
Ferris' milk-vetch <i>Astragalus tener</i> var. <i>ferrisiae</i>	PDFAB0F8R3	None	None	G2T1	S1	1B.1
giant gartersnake <i>Thamnophis gigas</i>	ARADB36150	Threatened	Threatened	G2	S2	
Great Valley Cottonwood Riparian Forest <i>Great Valley Cottonwood Riparian Forest</i>	CTT61410CA	None	None	G2	S2.1	
Great Valley Mixed Riparian Forest <i>Great Valley Mixed Riparian Forest</i>	CTT61420CA	None	None	G2	S2.2	
green sturgeon - southern DPS <i>Acipenser medirostris</i> pop. 1	AFCAA01031	Threatened	None	G2T1	S1	
Hartweg's golden sunburst <i>Pseudobahia bahiifolia</i>	PDAST7P010	Endangered	Endangered	G1	S1	1B.1
North American porcupine <i>Erethizon dorsatum</i>	AMAFJ01010	None	None	G5	S3	
Northern Hardpan Vernal Pool <i>Northern Hardpan Vernal Pool</i>	CTT44110CA	None	None	G3	S3.1	
northern harrier <i>Circus hudsonius</i>	ABNKC11011	None	None	G5	S3	SSC
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
recurved larkspur <i>Delphinium recurvatum</i>	PDRAN0B1J0	None	None	G2?	S2?	1B.2
Sacramento anthicid beetle <i>Anthicus sacramento</i>	IICOL49010	None	None	G1	S4	
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	AFCJB34020	None	None	G3	S3	SSC



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



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Sacramento Valley tiger beetle <i>Cicindela hirticollis abrupta</i>	IICOL02106	None	None	G5TH	SH	
Sanford's arrowhead <i>Sagittaria sanfordii</i>	PMALI040Q0	None	None	G3	S3	1B.2
steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus pop. 11</i>	AFCHA0209K	Threatened	None	G5T2Q	S2	
Swainson's hawk <i>Buteo swainsoni</i>	ABNKC19070	None	Threatened	G5	S3	
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T2T3	S3	
veiny monardella <i>Monardella venosa</i>	PDLAM18082	None	None	G1	S1	1B.1
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	ICBRA03030	Threatened	None	G3	S3	
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	ICBRA10010	Endangered	None	G4	S3S4	
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G2G3	S3	SSC
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP

Record Count: 32

Search Results

6 matches found. Click on scientific name for details

Search Criteria: CRPR is one of [1A:1B:2A:2B:3] , Quad is one of [3812184:3812185:3912114:3912115]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK
<u><i>Astragalus tener</i></u> <u>var. <i>ferrisiae</i></u>	Ferris' milk-vetch	Fabaceae	annual herb	Apr-May	None	None	G2T1	S1	1B.1
<u><i>Delphinium recurvatum</i></u>	recurved larkspur	Ranunculaceae	perennial herb	Mar-Jun	None	None	G2?	S2?	1B.2
<u><i>Downingia pusilla</i></u>	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2
<u><i>Monardella venosa</i></u>	veiny monardella	Lamiaceae	annual herb	May-Jul	None	None	G1	S1	1B.1
<u><i>Pseudobahia bahiifolia</i></u>	Hartweg's golden sunburst	Asteraceae	annual herb	Mar-Apr	FE	CE	G1	S1	1B.1
<u><i>Sagittaria sanfordii</i></u>	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2

Showing 1 to 6 of 6 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 27 June 2022].

CONTACT US

Send questions and comments to rareplants@cnps.org.



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