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Office of Planning and
Environmental Review
Leighann Moffitt, Director



County Executive
Navdeep S. Gill

Mitigated Negative Declaration

Pursuant to Title 14, Division 6, Chapter 3, Article 6, Sections 15070 and 15071 of the California Code of Regulations and pursuant to the Procedures for Preparation and Processing of Environmental Documents adopted by the County of Sacramento pursuant to Sacramento County Ordinance No. SCC-116, the Environmental Coordinator of Sacramento County, State of California, does prepare, make, declare, publish, and cause to be filed with the County Clerk of Sacramento County, State of California, this Mitigated Negative Declaration re: The Project described as follows:

1. **Control Number:** 2012-70057
2. **Title and Short Description of Project:** MICHIGAN BAR ROAD OVER THE COSUMNES RIVER BRIDGE REPLACEMENT PROJECT
The proposed project will replace a functionally obsolete one-lane bridge over the Cosumnes River on Michigan Bar Road. The new one-lane bridge will consist of a two-span pre-fabricated steel pony truss structure 360 feet long and 16 feet wide. The new bridge with new approaches and abutments will be built along the same alignment as the existing bridge.
3. **Assessor's Parcel Number:** N/A
4. **Location of Project:** The project site is located along Michigan Bar Road in eastern unincorporated Sacramento County approximately 1.2 miles north of Jackson Highway
5. **Project Applicant:** Sacramento County Department of Transportation
6. Said project will not have a significant effect on the environment for the following reasons:
 - a. It will not 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, 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. It will not have the potential to achieve short-term, to the disadvantage of long-term, environmental goals.
 - c. It will not have impacts, which are individually limited, but cumulatively considerable.
 - d. It will not have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly.
7. As a result thereof, the preparation of an environmental impact report pursuant to the Environmental Quality Act (Division 13 of the Public Resources Code of the State of California) is not required.
8. The attached Initial Study has been prepared by the Sacramento County Office of Planning and Environmental Review in support of this Mitigated Negative Declaration. Further information may be obtained by contacting the Office of Planning and Environmental Review at 827 Seventh Street, Room 225, Sacramento, California, 95814, or phone (916) 874-6141.

Governor's Office of Planning & Research

AUG 12 2019

STATE CLEARINGHOUSE

[Original Signature on File]

Tim Hawkins

Environmental Coordinator

County of Sacramento, State of California

COUNTY OF SACRAMENTO
PLANNING AND ENVIRONMENTAL REVIEW DIVISION
INITIAL STUDY

PROJECT INFORMATION

CONTROL NUMBER: 2012-70057

NAME: MICHIGAN BAR ROAD OVER THE COSUMNES RIVER BRIDGE REPLACEMENT PROJECT

LOCATION: The project site is located along Michigan Bar Road in eastern unincorporated Sacramento County approximately 1.2 miles north of Jackson Highway (see Plate IS-1 and Plate IS-2).

ASSESSOR'S PARCEL NUMBER: N/A

OWNER/ APPLICANT:

Sacramento County Department of Transportation
Attn: Tim Stevens
4111 Branch Center Rd
Sacramento, CA 95827

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PROJECT DESCRIPTION

The proposed project will replace a functionally obsolete one-lane bridge over the Cosumnes River on Michigan Bar Road. The new one-lane bridge will consist of a two-span pre-fabricated steel pony truss structure 360 feet long and 16 feet wide. The new bridge with new approaches and abutments will be built along the same alignment as the existing bridge.

PROJECT CHARACTERISTICS

The replacement bridge is a two-span pre-fabricated steel pony truss structure that will be 360 feet long and 16 feet wide between barriers.

The Project includes improvements to the roadway approaches to accommodate the increased width and higher road profile grade required to meet the Central Valley Flood Control Board (CVFPB) freeboard requirements for the new bridge. The existing road profile will be raised approximately one foot. The Project will also include paving a portion of the southbound approach, which is currently dirt; striping and stop controls will be added to both bridge approaches.

The three existing bridge piers will be removed and replaced with a single pier for the new structure. The abutments for the new bridge will remain in the same location and alignment as the existing abutments with a slightly larger footprint to accommodate the wider bridge. The project footprint and impact map is shown on Plate IS-3, and images of the existing and proposed bridge designs are shown on Plate IS-4.

The project site is accessible by large trucks and equipment only from the southern approach of Michigan Bar Road because of the narrow dirt road conditions to the north. Therefore, the Project will require construction of two temporary river crossings for equipment access and staging north of the river. A staging area has been identified north of the river. A water diversion system with gravel/rock crossing will provide temporary access across the river during construction. The gravel/rock will be placed on a heavy visqueen liner to avoid impacts to the underlying substrate during placement and removal of the gravel/rock. One crossing will be placed through the shallow portion of the river downstream of the bridge, and another crossing will be placed near the existing bridge for equipment access to the bridge piers and southern abutment area.

Installation of water diversion systems will be consistent with Section NS-5 of the Caltrans Construction Site BMPs Manual (Caltrans 2003). Diversion methods may include the use of water pillows, rock, sandbags, sheet piling, pipes or coffer dams, or other structural methods approved by the Project Engineer. Materials used for water diversion systems and temporary access crossings will be removed and the site restored to pre-project conditions immediately following project completion.

Michigan Bar Road Over the Cosumnes River Bridge Replacement Project

Plate IS-1: Regional Project Location

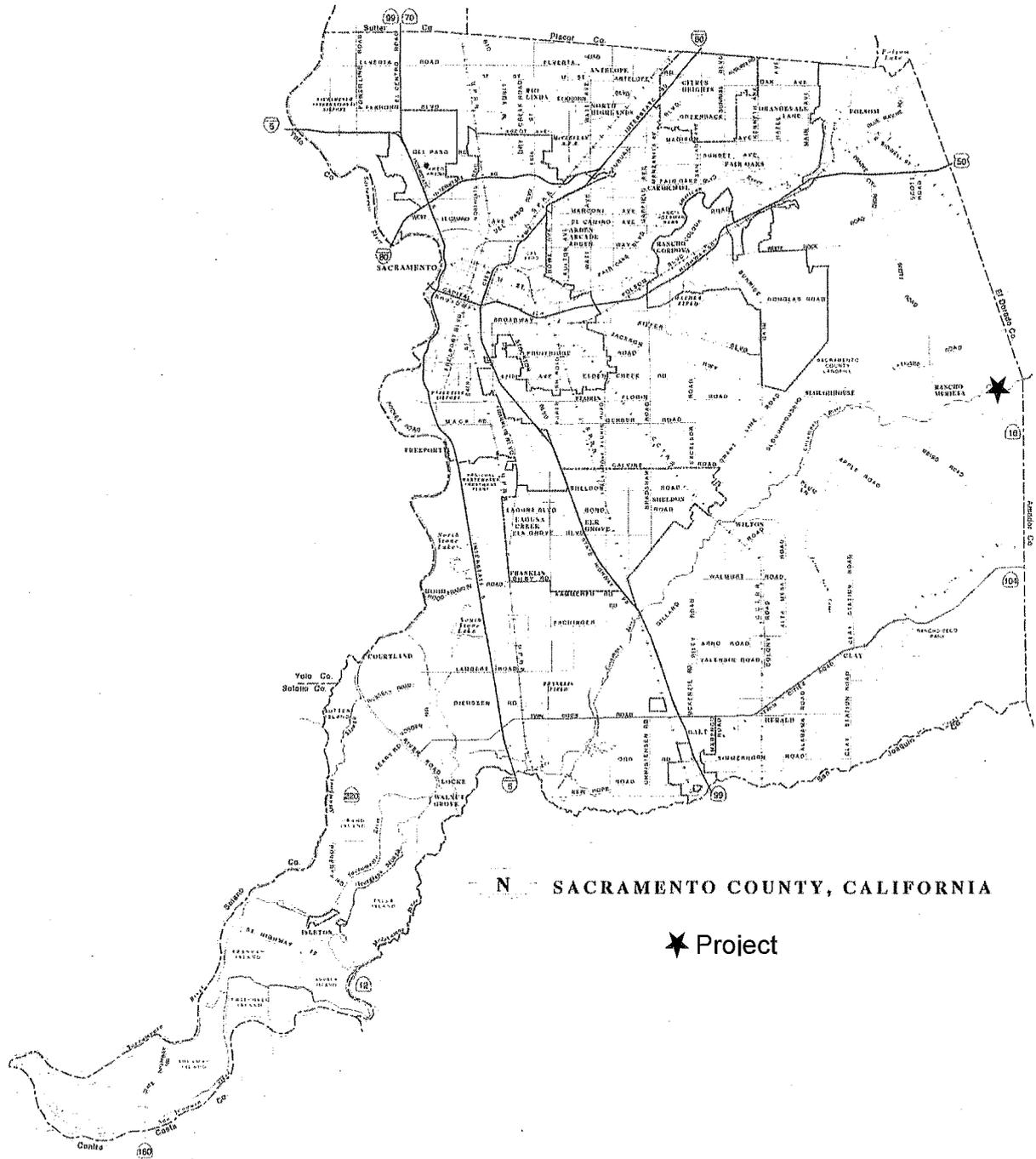


Plate IS-2: Project Location Aerial Photograph



Plate IS-3: Project Footprint and Impact Map

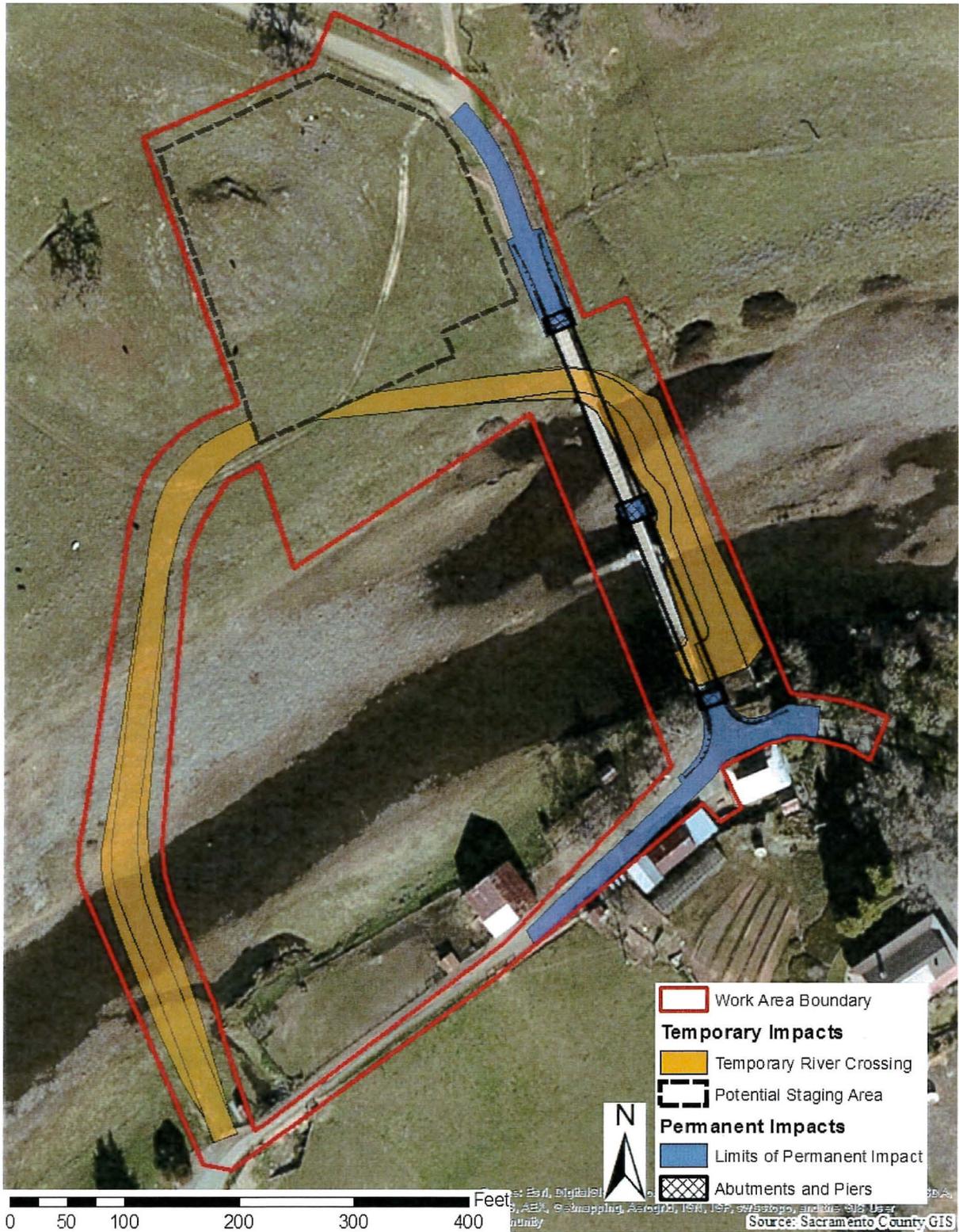


Plate IS-4: Existing Bridge and Rendering of Proposed Bridge Design



Existing 4-Span Bridge, looking west.



Proposed 2-Span Metal Pony Truss Bridge, looking east.

ENVIRONMENTAL SETTING

The project is located along Michigan Bar Road in rural eastern Sacramento County approximately three miles east of the community of Rancho Murieta. The project site consists of approximately 420 linear feet of Michigan Bar Road including the existing bridge and road shoulders, a portion of the Cosumnes River, and portions of the adjacent privately owned parcel.

Michigan Bar Road travels north-south over the Cosumnes River. The road bends sharply to the west on the south side of the bridge and parallels the Cosumnes River trending east-west for approximately 180 feet before curving south again. Michigan Bar Road is a single-lane paved road south of the bridge and transitions to dirt just beyond the northern bridge abutment.

Land surrounding the Michigan Bar Road Bridge has been used primarily for cattle ranching and grazing since 1877. This single, privately owned parcel remains a working ranch today and covers 1,758 acres on both sides of the Cosumnes River dominated by blue oak savanna grazing land. Several residences and outbuildings with associated landscaping, including four mature sycamore trees (*Platanus* sp.) are located along Michigan Bar Road south of the Cosumnes River

There are two utility poles and overhead powerlines in the project area near the southern bridge abutment. These utility lines serve a single pump station used by the property owner to pump water from the river for agricultural use.

COSUMNES RIVER

The Cosumnes River is a rain-fed stream that originates at relatively low elevations on the western slope of the Sierra Nevada and is generally not fed by hydrology from snow melt during the summer months. Consequently, the Cosumnes River is known to have little to no water flow during the summer. Declining groundwater levels also contribute to increasingly lower water levels in the Cosumnes River causing it to become completely dry from Highway 16 downstream to the tidally influenced reach of the river during the summer and fall of most years. During these dry summer months, the hydraulic connection between the Cosumnes River and the Mokelumne River is broken. Hydraulic connection is usually made again in mid-October or November after heavy rains.

The Cosumnes River channel bottom within the project area is comprised of moderately sorted river cobble in a thin matrix of sand and gravel. The topography and substrate in the project area have been heavily influence by historical gulch and hydraulic mining activities. The river bed is approximately 173 feet above sea level at the location of the bridge. The north river bank has a very gradual slope where river water flows during high water conditions. The south river bank is more steeply sloped especially near the southern bridge abutment.

The river banks in the project area lack tree canopy and shrub layer riparian vegetation. Herbaceous vegetation along the river edges is dominated by upland grasses and forbs intermingled with some hydrophytic vegetation.

BACKGROUND

The Michigan Bar Road over the Cosumnes River Bridge (24C-0056) Replacement Project (Project) is a federally funded project through the Federal Highway Administration (FHWA). The bridge is located along Michigan Bar Road in eastern Sacramento County approximately three miles east of the community of Rancho Murieta. The purpose of the Project is to replace the existing one-lane bridge with a new, slightly wider one-lane bridge, to improve bridge passage and roadway safety.

The existing Michigan Bar Road Bridge (24C-0056) is a one lane structure with a concrete panel deck on modular steel box deck trusses and steel girders supported on rubble masonry piers and abutments, and one steel bent. This 4-span bridge, constructed in 1947, has been determined functionally obsolete by Caltrans due to deck geometry and is currently in an advanced state of deterioration. It is approximately 353 feet long and 11 feet 2 inches wide and does not meet American Association of State Highway and Transportation Officials (AASHTO) minimum standards.

The first known bridge at Michigan Bar appears to have been a private toll bridge constructed in 1853 after gold was discovered in 1849 on the Cosumnes River near the project site. This bridge was eventually purchased by the County as a public crossing and was replaced in 1909. The current bridge was built in 1947 partially on piers of the previous bridge.

Caltrans Bridge Inspection Reports from 2010 rated the existing bridge Structurally Deficient with a sufficiency rating of 47.9. The 2013 Inspection Report downgraded the sufficiency rating to 36.3. The bridge is functionally obsolete due to deck geometry and is currently in an advanced state of deterioration. Noted deficiencies of the structure include scour critical problems, poor condition of bridge railings and approaches, poor quality welds on steel box trusses, paint loss, moderate surface rust and minor pitting.

ENVIRONMENTAL EFFECTS

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed an Initial Study Checklist (located at the end of this report). The Checklist identifies a range of potential significant effects by topical resource area (e.g. Public Services, Transportation/Traffic, Air Quality etc.), and assists in the examination of potential project impacts. When, during preparation of the Checklist, the need is identified for more in depth analysis, detailed topical discussions are included in the text of the Initial Study. The following section includes expanded discussions of resource areas identified as requiring more in depth analysis or consideration for the Michigan Bar Road Bridge Replacement Project.

PUBLIC SERVICES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of electric or natural gas service
- Result in substantial adverse physical impacts associated with the provision of park and recreation services

UTILITY SERVICES

There are two utility poles and overhead powerlines in the project area near the southern bridge abutment. These utility lines serve a single pump station used by the property owner to pump water from the river for agricultural use, and may require temporary relocation to allow construction access.

Discussion of Project Impacts

The Sacramento County Department of Transportation (Sac DOT) is coordinating with the utility company and the property owner to minimize impacts associated with the potential temporary disturbance to service to ensure that impacts related to utilities are **less than significant**.

RECREATIONAL USES AND PUBLIC ACCESS

The Cosumnes River is subject to the public right of navigation, which provides that members of the public have the right to navigate and exercise the incidences of navigation in a lawful manner on State waters that are capable of being physically navigated by oar or motor-propelled small craft.

Kayakers paddle the Cosumnes River through the project study area during high rains or spring runoff. Public access to the Cosumnes River is available at the Latrobe Road Bridge approximately 6 miles east (up-river) from the project site, and at the Highway 49 bridge located approximately 16 miles east of the project site. According to a popular rafting website (americanwhitewater.org), kayaking is generally possible when the river is flowing between 700 and 3000 cubic feet per second (CFS). Kayakers 'put in' at either the Latrobe Road bridge or the Highway 49 bridge, and float through the Michigan Bar area before taking out at the Highway 16/Jackson Road bridge approximately 4 miles downstream of the project site.

The County of Sacramento has received correspondence from the California State Lands Commission (CSLC) regarding public recreational use of the Cosumnes River in the project area. The CSLC has jurisdiction and management control over public lands of the State ("sovereign lands"), including beds of navigable rivers and streams, and manages these sovereign lands for the benefit of all the people of the State, subject to Public Trust uses. According to CSLC correspondence, the jurisdiction of the CSLC is presently undetermined at the location of the proposed Project, and as such, formal authorization from the CSLC is not required. However, letters from the CSLC have

addressed concerns regarding potential impacts to river navigability during project construction as well as the requirement under the California Streets and Highways Code (§ 991) to assess the feasibility of providing public recreational access to the river at the Michigan Bar Road Bridge site.

Promotion of public access and use of California's navigable waters is a mandate of the California Constitution (Article 10, Section 4), a condition of statehood in the Act of Admission (Vol. 9, Statutes at Large, page 452), and a responsibility of all public agencies pursuant to the Public Trust Doctrine. The California Legislature has provided a process to be followed regarding promoting access at bridge sites by counties in the California Streets and Highways Code (§ 991) which states: "Before any bridge on a county highway is constructed over any navigable river, the board of supervisors, after a study and public hearing on the question, shall determine and shall prepare a report on the feasibility of providing public access to the river for recreational purposes and a determination as to whether such public access shall be provided."

There are currently no public access points to the Cosumnes River at the location of the Michigan Bar Road Bridge. The road and bridge are surrounded by privately owned property used for residential and agricultural activities, and the property owner does not allow public access to the river through his property. The SacDOT conducted a Feasibility Study and prepared a Feasibility Study Report in January of 2017. The Feasibility Study concluded that it is not practical to construct new public access facilities within County prescriptive right of way at the Michigan Bar Road site. The combination of land acquisition constraints, environmental impacts, and funding limitations make this site impractical for new public access. The County Board of Supervisors will consider the Feasibility Study, along with testimony at a future public hearing and make the ultimate determination regarding public access at the project site. Based on the Feasibility Study, the currently proposed project does not include provisions for public access to the Cosumnes River from the project site.

Discussion of Project Impacts

The project will not restrict or impede the easement right of the public or adversely impact currently available recreational uses of, or public access to, the Cosumnes River. The completed project will not result in adverse impacts to the navigability of the river in the project area. The Project will be constructed during the dry season when the Cosumnes River is expected to have little or no water. The river in the project area is expected to have very poor to no recreational navigability during these months. Any water flows present during the time of construction will be maintained through the use of water diversion systems. Mitigation focused on providing safe passage for boaters through the project site during construction has been included (Mitigation Measure A) to minimize the impacts to recreational use caused by temporary construction related activities. Impacts to recreational services **are less than significant**.

TRANSPORTATION/TRAFFIC

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Result in a substantial adverse impact to access and/or circulation

Michigan Bar Road will be temporarily closed to through traffic during construction. Michigan Bar Road is a rural single lane roadway that is approximately 4 miles long running north-south between Jackson Road and Latrobe Road. The road travels primarily through a 1,812 acre privately owned parcel and serves only two residences both located south of the river. The existing bridge has an annual Average Daily Traffic (ADT) volume of less than 100 vehicles, and will be closed to public traffic during project implementation. Traffic will be detoured to use Latrobe Road to access the northern dirt portion of Michigan Bar Road north of the bridge. The detour length will be approximately 8 miles (Plate IS-5). Construction and emergency traffic will have access to use of the temporary low water crossing located west of the existing bridge.

Discussion of Project Impacts

The temporary closure to Michigan Bar Road may inconvenience the nearby residences and occasional travelers; however, the duration of the detour is expected to be less than 6 months. A traffic control and detour plan is required per County Construction Standards. It is further specified in the construction specifications that the contractor is required to notify service providers in advance of any detour or traffic control. Due to the short duration of the project, and the low ADT volume, impacts to the existing access and circulation system are ***less than significant***.

Plate IS-5: Traffic Detour



AIR QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

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

Construction activities have the potential to generate a substantial amount of air pollution. Even though the generation of construction-related emissions is temporary in nature, the emissions contribute to the pollution inventory for Sacramento County.

The proposed project site is located in the Sacramento Valley Air Basin (SVAB). The SVAB's frequent temperature inversions result in a relatively stable atmosphere that increases the potential for pollution. Within the SVAB, the Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for ensuring that emission standards are not violated. Project related air emissions would have a significant effect if they would result in concentrations that either violate an ambient air quality standard or contribute to an existing air quality violation (Construction Emissions and Short Term Impacts

Short-term air quality impacts related to construction activities are mostly due to dust generation (PM10 and PM2.5), and emissions from equipment and vehicle engines (NOx) operated during these activities. Dust generation is dependent on soil type and soil moisture, as well as the amount of total acreage involved in clearing, grubbing and grading activities. Clearing and earthmoving activities comprise the major source of construction dust generation, but traffic and general disturbance of the soil also contribute to the problem. Sand, lime or other fine particulate materials may be used during construction, and stored on-site. If not stored properly, such materials could become airborne during periods of high winds. The effects of construction activities include increased dust fall and locally elevated levels of suspended particulate matter (PM). PM10 and PM2.5 are considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

Table IS-1). Moreover, SMAQMD has established significance thresholds to determine if a proposed project's emission contribution significantly contributes to regional air quality impacts (Table IS-2).

CONSTRUCTION EMISSIONS AND SHORT TERM IMPACTS

Short-term air quality impacts related to construction activities are mostly due to dust generation (PM_{10} and $PM_{2.5}$), and emissions from equipment and vehicle engines (NO_x) operated during these activities. Dust generation is dependent on soil type and soil moisture, as well as the amount of total acreage involved in clearing, grubbing and grading activities. Clearing and earthmoving activities comprise the major source of construction dust generation, but traffic and general disturbance of the soil also contribute to the problem. Sand, lime or other fine particulate materials may be used during construction, and stored on-site. If not stored properly, such materials could become airborne during periods of high winds. The effects of construction activities include increased dust fall and locally elevated levels of suspended particulate matter (PM). PM_{10} and $PM_{2.5}$ are considered unhealthy because the particles are small enough to inhale and damage lung tissue, which can lead to respiratory problems.

Table IS-1: Air Quality Standards Attainment Status

Pollutant	Attainment with State Standards	Attainment with Federal Standards
Ozone	Non-Attainment Classification = Serious (1 hour Standard ¹)	Non-Attainment, Classification = Severe -15* (1 hour ² and 8 hour ³ Standards)
Particulate Matter 10 Micron	Non-Attainment (24 hour Standard and Annual Mean)	Attainment (24 hour standard)
Particulate Matter 2.5 Micron	Non-Attainment (Annual Standard)	Non-Attainment (24 hour Standard) and Unclassified/Attainment (Annual)
Carbon Monoxide	Attainment (1 hour and 8 hour Standards)	Attainment (1 hour and 8 hour Standards)
Nitrogen Dioxide	Attainment (1 hour Standard and Annual)	Unclassified/Attainment (1 hour and Annual)
Sulfur Dioxide ⁴	Attainment (1 hour and 24 hour Standards)	Attainment (1 hour)
Lead	Attainment (30 Day Standard)	Attainment (3-month rolling average)
Visibility Reducing Particles	Unclassified (8 hour Standard)	No Federal Standard
Sulfates	Attainment (24 hour Standard)	No Federal Standard
Hydrogen Sulfide	Unclassified (1 hour Standard)	No Federal Standard

1. Per Health and Safety Code (HSC) § 40921.59(c), the classification is based on 1989-1001 data, and therefore does not change.

2. Air Quality meets Federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply. The SMAQMD attained the standard in 2009. SMAQMD has requested EPA recognize attainment to fulfill the requirements.

3. For both that 1997 and the 2008 Standard.

4. Cannot be classified

*Federal designations based on information from <http://www.gpo.gov/fdsys/pkg/CFR-2010-title40-vol17/pdf/CFR-2010-title40-vol17-sec81-305.pdf>

*California Area Designations based on information from <http://www.arb.ca.gov/degis/changes.htm#reports>
Source: SMAQMD. "Air Quality Standards Attainment Status". *Air Quality Data*. December 23, 2013. Web. Accessed: July 6, 2015. <http://www.airquality.org/daqdata/attainmentstat.shtml>

Table IS-2: SMAQMD Significance Thresholds

	ROG ¹ (lbs/day)	NO _x (lbs/day)	CO (µg/m ³)	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)
Construction (short-term)	None	85	CAAQS ²	80 ³	82 ³
Operational (long-term)	65	65	CAAQS	80 ³	82 ³
1. Reactive Organic Gas 2. California Ambient Air Quality Standards 3. Only applies to projects for which all feasible best available control technology (BACT) and best management practices (BMPs) have been applied. Projects that fail to apply all feasible BACT/BMPs must meet a significance threshold of 0 lbs/day.					

Particulate Matter Emissions

The SMAQMD “Guide to Air Quality Assessment in Sacramento County” (December 2009, revised April 2019, hereinafter called the SMAQMD Guide) includes screening criteria for construction-related particulate matter. Projects that are 35 acres or less in size will generally not exceed the SMAQMD’s construction PM₁₀ or PM_{2.5} thresholds of significance. In order to be eligible for screening, a project must be 35 acres or less in size and it must not:

- Include buildings more than 4 stories tall;
- Include demolition activities;
- Include major trenching activities;
- Have a construction schedule that is unusually compact, fast-paced, or involves more than 2 phases (i.e., grading, paving, building construction, and architectural coatings) occurring simultaneously;
- Involve cut-and-fill operations (moving earth with haul trucks and/or flattening or terracing hills); or,
- Require import or export of soil materials that will require a considerable amount of haul truck activity

Some PM₁₀ and PM_{2.5} emissions during project construction can be reduced through compliance with institutional requirements for dust abatement and erosion control. These institutional measures include the SMAQMD “District Rule 403-Fugitive Dust” and measures in the Sacramento County Code relating to land grading and erosion control [Title 16, Chapter 16.44, Section 16.44.090(K)].

Ozone Precursor Emissions (NO_x)

The screening criteria for construction-related ozone precursor emissions (NO_x) are the same as those listed for particulate matter.

Discussion of Project Impacts

The project does not meet the screening thresholds for particulate matter emissions or ozone precursor emissions because it includes demolition activities. The Road Construction Emissions Model, Version 8.1.0, was therefore used to model emissions for the project. The model run was based on a 6 month construction schedule and some of the default equipment was changed to more accurately reflect the site conditions and scope of the project. The results are included in Table IS-3 below. The maximum predicted NO_x, PM₁₀, and PM_{2.5} emissions for the project are below the established thresholds.

Table IS-3: Project Emissions

	PM ₁₀ (lbs/day)	PM _{2.5} (lbs/day)	NO _x (lbs/day)
Construction (short-term)	12.79	4.62	62.23
Exceed SMAQMD Threshold?	No	No	No

The SMAQMD Guide includes a list of Basic Construction Emissions Control Practices that should be implemented on all projects, regardless of size. Dust abatement practices are required pursuant to SMAQMD Rule 403 and California Code of Regulations, Title 13, sections 2449(d)(3) and 2485; the SMAQMD Guide simply lays out the basic practices needed to comply. Since these are already required by existing rules and regulations, it is not necessary to include them as mitigation.

The project will not exceed the established NO_x, PM₁₀, and PM_{2.5} thresholds. Compliance with institutional requirements for dust abatement and erosion control will ensure that construction related air quality impacts are ***less than significant***.

NATURALLY OCCURRING ASBESTOS

Asbestos is a commercial term used to identify a group of six silicate minerals which have the properties of high tensile strength, flexibility, chemical resistance, and heat resistance. Asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board (CARB) in 1986. All types of asbestos are hazardous and may cause lung disease and cancer.

Naturally Occurring Asbestos (NOA) is the term applied to the natural geologic occurrence of any of the six types of asbestos. The presence of NOA is related to the chemistry of rocks in an area and the different geologic processes that have acted on those rocks through time. Conditions favorable for the formation of NOA may be present in a variety of geologic settings, but are more common in some settings than in others.

NOA is known to be present in certain areas of eastern Sacramento County where the geology is characterized by a variety of igneous, metamorphic, and sedimentary rocks, some of which have been faulted or sheared. This geologic diversity provides some settings that are favorable for the presence of NOA. In 2006, the California Department of Conservation, California Geological Survey (CGS), prepared a map and report for the Sacramento Metropolitan Air Quality Management District under Interagency Agreement Number 1004-019R to help identify areas in Sacramento County that may contain NOA. The map divides the eastern part of the county into different areas based on the relative likelihood of encountering NOA. These areas are defined as: most likely, moderately likely, and least likely to contain NOA. The areas that are moderately likely to contain NOA are found along a northerly trending region that extends from Folsom Lake to the Cosumnes River. These areas include parts of the communities of Folsom and Rancho Murieta.

Since NOA has the potential to occur in the soil, and may enter the air in the form of particulate matter (dust), the California Air Resource Board (CARB) adopted the Airborne Toxic Control Measure (ATCM) requirements for Construction, Grading, Quarrying, and Surface Mining Operations that apply to grading or any other projects disturbing soil in areas of California where asbestos may exist, as determined by the California Geological Survey (CGS).

Discussion of Project Impacts

According to the CGS map, the Project site is located in an area considered *least likely* to contain NOA. However, because of the close proximity of the project site to known occurrences of NOA, the project site is considered an "affected parcel" by SMAQMD and is subject to ATCM requirements.

Taber Consultants reviewed geologic mapping and conducted site reconnaissance to determine the likelihood of NOA in the study area. No ultramafic rock units have been identified in the published mapping and no outcrops likely to contain NOA or rock fragments were observed in the study area. Taber Consultants did not find indications of a recognized environmental condition (REC) with respect to NOA.

The project will comply with institutional requirements for dust abatement and erosion control. In addition, mitigation requiring compliance with the California Air Resource Board Airborne Toxic Control Measures for Construction and Grading has been included (Mitigation Measure B) to ensure that construction related air quality impacts associated with Naturally Occurring Asbestos are ***less than significant***.

HYDROLOGY AND WATER QUALITY

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area

- Place structures that would impede or redirect flood flows within a 100-year floodplain
- Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality

HYDROLOGY AND DRAINAGE

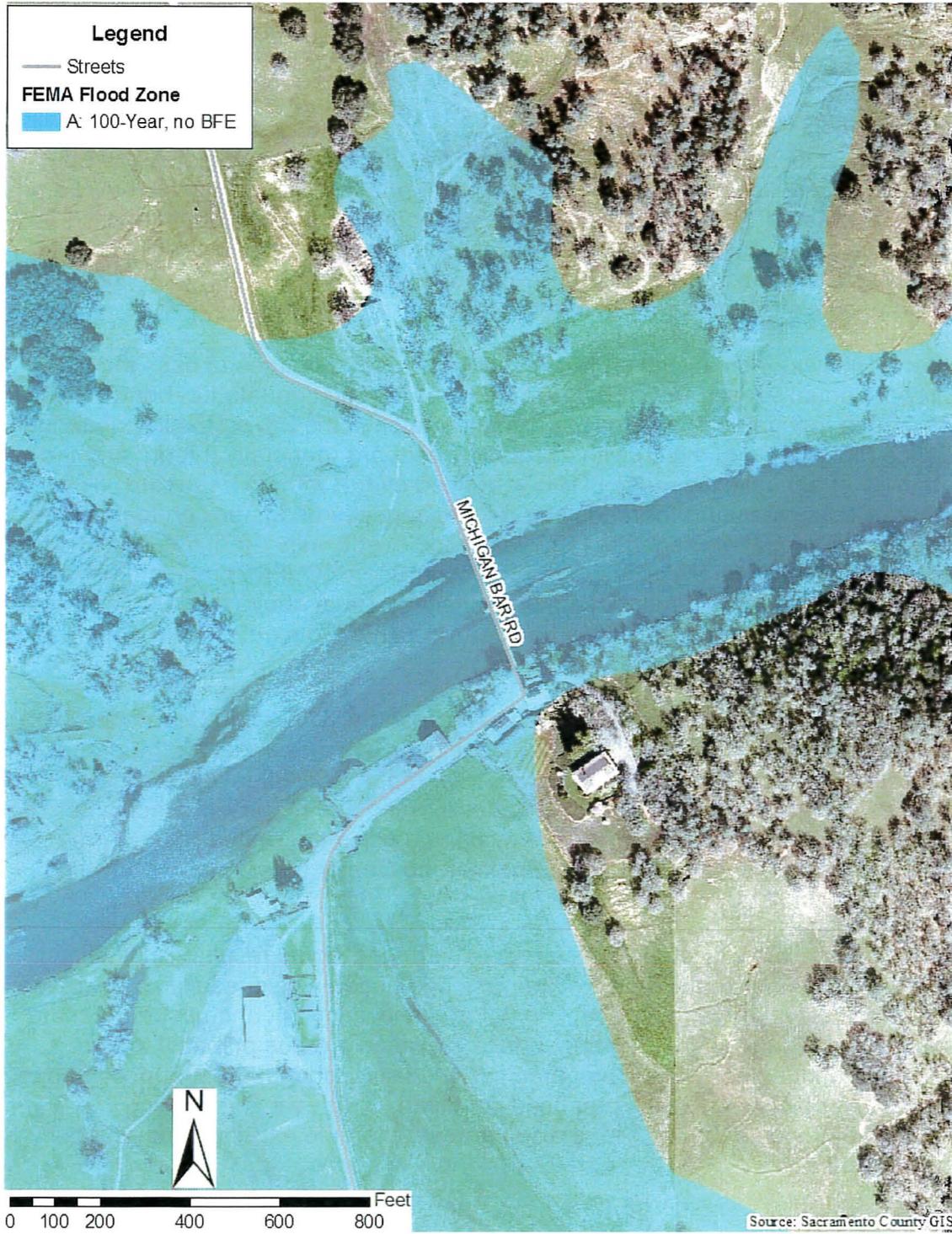
The project site is located within the Cosumnes River watershed, and is designated Flood Zone A according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panels 06067CO275H (bridge and north bank) and 06067CO400H (south bank; Plate IS-6). Flood Zone A is defined as a special flood hazard area that is subject to the one percent annual chance flood (100-year floodplain) in which no flood elevations have been determined.

The Federal Highway Administration (FHWA) criteria require bridges to pass the 2% probability of annual exceedance (50-year flood event) with adequate freeboard. The Caltrans criteria requires that bridges are designed to pass the 2% probability of annual exceedance (50-year flood event) with adequate freeboard (generally 2 feet); and the 1% probability of annual exceedance (100-year flood event) with no freeboard. The Sacramento County standard for roads and bridges requires bridge design to pass the 1% probability of annual exceedance (100-year flood event) with 1-foot freeboard. The Cosumnes River is a Central Valley Flood Protection Board (CVFPB) regulated stream. The CVFPB freeboard requirement at the project site is 3 feet above the 100-year water surface elevation. The proposed bridge has been designed to meet CVFPB's more conservative freeboard criteria.

A Location Hydraulic Study (LHS) Report was prepared by WRECO in December 2013 to document the hydrology, hydraulics, and floodplain risk assessment for the proposed replacement of the Michigan Bar Road bridge. The report calculates and evaluates water surface elevation and flow velocities under existing and proposed conditions. The hydraulic conditions at the project site were evaluated using the United States Army Corps of Engineers' (USACE) Hydrologic Engineering Center River Analysis System (HEC-RAS) Version 4.1.0.

The hydraulic modeling indicated that the proposed bridge would result in minimal adverse effects to the base floodplain. The proposed bridge would result in a decrease in water surface elevation ranging from 1 to 3 ft at the locations at and upstream of the proposed bridge. The changes in water surface elevation are due primarily to the changes to the bridge geometry. Compared to the existing bridge, the proposed bridge would have fewer piers (one in the proposed condition vs. three in the existing condition). The proposed bridge pier is also narrower than the existing bridge piers by approximately 18 ft.

Plate IS-6: FEMA Firm Map



The proposed condition would not increase the base flood elevation (BFE) within the project vicinity. The FIRM shows that the existing bridge is within the 100-year floodplain. The proposed condition would still be within the 100-year floodplain. The Project considered the purpose, need, and the minimization of adverse effects to the floodplain. The purpose of the Project is to replace the existing bridge with one that meets current applicable County, AASHTO, CVFPB, and Caltrans design standards.

The project is located within a Designated Floodway, and approval by the CVFPB must be obtained prior to commencement of work. The LHS report was reviewed by Sacramento County Department of Water Resources and no comments were received. The entire report can be reviewed in person at the Office of Planning and Environmental Review, 827 7th Street, Rm. 220, Sacramento, CA 95814 or online at:

<https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=2012-70057>

Discussion of Project Impacts

The water surface elevation in the vicinity of the bridge generally remains the same in the proposed condition as in the existing condition. The project will not alter the existing drainage pattern in such a way that it causes flooding; contributes to runoff that would exceed the capacity of existing or planned stormwater infrastructure, or exposes people or structures to substantial loss of life, health, or property as a result of flooding. No new flooding impact will occur as a result of this project. Impacts related to drainage are considered *less than significant*.

WATER QUALITY

CONSTRUCTION WATER QUALITY: EROSION AND GRADING

Construction on undeveloped land exposes bare soil, which can be mobilized by rain or wind and displaced into waterways or become an air pollutant. Construction equipment can also track mud and dirt onto roadways, where rains will wash the sediment into storm drains and thence into surface waters. After construction is complete, various other pollutants generated by site use can also be washed into local waterways. These pollutants include; but are not limited to: vehicle fluids, heavy metals deposited by vehicles, and pesticides or fertilizers used in landscaping.

Sacramento County has a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit issued by Regional Water Board. The Municipal Stormwater Permit requires the County to reduce pollutants in stormwater discharges to the maximum extent practicable and to effectively prohibit non-stormwater discharges. The County complies with this permit in part by developing and enforcing ordinances and requirements to reduce the discharge of sediments and other pollutants in runoff from newly developing and redeveloping areas of the County.

The County has established a Stormwater Ordinance (Sacramento County Code 15.12). The Stormwater Ordinance prohibits the discharge of unauthorized non-

stormwater to the County's stormwater conveyance system and local creeks. It applies to all private and public projects in the County, regardless of size or land use type.

In addition to complying with the County's ordinances and requirements, construction sites disturbing one or more acres are required to comply with the State's General Stormwater Permit for Construction Activities (CGP). CGP coverage is issued by the State Water Resources Control Board (State Board) http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml and enforced by the Regional Water Board. Coverage is obtained by submitting a Notice of Intent (NOI) to the State Board prior to construction and verified by receiving a WDID#. The CGP requires preparation and implementation of a site-specific Stormwater Pollution Prevention Plan (SWPPP) that must be kept on site at all times for review by the State inspector.

The project must include an effective combination of erosion, sediment and other pollution control BMPs in compliance with the County ordinances and the State's CGP.

Erosion controls should always be the *first line of defense*, to keep soil from being mobilized in wind and water. Examples include stabilized construction entrances, tackified mulch, 3-step hydroseeding, spray-on soil stabilizers and anchored blankets. Sediment controls are the *second line of defense*; they help to filter sediment out of runoff before it reaches the storm drains and local waterways. Examples include rock bags to protect storm drain inlets, staked or weighted straw wattles/fiber rolls, and silt fences.

In addition to erosion and sediment controls, the project must have BMPs in place to keep other construction-related wastes and pollutants out of the storm drains. Such practices include, but are not limited to: filtering water from dewatering operations, providing proper washout areas for concrete trucks and stucco/paint contractors, containing wastes, managing portable toilets properly, and dry sweeping instead of washing down dirty pavement.

It is the responsibility of the project proponent to verify that the proposed BMPs for the project are appropriate for the unique site conditions, including topography, soil type and anticipated volumes of water entering and leaving the site during the construction phase.

Project compliance with requirements outlined above, as administered by the County and the Regional Water Board will ensure that project-related erosion and pollution impacts are *less than significant*.

OPERATION: STORMWATER RUNOFF

Development and urbanization can increase pollutant loads, temperature, volume and discharge velocity of runoff over the predevelopment condition. The increased volume, increased velocity, and discharge duration of stormwater runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage systems. Studies have demonstrated a direct correlation between the

degree of imperviousness of an area and the degradation of its receiving waters. These impacts must be mitigated by requiring appropriate runoff reduction and pollution prevention controls to minimize runoff and keep runoff clean for the life of the project.

The County requires project proponents to utilize the *Stormwater Quality Design Manual for the Sacramento Region, 2018* (Design Manual) in selecting and designing post-construction facilities to treat runoff from the project. Regardless of project type or size, developers are required to implement the minimum source control measures (Chapter 4 of the Design Manual). Low impact development measures and Treatment Control Measures are required of all projects exceeding the impervious surface threshold defined in Table 3-2 and 3-3 of the Design Manual. Further, depending on project size and location, hydromodification control measures may be required (Chapter 5 of the Design Manual).

Updates and background on the County's requirements for post-construction stormwater quality treatment controls, along with several downloadable publications, can be found at the following websites:

<http://www.waterresources.saccounty.net/stormwater/Pages/default.aspx>

<http://www.beriverfriendly.net/Newdevelopment/>

The final selection and design of post-construction stormwater quality control measures is subject to the approval of the County Department of Water Resources; therefore, they should be contacted as early as possible in the design process for guidance. Project compliance with requirements outlined above will ensure that project-related stormwater pollution impacts are *less than significant*.

BIOLOGICAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community
- Have a substantial adverse effect on riparian habitat or other sensitive natural communities
- Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies
- Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species

SURVEYS AND METHODOLOGY

An evaluation of natural and biological resources was conducted to determine whether any special-status plant or wildlife species or their habitat, or other sensitive habitats

occur in or near the project site. Field surveys, map review, and review of evaluated species' biology and habitats were used during the investigation of biological resources. The United States Fish and Wildlife Service (USFWS) special status species list for the Folsom SE and Carbondale USGS topographic quads, the California Natural Diversity Database (CNDDB) occurrence records, and National Marine Fisheries Geographic Information Systems data were reviewed. Critical habitat, range, and distribution data were also reviewed on the USFWS' Critical Habitat Portal website and the California Department of Fish and Wildlife's (CDFW), Biogeographic Information & Observation System (BIOS) website.

Sacramento County's analysis of biological resources included completion of a Natural Environment Study (NES), a Biological Assessment (BA), and a Wetland Delineation conducted by Sacramento County Office of Planning and Environmental Review Staff Biologists. The Wetland Delineation was completed in April of 2014. The NES and BA were completed in April of 2015. The following analysis contains portions of, and is based on, these reports.

The entire Wetland Delineation, NES, and BA Reports can be reviewed in person at the Office of Planning and Environmental Review, 827 7th Street, Rm. 225, Sacramento, CA 95814 or online at:

<https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=2012-70057>

The methodologies used to determine significance rely on documents published by or endorsed by regulatory agencies. Surveys and studies performed on the Project site have been conducted by qualified professionals. The applicable documents and methods are cited and described in the impact discussions below. Significance findings have been based on the impact conclusions of applicable surveys and studies. In absence of such published documents, the analyses rely on the general definitions of significance.

SPECIAL STATUS SPECIES

The likelihood of a special status species to be present on the Project site was determined using the technical studies/documents discussed in the Surveys and Methodology section above. Species considered for presence are those species considered to be potentially present as indicated on the official USFWS species list, CNDDB quad list, and SSHCP covered species whose modeled habitat includes the project site. These species are the basis for species outlined in Table IS-4. Table IS-4 reports the likelihood of species occurrence based on habitat presence either on the site or in proximity of the site, survey results (if any), and nearby recorded species occurrences (Plate IS-7).

Likelihood of occurrence is rated as Not Present, Low Potential, Moderate Potential, High Potential, or Present, which are defined as:

Michigan Bar Road Over the Cosumnes River Bridge Replacement Project

- *Not Present:* A survey was performed by a qualified biologist, and the species was not found and habitat is absent both on the site and within one mile of the site.
- *Low Potential:* Habitat is near-absent.
- *Moderate Potential:* Habitat is present, but the species has not been observed within five miles of the site.
- *High Potential:* Habitat is present and the species has been observed within five miles of the site.
- *Present:* The CNDDDB contains a recorded occurrence on the site, or the species was found during site-specific surveys.

Species which are not present or were found to have a low potential of occurrence are not discussed further in subsequent analysis sections.

Plate IS-7: CNDDDB Species Occurrences within 5 Miles of the Project Site

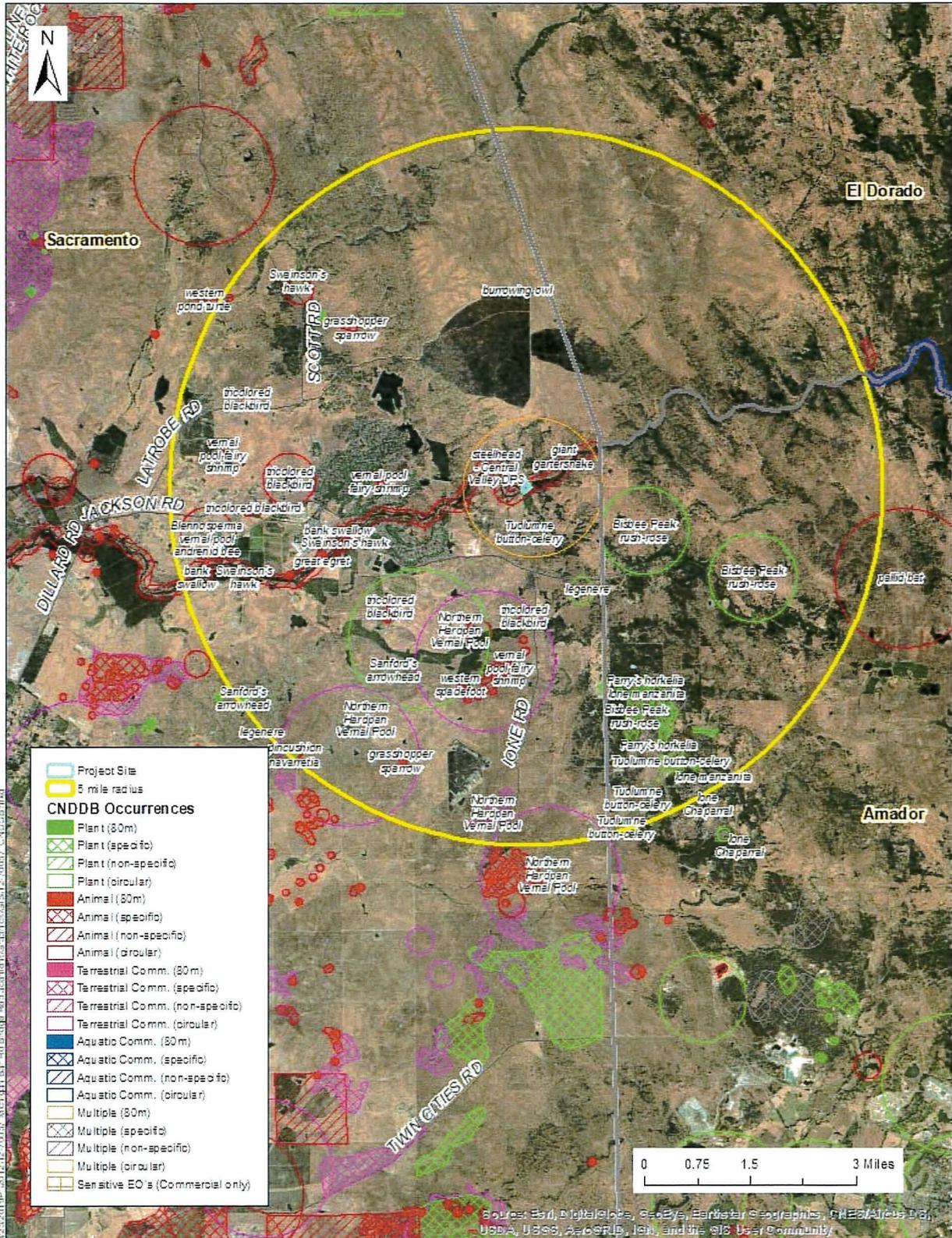


Table IS-4: Potential for Special Status Species Occurrences

Scientific Name	Status	General Habitat Description	Potential for Occurrence
Invertebrates			
conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE CSC	Species is uniquely adapted to the ephemeral conditions of vernal pool habitats. Species is known from a few isolated populations in Tehama, Butte, Solano, Glen, and Yolo Counties. The species is not known to occur in Sacramento County.	Not present. No vernal pools are present in the project area. The project area is outside the known range of this species and is not located within designated Critical Habitat for this species.
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT CSC SSHCP	Species is uniquely adapted to the ephemeral conditions of vernal pool habitats.	Not present. No vernal pools are present in the project area. The project area is not located within designated Critical Habitat for this species.
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT	Species occurs in riparian habitat with elderberry shrubs. Species requires elderberry (<i>Sambucus mexicana</i>) throughout entire life cycle.	Not present. No elderberry shrubs are present in the project area or within 100 ft of the project area. The project area is not located within designated Critical Habitat for this species.
vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE SSHCP	Species occurs in a wide variety of ephemeral wetland habitats. Requires large vernal pools (greater than 2 square meters) that hold water long enough to accommodate its relatively long life cycle.	Not present. No vernal pools are present in the project area. The project area is not located within designated Critical Habitat for this species.
Mammals			
American Badger <i>Taxidea taxus</i>	CSC SSHCP	Occurs in a variety of habitats, including grasslands and oak woodlands. Requires loose or easily crumbled soils for digging.	Not present. No evidence of badgers or suitable habitat were observed during 2014 surveys.
Western Red Bat <i>Lasiurus blossevillii</i>	CSC SSHCP	Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Young are born from May through early July.	Moderate potential. The project site contains structures and large riparian trees that may provide roosting habitat. There are no recorded CNDDDB occurrences within 5 miles of the project site.

Scientific Name	Status	General Habitat Description	Potential for Occurrence
Pallid Bat <i>Antrozous pallidus</i>	CSC SSHCP	A wide variety of habitats is occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. Day roosts are in caves, crevices, mines, and occasionally in hollow trees and buildings. Maternity colonies form in early April, and may have a dozen to 100 individuals.	High potential. The project site contains structures and large riparian trees that may provide roosting habitat. There is a recorded CNDDDB occurrence approximately 5 miles southeast of the project site.
Yuma Myotis Bat <i>Myotis yumanensis</i>	SA SSHCP	Optimal habitats are open forests and woodlands with sources of water over which to feed, but it is found in a variety of habitats. The species roosts in buildings, mines, caves, or crevices. Young are born from May to mid-June.	Moderate potential. The project site contains structures and large riparian trees that may provide roosting habitat. There are no recorded CNDDDB occurrences within 5 miles of the project site.
Fish			
delta smelt <i>Hypomesus transpacificus</i>	FT	Species occurs in the Delta, primarily below Isleton on the Sacramento River. Moves into freshwater for spawning, which occurs from January through July in dead end sloughs and shallow edge waters and channels near Rio Vista.	Not present. No suitable habitat is present within the project area. The project area is outside the known range of this species. The project area is not located within designated Critical Habitat for this species.
California Central Valley steelhead DPS <i>Oncorhynchus mykiss</i>	FT CH	Suitable spawning streams contain gravel substrates free of excessive silt and deep low-velocity pools for wintering. Most of Sacramento County is within the distinct population segment area for this species. The listing applies to the Sacramento and San Joaquin Rivers and their tributaries.	High potential. Suitable habitat is present in the Cosumnes River within the project area. See the species discussion below.
Central Valley spring-run chinook salmon, Central Valley ESU** <i>Oncorhynchus tshawytscha</i>	FT ST CH	Adults migrate from a marine environment into the freshwater streams and rivers of their birth in order to mate and spawn. Requires streams with suitable gravel composition, water depth, and velocity for spawning. Central Valley spring-run Chinook salmon migration occurs in late January and early February. Spawning occurs between mid-August and early October in the upper reaches of the watersheds.	Not present. The project area is not located within the boundaries of this ESU. The project area is outside the known range of this species and does not occur within designated Critical Habitat. The Cosumnes River is hydrologically unavailable to spring-run salmon.

Scientific Name	Status	General Habitat Description	Potential for Occurrence
Central Valley winter-run chinook salmon, Sacramento River ESU <i>Oncorhynchus tshawytscha</i>	FE ST CH	Adults migrate from a marine environment into the freshwater streams and rivers of their birth in order to mate and spawn. Requires streams with suitable gravel composition, water depth, and velocity for spawning. Winter-run Chinook salmon are primarily restricted to the mainstem Sacramento River, with spawning occurring north of Red Bluff, and rearing and migration occurring south of Red Bluff.	Not present. The project is not located within the boundaries of this ESU. The project is outside the known range of this species and does not occur within designated Critical Habitat.
Amphibians			
California tiger salamander, central population <i>Ambystoma californiense</i>	FT CSC CH SSHCP	Endemic to annual grasslands and valley-foothill habitats in California. Adults spend most time in subterranean refugia, particularly in ground squirrel burrows. Seasonal ponds or vernal pools are required for breeding.	Not present. Suitable habitat does not occur within the project area. The project is not located within designated Critical Habitat.
California red-legged frog <i>Rana aurora draytonii</i>	FT CSC CH	Inhabits quiet pools of streams, freshwater marshes and ponds along the Coast Ranges and in portions of the Sierra Nevada and Cascades ranges. Requires permanent or nearly permanent pools for larval development. Adults prefer shorelines with dense, shrubby or emergent vegetation near deep pools (> 3 ft). Not known to occur in Sacramento County.	Not present. Suitable habitat is not present within the project area. The project area is outside the known range and is not located within designated Critical Habitat for this species.
Western spadefoot <i>Spea (Scaphiopus) hammondi</i>	CSC SSHCP	Occurs primarily in grasslands but occasionally populates valley-foothill hardwood woodlands. Almost entirely terrestrial, but requires temporary rain pools that lack predators (fish, bullfrogs, crayfish) for breeding. Vernal pools are essential for breeding and egg-laying. Also needs burrows for refuge.	Not present. Suitable habitat is not present within the project area.
Reptiles			
western pond turtle <i>Actinemys marmorata</i>	CSC SSHCP	Inhabits permanent ponds, lakes, streams, irrigation ditches or permanent pools along intermittent streams. Require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Eggs are deposited in nests constructed on sandy banks or nearby hillsides in spring.	High potential. The project site contains suitable aquatic and upland habitat. The nearest recorded CNDDDB occurrence is approximately 5 miles northwest of the project site. See species discussion below.

Scientific Name	Status	General Habitat Description	Potential for Occurrence
giant garter snake <i>Thamnophis gigas</i>	FT ST SSHCP	Habitat requirements consist of adequate water during the snake's active season (early spring through mid-fall) to provide food and cover; emergent, herbaceous wetland vegetation; grassy banks and openings in vegetation for basking; and higher elevation uplands for cover and refuge from flood waters during the snake's winter dormant season.	Not present. Suitable habitat is not present within the project area.
Birds			
tricolored blackbird <i>Agelaius tricolor</i>	CSC SSHCP	Highly colonial species. Breeds in fresh water emergent wetlands, preferably with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, and other tall herbaceous vegetation. Nesting area must be large enough to support a colony of at least 50 pairs. Feeds in grassland and cropland habitats. Nesting habitat is of concern to CDFW.	Not present. Suitable nesting habitat does not occur in the project area.
grasshopper sparrow <i>Ammodramus savannarum</i>	CSC	Occurs in dry, dense grasslands, especially those with a variety of grasses and tall forbs and scattered shrubs for singing perches. Builds nest of grasses and forbs in a slight depression in ground, hidden at base of an overhanging clump of grasses or forbs. Listed for loss of nesting/breeding habitat.	High potential. Suitable habitat occurs on the project site. There are several documented occurrences of the species within 5 miles of the project site.
burrowing owl <i>Athene cunicularia</i>	CSC SSHCP	Yearlong resident of open, sparse grassland habitats, deserts, and agricultural fields. Uses rodent or other burrow for roosting and nesting cover. Known to inhabit sites with considerable human activity, and nest in manmade structures and rubble piles. Breeding habitat is of concern to CDFW.	Not present. Suitable nesting burrows do not occur in the project area.
Swainson's hawk <i>Buteo Swainsoni</i>	ST SSHCP	Nests in large trees often in open riparian habitat, in scattered trees or small groves in sparsely vegetated flatlands. Forages in grasslands, livestock pastures, or agricultural fields with low vegetative cover adjacent to nest sites.	High potential. The project site contains nesting habitat and is in proximity to appropriate foraging habitat. There are a number of documented occurrences of Swainson's hawk within 5 miles of the project site, downstream on the Cosumnes River. See the species discussion below.

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Scientific Name	Status	General Habitat Description	Potential for Occurrence
white-tailed kite <i>Elanus leucurus</i>	CFP SSHCP	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low Potential. There are no documented occurrences of white tailed kite within 5 miles of the project site.
Ferruginous Hawk <i>Buteo regalis</i>	SA SSHCP	Frequents open grasslands, sagebrush flats, desert scrub, low foothills surrounding valleys, and fringes of pinyon-juniper habitats. Listed for preservation of wintering habitat.	High Potential. The project site contains suitable foraging habitat for the Ferruginous Hawk. The nearest CNDDDB occurrence is 1.3 miles northeast.
Cooper's Hawk <i>Accipiter cooperii</i>	SA SSHCP	Occurs year-round throughout much of California. Favors a variety of forest and woodland habitats, including in towns and urban areas with suitable tree cover. Nests in trees. Preys on birds.	High Potential. The project area and adjacent areas provide suitable foraging and nesting habitat for this species. The nearest documented occurrence of a nest is 2.7 miles south of the project area (CDFW 2018).
Northern Harrier <i>Circus cyaneus</i>	CSC SSHCP	Frequents meadows, grasslands, open rangelands, desert sinks, and fresh and saltwater emergent wetlands. Harriers nest on the ground, mostly within patches of dense, often tall, vegetation in undisturbed areas. The species is listed for nesting.	High Potential. Foraging habitat is present on the site, and though no occurrences are recorded within ten miles, the species was observed foraging during a site visit. The site lacks the shrubby vegetation preferred for nesting, though dense, tall grasses on the site could be used.
Loggerhead shrike <i>Lanius ludovicianus</i>	BCC SSC SSHCP	Found in broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, and desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	High Potential. Foraging habitat is available within the project area and suitable nesting habitat occurs in adjacent areas. This species has been documented approximately 3.3 miles southeast of the project site (SSHCP 2018).
Plants			
lone manzanita <i>Arctostaphylos myrtifolia</i>	CNPS List 1B.2	Perennial evergreen shrub found in chaparral and cismontane woodland habitat with acidic, clay or sandy lone soils from 200 to 2000 ft. Blooms November-March.	Not present. Suitable substrate does not occur in the project area
succulent owl's clover <i>Castilleja campestris</i> ssp. <i>succulenta</i>	FE SE CH	Hemiparasitic annual herb found in acidic vernal pools from 165 to 2500 feet. No known occurrences in Sacramento County. Blooms April-May.	Not present. Suitable habitat does not occur in the project area. The project is not located within critical habitat for this species.

Scientific Name	Status	General Habitat Description	Potential for Occurrence
Palmate-bracted bird's-beak <i>Cordylanthus palmatus</i>	FE	Hemiparasitic annual herb found in alkaline chenopod scrub and valley and foothill grassland from 16 to 500 feet. No known occurrences in Sacramento County. Blooms May – October.	Not present. Suitable substrate does not occur in the project area.
dwarf downingia <i>Downingia pusilla</i>	CNPS List 2B.2 SSHCP	Annual herb found in vernal pools and mesic sites of valley and foothill grasslands from 3 to 1500 feet. Blooms March-May.	Not present. Suitable habitat does not occur in the project area.
lone buckwheat <i>Eriogonum apricum</i> var. <i>apricum</i>	CNPS List1.B	Perennial herb found in chaparral openings with lone soils from 200 to 500 ft. Blooms July-October.	Not present. Suitable substrate does not occur in the project area
Irish Hill buckwheat <i>Eriogonum apricum</i> var. <i>prostratum</i>	CNPS List1.B	Perennial herb found in chaparral openings with lone soils from 300 to 400 ft. Known from only two occurrences near Irish Hill. Blooms June-July.	Not present. Suitable substrate does not occur in the project area
Tuolumne button-celery <i>Eryngium pinnatisectum</i>	CNPS List 1B.2	Annual/perennial herb found in vernal pools and mesic sites of cismontane woodland, lower montane coniferous forest from 230 to 3000 ft. Blooms May-August.	Not present. Suitable habitat does not occur in the project area.
Parry's horkelia <i>Horkelia parryi</i>	CNPS List 1B.2	Perennial herb found in chaparral and cismontane woodland habitats with lone formation soils from 250 to 3400 ft. Blooms April-September.	Not present. Suitable substrate does not occur in the project area
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE	Annual herb found in vernal pools in cismontane woodland, alkaline playas, and valley and foothill grassland from 0 to 1500 feet. No known occurrences in Sacramento County. Blooms March-June.	Not present. Suitable habitat does not occur in the project area.
legenere <i>Legenere limosa</i>	CNPS List 1B.1 SSHCP	Annual herb found in vernal pools from 3 to 2900 feet. Blooms April-June.	Not present. Suitable habitat does not occur in the project area.
pincushion navarretia <i>Navarretia myersii</i>	CNPS List 1B.1 SSHCP	Annual herb found in often acidic vernal pools from 65 to 1000 ft. Blooms April-May.	Not present. Suitable habitat does not occur in the project area.
Colusa grass <i>Neostapfia colusana</i>	FT	Annual herb found in vernal pools in valley grassland from 16-700 feet. No known occurrences in Sacramento County. Blooms May-August.	Not present. Suitable habitat does not occur in the project area.
slender orcutt grass <i>Orcuttia tenuis</i>	FT CH SSHCP	Annual herb found in often gravelly vernal pools from 100 to 5600 ft. Blooms from May-October.	Not present. Suitable habitat does not occur in the project area. The project area is not located within critical habitat for this species.

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Scientific Name	Status	General Habitat Description	Potential for Occurrence
Sacramento orcutt grass <i>Orcuttia viscida</i>	FE CH SSHCP	Annual herb found in vernal pools from 100 to 350 feet. Known only from occurrences in Sacramento County. Blooms April-September.	Not present. Suitable habitat does not occur in the project area. The project area is not located within critical habitat for this species.
Layne's ragwort <i>Senecio (Packera) layneae</i>	FT	Perennial herb found in serpentinite or gabbroic rocky soils of chaparral and cismontane woodlands from 600 to 3200 ft. Blooms April-August.	Not present. Suitable substrate does not occur in the project area
Sanford's arrowhead <i>Sagittaria sanfordii</i>	CNPS List 1B.2 SSHCP	Perennial rhizomatous herb found in shallow, standing, fresh water and sluggish waterways including marshes, swamps, ponds, reservoirs, sloughs, ditches, canals, streams and rivers at elevations from 0 to 2000 feet. Blooms May-October.	Not present. Suitable habitat does not occur within the project area.

*Distinct Population Segment (DPS) **Evolutionarily Significant Unit (ESU)

Status: Federal Endangered (FE), Federal Threatened (FT), Federal-Fully Protected (FFP); State Endangered (SE), State Threatened (ST), Critical Habitat (CH)– A final rule for critical habitat has been made for the species. State Endangered (SE), State Threatened (ST), Species is covered by the South Sacramento Habitat Conservation Plan (SSHCP), CNPS List-Ca. Native Plant Society Rare, Threatened, or Endangered ranking.

WETLANDS AND WATERS OF THE UNITED STATES

REGULATORY SETTING

The CWA uses the term “surface water” to refer to all standing or flowing water which is present above-ground either perennially or seasonally. There are many types of surface waters, but the two major groupings are linear waterways with a bed and bank (streams, rivers, etc.) and wetlands. The CWA has defined the term wetland to mean “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions”. The term “wetlands” includes a diverse assortment of habitats such as perennial and seasonal freshwater marshes, vernal pools, and wetted swales. The 1987 Army Corps Wetlands Delineation Manual is used to determine whether an area meets the technical criteria for a wetland and is therefore subject to local, State or federal regulation of that habitat type.

The CWA protects all “navigable waters”, which are defined as traditional navigable waters that are or were used for commerce, or may be used for interstate commerce; tributaries of covered waters; and wetlands adjacent to covered waters, including tributaries. Isolated wetlands that are not hydrologically connected to other “navigable” surface waters (or their tributaries) are not considered to be subject to the CWA.

The ACOE regulates discharge of dredged or fill material into waters of the United States under Section 404 of the CWA. “Discharge of fill material” is defined as the addition of fill material into waters of the United States, including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; fill for intake and outfall pipes and subaqueous utility lines [33 C.F.R. §328.2(f)].

The RWQCB implements Section 401 of the CWA (33 U.S.C. 1341) which requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

In addition to the Clean Water Act, the State also has jurisdiction over impacts to surface waters through the Porter-Cologne Water Quality Control Act, which does not require that waters be “navigable”. For this reason, federal non-jurisdictional waters – isolated wetlands – can be regulated by the State of California pursuant to Porter-Cologne.

The CWA establishes a “no net loss” policy regarding wetlands for the state and federal governments, and Sacramento County General Plan Policy CO-58 establishes a “no net loss” policy for wetlands in Sacramento County. Pursuant to these policies, any wetlands to be excavated or filled require 1:1 mitigation, and construction within the

wetlands cannot take place until the appropriate permit(s) have been obtained from the ACOE, the RWQCB, the CDFW, and any other agencies with authority over surface waters. Any loss of delineated wetlands not mitigated for through the permitting process must be mitigated, pursuant to County policy.

As a covered activity under the SSHCP, CWA 404 permits required for implementation of the Project would be covered through participation in the SSHCP (see discussion above).

PROJECT IMPACTS – WETLANDS AND WATERS

The Cosumnes River is a perennial channel that flows west under the Michigan Bar Road bridge eventually flowing into the Mokelumne River approximately 32 miles downstream from the project site. A small seasonal wetland, approximately 0.013 acre in size, was identified along the south river bank within the project study area. This feature was identified as a linear wetted area dominated by spike rush (*Eleocharis macrostachya*). The feature is a low spot between the OHWM of the river and the adjacent upland area that becomes temporarily inundated with flowing water during high flow events.

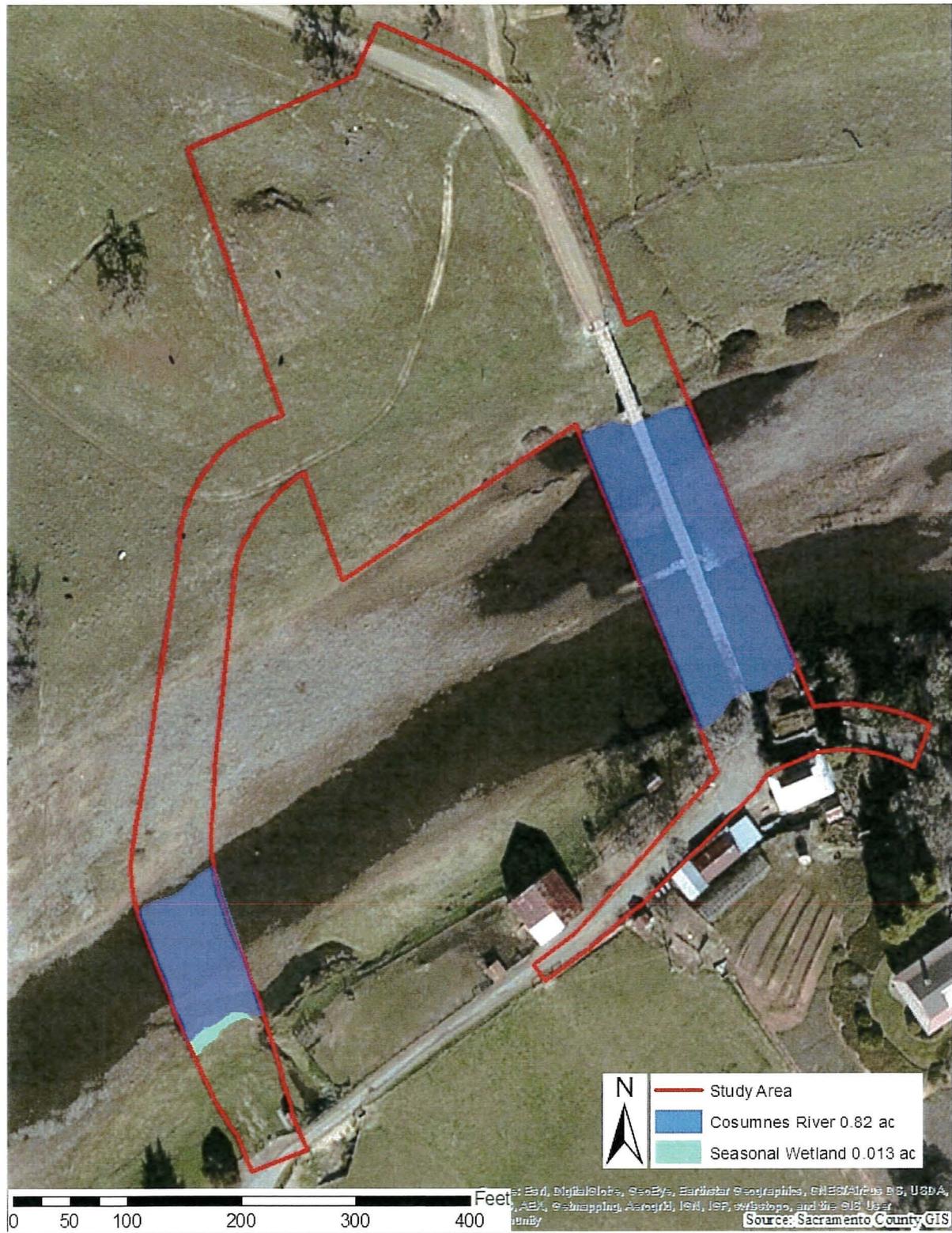
The delineation report identified 0.83 acres of potential waters of the United States within the project study area including 0.82 acre of the Cosumnes River, and 0.013 acre of seasonal wetland. On May 1, 2014 the ACOE issued a Preliminary Jurisdictional Determination concurring with the amount and location of wetlands and/or other water bodies delineated on the site, as depicted in Plate IS-8.

The project has been designed to minimize potential impacts to wetlands and waters of the United States to the maximum extent possible. Non-point source pollution to wetlands and waters of the United States will be minimized through compliance with County and State requirements regarding construction related erosion, sediment discharge, and discharge of other construction-related wastes and pollutants as outlined in the Erosion/Grading section above.

The project will result in approximately 0.02 acre of permanent impact to the Cosumnes River. Permanent impacts to the river will result from the installation of the southern abutment and a single pier. However, removal of the existing structure and placement of the new structure is expected to result in a net reduction of volume and area of encroachment below the OHWM of the river because the single pier of the new bridge will occupy less area and volume in the river than the existing bridge piers.

Construction activities associated with project implementation, including placement and removal of the temporary river crossings, will result in approximately 0.82 acre of temporary impacts to the Cosumnes River. Temporarily disturbed portions of the river will be restored to pre project contours and conditions to the maximum extent possible upon project completion.

Plate IS-8: Wetland Delineation Map



Additionally, the project will result in direct impacts to the 0.013 acre seasonal wetland identified in the study area. Impacts to this feature will result from placement of the temporary access roadway. No excavation will occur in this area, so the topography of this feature is not expected to be significantly altered. Because the topography and hydrology of this feature will not change, wetland vegetation damaged by placement of the temporary roadway material (protective mat and gravel) is expected to naturally recolonize this area after project completion.

Section 401 and 404 permits are required before project construction can begin. The final area and volume of impact to waters of the United States will be determined during the permitting process. As a covered activity under the SSHCP, the Project would be subject to the provisions, avoidance and minimizations measures as outlined in the SSHCP. Based on the analysis herein, the County will require 1:1 mitigation for direct wetland impacts. Upon successfully mitigating impacts through individual permits, or the SSHCP (Mitigation Measure C), impacts to wetlands and waters would be **less than significant with mitigation**.

SPECIAL STATUS SPECIES

REGULATORY BACKGROUND

The United States Congress passed the Federal Endangered Species Act (FESA) in 1973 to protect those species that are endangered or threatened with extinction. In 1984, the State of California enacted a similar law, the California Endangered Species Act (CESA), to protect species identified and listed by the California Fish and Game Commission as endangered or threatened with extinction.

The state and federal Endangered Species Acts are intended to operate in conjunction with CEQA and the National Environmental Policy Act (NEPA) to help protect ecosystems that endangered and threatened species depend upon. The United States Fish and Wildlife Service (USFWS) is responsible for implementation of the FESA while CDFW implements the CESA.

Accidental or intentional killing of a threatened or endangered species is labeled "take". "Take" is defined by the FESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any threatened or endangered wildlife species. Take may include significant habitat modification or degradation and is applied to threatened or endangered plant species as well.

Incidental take due to an otherwise lawful activity may be authorized by one of two procedures. If a federal agency is involved with the permitting, funding, or carrying out of the project, then initiation of formal consultation between that agency and USFWS pursuant to Section 7 of the FESA is required if a proposed project may affect a federally listed species. Such consultation would result in a biological opinion that addresses the anticipated effects of the project to listed species and may authorize a limited level of incidental take. If a federal agency is not involved with the project, and federally listed species may be taken as part of the project, then an incidental take permit pursuant to Section 10(a) of the FESA must be obtained. The USFWS may

issue such a permit upon completion of a satisfactory conservation plan for any listed species that would be affected by the project.

Species of animals and plants that are fully protected under CEQA, include those species that are presumed to be endangered, rare, or threatened as listed in the California Code of Regulation or Federal Code of Regulation; those officially proposed for listing (federal classification), candidate species (federal and state classification), species listed on the Fully Protected Animals list (State of California classification), and Species of Special Concern (State of California classification). Plants identified as 1A, 1B, and 2A, 2B by the California Native Plant Society are also afforded protection pursuant to CEQA.

Birds of prey and migratory birds are protected under the California Fish and Game Code, the Federal Migratory Bird Treaty Act of 1918, and the Federal Endangered Species Act.

Section 3503.5. of the California Fish and Game Code states: It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Section 3513 of the California Fish and Game Code states: It is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act.

The Federal Migratory Bird Treaty Act (MBTA) of 1918 states "unless and except as permitted by regulations, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill" a migratory bird.

DISCUSSION OF CALIFORNIA CENTRAL VALLEY STEELHEAD-DISTINCT POPULATION SEGMENT (DPS)

California Central Valley Steelhead (*Oncorhynchus mykiss*) DPS is a Federal-Threatened species. Steelhead is the anadromous form of rainbow trout. Anadromous fish species are those that migrate to the ocean to spend a portion of their life cycles after hatching and living the first parts of their lives in fresh water rivers and streams. When they reach sexual maturity, these fish return to the freshwater streams of their origin to lay eggs.

Fish "runs" are named for the season when the majority of the adults enter freshwater. The Central Valley drainages contain only winter-run steelhead. Central Valley Steelhead adults typically begin their spawning migration in fall and winter during high flows, and spawn relatively soon after freshwater entry. In California, peak spawning occurs from December through April in small streams and tributaries with cool, well-oxygenated water. Juvenile steelhead rear in freshwater for 1-3 years before emigrating to the ocean. Steady perennial flows in spawning streams are required to support this portion of the steelhead life cycle.

DISCUSSION OF PROJECT IMPACTS – CENTRAL VALLEY STEELHEAD DPS

The Cosumnes River is not located within this species' designated Critical Habitat. The project site is located within the geographical boundaries of where this distinct population segment of steelhead could occur, but Central Valley steelhead are not known to spawn in the Cosumnes River. The seasonal hydrology of the Cosumnes does not provide the steady perennial water flows essential to the life history requirements of this species. The probability of juvenile steelhead surviving the summer months in the Cosumnes is low due to low water levels, elevated water temperatures, low dissolved oxygen levels, and predation.

The Cosumnes River is expected to have very low to no flows in the project area during the summer months when construction is proposed. Steelhead that migrate and spawn in the Mokelumne River would not have access to the project site during the low flow summer months when the Project is under construction because there is typically no hydraulic connection between the Cosumnes River and the Mokelumne River during the months when construction will occur.

Caltrans, as the federal lead agency, initiated informal Section 7 consultation with National Marine Fisheries Service in 2015. In a letter received July 7, 2015, NMFS concurred with Caltrans determination that the proposed action is *not likely to adversely affect* Central Valley steelhead DPS. Mitigation focused on compliance with the agreed upon avoidance and minimization measures (Mitigation Measure D) has been included to ensure that impacts to Central Valley steelhead are ***less than significant***.

DISCUSSION OF WESTERN POND TURTLE

Western Pond Turtle (*Actinemys marmorata*; WPT) is a CDFW species of special concern. Western pond turtles are aquatic turtles that usually leave the aquatic site to reproduce, aestivate, and overwinter. This species requires some slack- or slow-water aquatic habitat. High-gradient streams with minimal cover or basking habitat are not suitable. In pond environments the species typically only leaves the water to reproduce, whereas in stream environments the turtles more commonly leave the water to aestivate or overwinter, in addition to leaving for reproduction. Turtles leave the water to overwinter in October or November, and typically become active in March or April. Mating typically occurs in late April or early May, but may occur year-round. Most egg-laying occurs in May or June, but may occur as early as April or as late as August. The hatchlings remain in the nest over the winter, and emerge in the spring. Suitable nesting locations have dry soils (usually in a substrate with a high clay or silt fraction) on a slope that is unshaded and may be at least partially south-facing. The nest site can be up to 1,300 feet from the aquatic habitat, but it is more typical for the nest to be within 650 feet of aquatic habitat.

DISCUSSION OF PROJECT IMPACTS – WESTERN POND TURTLE (WPT)

Turtles were observed in the Cosumnes River within the project site during field surveys, but positive identification for WPT was not confirmed. Suitable upland and aquatic habitat for this species occurs in the project area. CDFW has not published mitigation or other regulatory guidance for the treatment of impacts to this species. As a result, mitigation is focused on preventing construction activities from resulting in direct

mortality of a western pond turtle. The WPT is a SSHCP covered species. Mitigation has been included that will require compliance with Avoidance and Minimization Measures WPT-1 through WPT-9, aimed at preventing direct mortality of WPT (Mitigation Measure E). Thus, impacts to Western pond turtle are **less than significant**.

DISCUSSION OF SPECIAL STATUS BATS

There are many bat species which can be found in Sacramento County, the following of which are listed as special animals: pallid bat (*Antrozous pallidus*), western red bat (*Lasiurus blossevillii*), and Yuma myotis bat (*Myotis yumanensis*). The pallid bat and western red bat are state-listed Species of Special Concern, while the Yuma myotis is a special animal. All three bat species roost within either natural or human-made structures, such as caves, mines, crevices (including under bridges), hollow trees, and in abandoned or seldom-used buildings. Young are born to the species in the spring and early summer (maternity colonies typically begin to form in April, and births occur from May through early July, depending on the species). Threats to the species include loss of foraging and roosting habitat, and disruption of maternity colonies.

DISCUSSION OF PROJECT IMPACTS – SPECIAL STATUS BATS

The project site is within the SSHCP modeled habitat for the three bat species discussed above. No bats were observed during project surveys. The project site contains older buildings, structures, and large, broad leaf riparian trees that could provide roosting habitat for bats. The Project will be required to comply with the provisions of the SSHCP. Mitigation has been included to specify that the Project will be subject to the Avoidance and Minimization Measures BAT-1 through BAT-4 as outlined in the SSHCP (Mitigation Measure E), resulting in impacts to bats that will be **less than significant**.

DISCUSSION OF SPECIAL STATUS BIRDS

SWAINSON'S HAWK (BUTEO SWAINSONI)

Swainson's hawk is a State-Threatened Species. This migratory bird of prey spends its winters in South America, and travels back to the central valley between March and late August for nesting. Peak nesting activity usually occurs from late May through July. Swainson's hawks were once common throughout the state, but various habitat changes, including the loss of nesting habitat (trees) and the loss of foraging habitat through the conversion of native Central Valley grasslands to incompatible agricultural and urban uses has caused an estimated 90% decline in their population.

Swainson's hawks feed primarily upon small mammals, birds, and insects. Their typical foraging habitat includes native grasslands, alfalfa and other hay crops that provide suitable habitat for small mammals. Certain other row crops and open habitats also provide some foraging habitat. The availability of productive foraging habitat near a Swainson's hawk's nest site is a critical requirement for nesting and fledgling success.

COOPER'S HAWK (*ACCIPITER COOPERII*)

Cooper's hawks are well-distributed and occur in varied habitats including; deciduous, mixed, and evergreen forests and riparian woodlands. This species is tolerant of human disturbance and habitat fragmentation and has been found to increasingly breed in suburban and urban areas (Curtis et al. 2006). This species nests in extensive forests, woodlots of 10-20 acres, and occasionally in isolated trees in more open areas. Nests are typically in more mature trees which have relatively more canopy cover than what is locally available (Curtis et al. 2006).

FERRUGINOUS HAWK (*BUTEO REGALIS*)

According to the CDFW Life History Account for the ferruginous hawk, the species is an uncommon winter resident and migrant at lower elevations and open grasslands in the Central Valley. The species requires large, open tracts of grasslands, sparse shrub, or desert habitats with elevated structures for nesting. The species is migratory, and generally arrives in California in September and departs by mid-April. The species does not nest in Sacramento County; therefore impacts to foraging habitat are the primary concern. There is no published regulatory guidance on mitigation of foraging habitat for this species.

LOGGERHEAD SHRIKE (*LANIUS LUDOVICIANUS*)

Loggerhead shrike is a year-round resident and winter visitor in lowlands and foothills throughout California. This species is associated with open country with short vegetation and scattered trees, shrubs, fences, utility lines and/or other perches. Although they are songbirds, shrikes are predatory and forage on a variety of invertebrates and small vertebrates. Captured prey items are often impaled for storage purposes on suitable substrates, including thorns or spikes on vegetation, and barbed wire fences. The species nests in trees and large shrubs; nests are usually placed 3 - 10 feet off the ground (Shuford and Gardali 2008).

NORTHERN HARRIER (*CIRCUS CYANEUS*)

According to the CDFW Life History Account for the northern harrier the species occurs in a wide range of habitat types and elevations, from grasslands in the Central Valley to alpine meadows as high as 10,000 feet. The species forages in areas where rodents are abundant, generally agricultural and grassland areas. The species is a widespread winter resident and migrant, though an uncommon nesting season resident in the Central Valley. The population has declined in California, largely due to destruction of breeding habitat. The species is mostly found in flat or hummocky open areas of tall, dense grasses, moist or dry shrubs, with edges for nesting, cover, and feeding. It is also known to nest and forage in agricultural areas as well. There is no published regulatory guidance on mitigation of nesting habitat for this species.

GRASSHOPPER SPARROW (*AMMODRAMUS SAVANNARUM*)

According to the California Fish and Wildlife life history account for the species, grasshopper sparrow (*Ammodramus savannarum*) prefer short to middle-height, moderately open grasslands with scattered shrubs. The species tends to be absent in areas with extensive shrub or tree cover, and builds nests domed with grasses,

concealed at the base of grass clumps. The grasshopper sparrow is a summer resident from March to September, with breeding taking place from Mid-March to August. Agriculture and urbanization have reduced the prevalence of the species in the Central Valley, and they now breed predominantly at the valley edges and low foothills. The California Fish and Wildlife account does state that breeding has been confirmed at the Cosumnes River Preserve, and the California Natural Diversity Database includes reported occurrences of breeding in eastern Sacramento County. The species is state-listed as a Species of Special Concern due to loss of breeding habitat.

DISCUSSION OF PROJECT IMPACTS – SPECIAL STATUS BIRDS

The project site contains potential nesting and foraging habitat for birds protected under the California Fish and Game Code and the MBTA including Ferruginous hawk, Cooper's hawk, Northern harrier, Loggerhead shrike, and Grasshopper sparrow. Construction related activities have the potential to agitate nesting birds, potentially resulting in nest abandonment or other harm to nesting success. The Michigan Bar Road bridge structure itself provides nesting habitat for mud and stick nest building birds including swallows and black phoebes. Cliff swallows are known to use the bridge as a nesting platform.

Nesting Swainson's hawks have not been observed on or near the project site during previously conducted surveys. Large trees within ½ mile of the project site provide potential nesting habitat for Swainson's hawk. The grasslands on the project site also provide potential foraging habitat for this species. The project will not result in removal of potential nesting trees or permanent impacts to foraging habitat for Swainson's hawk.

Swainson's hawk is a SSHCP covered species. Additionally, the SSHCP has Avoidance and Minimization Measures for special status raptors including Cooper's hawk, Ferruginous hawk, Northern harrier, and Loggerhead shrike. Mitigation has been included to reflect that the project will be subject to compliance with SSHCP Avoidance and Minimization Measures SWHA-1 through SWHA-4, and RAPTOR-1 through RAPTOR-4 which are focused on preventing construction activities from agitating nesting birds, potentially resulting in nest abandonment or other harm to nesting success (Mitigation Measure E). Thus, impacts associated with potential impacts to special status birds are *less than significant*.

NATIVE TREES

Sacramento County has identified the value of its native and landmark trees and has adopted measures for their preservation. The Tree Ordinance (Chapter 19.04 and 19.12 of the County Code) provides protections for landmark trees and heritage trees. The County Code defines a landmark tree as "an especially prominent or stately tree on any land in Sacramento County, including privately owned land" and a heritage tree as "native oak trees that are at or over 19" diameter at breast height (dbh)." Chapter 19.12 of the County Code, titled Tree Preservation and Protection, defines native oak trees as valley oak (*Quercus lobata*), interior live oak (*Quercus wislizenii*), blue oak (*Quercus douglasii*), or oracle oak (*Quercus morehus*) and states that "it shall be the policy of the County to preserve all trees possible through its development review process." It should be noted that to be considered a tree, as opposed to a seedling or sapling, the

tree must have a diameter at breast height (dbh) of at least 6 inches or, if it has multiple trunks of less than 6 inches each, a combined dbh of 10 inches. The Sacramento County General Plan Conservation Element policies CO-138 and CO-139 also provide protections for native trees.

CO-139. Native trees other than oaks, which cannot be protected through development, shall be replaced with in-kind species in accordance with established tree planting specifications, the combined diameter of which shall equal the combined diameter of the trees removed.

Native trees other than oaks include Fremont cottonwood (*Populus fremontii*), California sycamore (*Platanus racemosa*), California black walnut (*Juglans californica*, which is also a List 1B plant), Oregon ash (*Fraxinus latifolia*), western redbud (*Cercis occidentalis*), gray pine (*Pinus sabiniana*), California white alder (*Alnus rhombifolia*), boxelder (*Acer negundo*), California buckeye (*Aesculus californica*), narrowleaf willow (*Salix exigua*), Gooding's willow (*Salix gooddingii*), red willow (*Salix laevigata*), arroyo willow (*Salix lasiolepis*), shining willow (*Salix lucida*), Pacific willow (*Salix lasiandra*), and dusky willow (*Salix melanopsis*).

DISCUSSION OF IMPACTS: NATIVE TREES

The project site contains a handful of large sycamore trees lining Michigan Bar Road between the road and Cosumnes River on the approach of the south side of the bridge, and two large, mature oak trees adjacent to the construction staging area on the north side of the Cosumnes River. No tree removal is proposed for project implementation.

The sycamore trees lining Michigan Bar Road are already subject to encroachment from the road. The new bridge and roadway approach will not result in encroachment beyond what is currently at the project site. However, because there is a gradual increase in roadway elevation to accommodate the 2' elevation increase of the bridge, some fill will be necessary to conform the existing elevation of the ground to the new roadway approach. Mitigation has been included to employ protective measures around the oak trees near the staging area to ensure no adverse impacts to trees because of equipment staging, and ensure that no fill will be placed around the trunk of the sycamore trees on Michigan Bar Road. Impacts to native trees are *less than significant*.

SOUTH SACRAMENTO HABITAT CONSERVATION PLAN (SSHCP) CONSISTENCY

The SSHCP is a regional approach to addressing development, habitat conservation, and agricultural lands within the south Sacramento County region, including the cities of Galt and Rancho Cordova. The specific geographic scope of the SSHCP includes U.S. Highway 50 to the north, the Sacramento River levee and County Road J11 (connects the towns of Walnut Grove and Thornton, it is known as the Walnut Grove-Thornton Road) to the west, the Sacramento county line with El Dorado and Amador counties to the east, and San Joaquin County to the south. The SSHCP Project area excludes the City of Sacramento, the City of Folsom, the City of Elk Grove, most of the Sacramento-San Joaquin Delta, and the Sacramento community of Rancho Murieta.

The SSHCP Conservation Strategy minimizes habitat fragmentation by focusing on the establishment of large Preserves, and by linking existing preserves and SSHCP Preserves together to allow wildlife movement. Development of the SSHCP included comprehensive landcover mapping of the Plan area, as well as modeling habitat for each of the covered species. This data is utilized to focus mitigation funds towards preservation of lands that is suitable for species by habitat type. In addition to preserving lands by habitat type, as required by the ESA (Section 10(a)(2)(A)(ii)) and Fish and Game Code Section 2081, the SSHCP includes measures to avoid and minimize take of Covered Species through species-specific avoidance and minimization measures (AMMs).

Covered activities under the SSHCP include development-related activities inside the urban development area or UDA. The UDA corresponds to land within the County's Urban Services Boundary (USB), and to land within the city limits of Rancho Cordova, Elk Grove and Galt, and Galt's adopted sphere of influence. Covered activities outside of the UDA include rural road projects and some recycled water projects. As a rural road project, the Michigan Bar Road bridge replacement is a covered activity.

Covered activities within the SSHCP boundary are required to comply with the provisions of the SSHCP including applicable AMMs, Biological Goals and Objectives (BGOs), and payment of fees to mitigate for the loss of natural land cover types. In addition to the SSHCP itself, covered activities must comply with the Aquatic Protection Ordinance (Chapter 16.135.010 through 16.135.110 of the Sacramento County Code), the Implementing Resolution (Resolution No. 2018-0642), and the Fee Ordinance (Chapter 22.45.101 through 22.45.102 of Title 22 of the Sacramento County Code).

The project is a covered activity under the SSHCP. The analysis contained in this chapter is consistent with the protocol for covered species analysis under the SSHCP. The mitigation contained in this chapter has been structured such that the required mitigation will be consistent with the adopted SSHCP mitigation and monitoring protocols. Thus, the project is consistent with, and aids in the goals set forth in the SSHCP. Impacts with regards to consistency with the SSHCP are ***less than significant***.

CULTURAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource
- Have a substantial adverse effect on an archaeological resource
- Disturb any human remains, including those interred outside of formal cemeteries

Under CEQA, lead agencies must consider the effects of projects on historical resources and archaeological resources. A "historical resource" is defined as a resource

listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR), a resource included in a local register of historical resources, and any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant (Section 15064.5[a] of the Guidelines). Public Resources Code (PRC) Section 5042.1 requires that any properties that can be expected to be directly or indirectly affected by a proposed project be evaluated for CRHR eligibility. Impacts to historical resources that materially impair those characteristics that convey its historical significance and justify its inclusion or eligibility for the NRHP or CRHR are considered a significant effect on the environment (CEQA guidelines 15064.5)).

In addition to historically significant resources, an archeological site may meet the definition of a "unique archeological resource" as defined in PRC Section 21083.2(g). If unique archaeological resources cannot be preserved in place or left in an undisturbed state, mitigation measures shall be required (PRC Section 21083.2 (c)).

CEQA Guidelines Section 15064.5 (e) outlines the steps the lead agency shall take in the event of an accidental discovery of human remains in any location other than a dedicated cemetery.

CULTURAL SETTING

A Historic Property Survey Report (HPSR) comprised of a Historical Resource Evaluation Report (HRER) and an Archaeological Survey Report (ASR) was prepared for the project. The HRER was prepared by JRP Historical Consulting, LLC, and the ASR was prepared by PAR Environmental Services, INC. The following information and analysis is based on these reports.

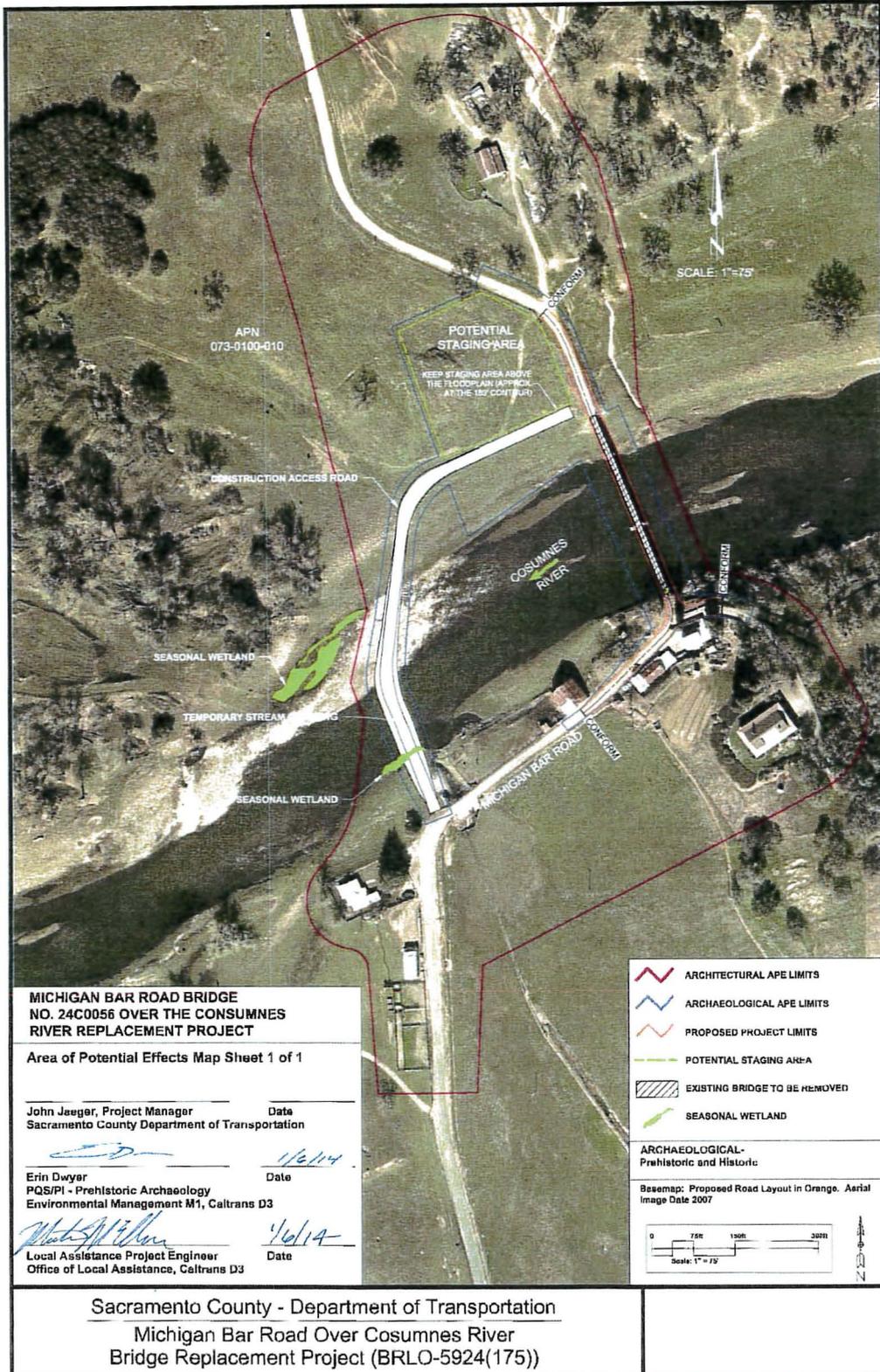
Letters requesting information regarding potential historic built environment resources in this area were mailed on October 15, 2012 to local parties including the Sacramento County Historical Society, Center for Sacramento History, Sacramento Room at the Central Public Library, Sacramento History Museum, and the Elk Grove Historical Society. Consultation with Native American groups and individuals, as well as other persons, did not elicit comments or issues related to historic archaeological resources.

A search of records and historical information on file at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) was conducted by NCIC staff in February of 2014 for the Area of Potential Effect (APE) (Plate IS-9) and a one-quarter-mile buffer. The records search identified three previously recorded resources within the APE:

- the Michigan Bar Road Bridge (P-34-4295)
- the Michigan Bar Mining District (P-34-679), and
- Michigan Bar Road (P-34-662).

Michigan Bar Road Over the Cosumnes River Bridge Replacement Project

Plate IS-9: Area of Potential Effect (APE)



The Michigan Bar Road Bridge was previously determined not eligible for listing in the NRHP by Caltrans during their 2004 Historic Bridge Inventory Update. The current structure was built in 1947 and includes piers from the 1909 bridge. The decking of the bridge was replaced in 1958. Therefore, the findings from the 2004 Historic Bridge Inventory remain valid: the bridge structure does not retain sufficient historic integrity to qualify as a historical resource for the purposes of CEQA, nor to be listed National Registers of Historic Places.

The APE is located within a 1,800-acre Michigan Bar Mining District (P-34-679; Trinomial CA-SAC-690H), first surveyed by Caltrans District 3 in 1999 and surveyed again in 2011. The Office of Historic Preservation has not assigned a status code to the district; however, for the purposes of this document, the Michigan Bar Mining District is a presumed historical resource under the National Register of Historic Places (NRHP) and, therefore, the California Register of Historical Resources under CEQA.

Michigan Bar Road (P-34-662) was previously determined individually eligible for listing in the NRHP; therefore, it is a historical resource for the purposes of CEQA. The road was also identified as a contributing element of the Michigan Bar Mining District. The road is significant for its alignment; neither the road bed nor the associated road drainage structures are character defining.

The APE also includes Ruman Ranch, which is comprised of sixteen (16) built environment structures on the east and west sides of the Cosumnes River and is primarily used for cattle ranching. The ranch is located adjacent to the Michigan Bar Road Bridge and includes three houses from different time periods, a bar, outbuildings, shops, and sheds.

On October 3, 2012, JRP staff conducted a field survey of the architectural APE. PAR Environmental, Inc. conducted an archaeological survey on April 15, 2014 with two archaeologists walking parallel transects of five to 10 meter separation. The bullet-point list below summarizes the findings of the built environment and historic archaeological surveys.

- The sixteen (16) buildings that comprise Ruman Ranch are not eligible for the National Register (NRHP) or the California Register of Historic Resources (CRHR) as a historic district.
- The Ruman Ranch House (Building 5) is eligible for the NRHP as a rare example of the vernacular folk form house representative of the type, period and method of construction in California when construction of permanent wood farm structures replaced early buildings. The building also illustrates the use of New England building forms brought by builders who immigrated during the Gold Rush.
- A one-room house (Building 14) within Ruman Ranch is eligible for the NRHP and CRHR because it is located within the boundary of a potential historic archaeological site for the former Chinese settlement at Michigan Bar and was purportedly inhabited by a Chinese woman prior to 1940.

- The following resources are assumed eligible for the NRHP and the CRHR for the purposes of this project:
 - H1, the location of the Chinese community;
 - prehistoric archaeological site P1, a bedrock mortar;
 - prehistoric midden site P2; and, the Michigan Bar Mining District

PROJECT IMPACTS

On December 22, 2018 Caltrans submitted a Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR) and a Historical Resources Evaluation Report (HRER) for the proposed project to the State Historic Preservation Office (SHPO). On January 17, 2019, the SHPO concurred with the NRHP determinations of eligibility. Then on February 28, 2019, the SHPO concurred that the Michigan Bar Bridge Replacement project will not adversely affect the eligible historic properties.

The project is designed to bring equipment via a temporary access road across the Cosumnes River to a staging area to the northwest of the bridge. To conduct work on the south bridge approach, equipment will approach from the construction staging area rather than directly from Michigan Bar Road, which is too narrow to accommodate the equipment. Environmental Sensitive Area (ESA) barriers will also be installed to prevent potential damage to identified resources. The project will not result in direct effects to Buildings 5 (Ruman Ranch House) and 14 (former Chinese residence), nor will it cause indirect adverse effects because changes to the setting of each will be largely temporary. Likewise, Michigan Bar Road, which will be slightly elevated at the bridge approaches and paved on the southbound approach, will not be directly impacted in such a way that it will lose its significance as a historic resource. The road will retain its alignment, which is its primary character-defining feature. Therefore, the road will also continue to contribute to the Michigan Bar Mining District.

An ESA and Archaeological Monitoring Plan was prepared so that the project will not directly or indirectly affect those resources presumed to be significant for the purposes of this project. Site H1, the location of the Chinese Community, is located outside of the area of direct impact (ADI) but will be protected by ESA fencing to protect it from construction vehicles. Within the ADI at the temporary access road location, a vertical ESA such as a crane mat or steel plates will be placed in the vicinity of H1 and covered with gravel or fill on the temporary access road. ESA fencing will also be placed around P1, a bedrock mortar, and P2, the historic midden to protect these sites from all project activities. Once the bridge replacement is complete, the temporary barriers will be removed and the area will be returned to its pre-construction condition.

A Late Discovery Plan prepared for the project includes protocol for the unanticipated discovery of cultural resources during construction. The project is unlikely to impact human remains buried outside of formal cemeteries; however, if human remains are encountered during construction, mitigation is included specifying how to comply with CEQA Guidelines Section 15064.5 (e), Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code. Therefore, with mitigation, project impacts to cultural resources will be ***less than significant***.

TRIBAL CULTURAL RESOURCES

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- 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 a cultural value to a California Native American tribe, that is:
 - 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
 - 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under PRC Section 21084.3, public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their tribal cultural resources (21080.3.1(a)).

TRIBAL CULTURAL RESOURCE SETTING

PAR submitted a Sacred Lands File and Native American Contacts List Request to the Native American Heritage Commission (NAHC) on March 6, 2014. On March 13, 2014, the NAHC responded with a list of fifteen (15) individuals/organizations, whom were contacted by letter on July 10, 2014. Follow-up phone calls were conducted on July 24 and 25 of 2014. The United Auburn Indian Community (UAIC), Wilton Rancheria, the lone Band of Miwok Indians, and Buena Vista Rancheria expressed interest in the proposed project and requested to be kept informed about its progress, and receive written materials that address cultural resources.

In accordance with Assembly Bill (AB) 52, codified as Section 21080.3.1 of CEQA, formal notification letters were sent to those tribes who had previously requested to be notified of Sacramento County projects on August 4, 2015. The UAIC and Wilton Rancheria requested consultation.

On August 27, 2015, the County held a field meeting at the project site which was attended by representatives of the UAIC, Wilton Rancheria, and Dwight Dutschke and Glen Villa, Jr, local Miwok with an interest in the project. At this meeting, the County explained that Caltrans had recommended Extended Phase 1 archeological testing to determine the significance of P2, the prehistoric midden site identified in PAR's

pedestrian-level survey. The tribes stated that the project is located in an area sensitive to tribal cultural resources and proposed that rather than conduct testing, that measures be taken to avoid and protect sites. Tribal representatives requested the use of ESA protective barriers during construction, preparation of a Late Discovery and Treatment Plan, preparation of an Ethnographic Report summarizing the significance of the Michigan Bar site, and use of a Native American monitor during ground disturbing activities.

Additional correspondence between the County, UAIC and Wilton Rancheria occurred between January and May of 2016. The County held a second meeting on May 23, 2016 with representatives from Caltrans, the County, UAIC, and Wilton Rancheria. The purpose of the meeting was to discuss the project design, avoidance and minimization details, the project timeline, and information sharing. The ESA Action Plan, Late Discovery and Treatment Plan, and Ethnographic summary were discussed. On May 9, 2018, Caltrans, the County and the consultant team met to discuss the treatment of archeological resources, particularly H1, the Chinese settlement site, and the treatment of tribal cultural resources. With additional research conducted by the consultants in June and July of 2018, the team supported adherence to avoidance and mitigation measures rather than testing at H1. In August of 2018, comments from the UAIC were incorporated into the avoidance and mitigation measures. Consultation with tribal representatives will continue throughout the life of the project.

DISCUSSION OF PROJECT IMPACTS – TRIBAL CULTURAL RESOURCES

Through consultation under Section 106 and CEQA, tribes confirmed that the project area contains tribal cultural resources of significance. The tribes and lead agency mutually agreed that tribal cultural resources mitigation measures were appropriate and feasible for the project. Avoidance and mitigation measures include an ESA Action Plan, Late Discovery Plan, and Native American and archeological monitors during ground disturbing activities at the site. Additionally a confidential Ethnographic summary (not appended) was prepared that documents the significance of the site. With the preparation of these documents and monitoring in place, project impacts to tribal cultural resources will be *less than significant*.

HAZARDS AND HAZARDOUS MATERIALS

This section supplements the Initial Study Checklist by analyzing if the proposed project would:

- Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials

BACKGROUND

The project will result in soil disturbance, and demolition and disposal of the existing bridge structure. To determine the potential of the project to result in the disturbance,

transport, and disposal of materials that are considered hazardous, it was necessary to conduct an evaluation of the existing site conditions, including the bridge structure. An Initial Site Assessment (ISA) was prepared for the project in September 2014 by Taber Consultants. The purpose of an ISA is to identify Recognized Environmental Conditions (RECs) for the project site that may adversely affect bridge and roadway construction or project corridor right-of-way acquisition (if required) in keeping with the Caltrans Standard Environmental Reference Manual (SER) and in general conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Practice E 1527-13 and USEPA All Appropriate Inquiry Rule.

The ISA was conducted within the Area of Potential Effects (APE) as bounded in the January 2013, APE map (**Plate IS-10**). The ISA includes a summary of the site reconnaissance conducted on November 15, 2012, a review of environmental databases, and a review of historical data sources. The ISA also identifies materials that may require special handling under Federal or California regulations.

The entire ISA report can be reviewed in person at the Office of Planning and Environmental Review, 827 7th Street, Rm. 225, Sacramento, CA 95814 or online at: <https://planningdocuments.saccounty.net/ViewProjectDetails.aspx?ControlNum=2012-70057>

The following analysis contains portions of, and is based on, this report.

Taber Consultants conducted a screening-level assessment of the baseline environmental conditions and the materials used on the Michigan Bar Road Bridge and roadway for potentially hazardous materials to estimate classification of the materials with respect to State and Federal hazardous waste criteria. Specifically, Taber Consultants assessed materials for asbestos, treated wood, and lead content.

During site reconnaissance and review of environmental databases, Taber Consultants obtained no direct or indirect evidence of a hazardous spill or release of petroleum products in the study area or immediately adjacent properties.

Plate IS-10: Initial Site Assessment (ISA)



ASBESTOS

As discussed in the Air Quality section above, asbestos is classified as a known human carcinogen by state, federal, and international agencies and was identified as a toxic air contaminant by the California Air Resources Board (ARB) in 1986. Asbestos can be found in certain areas as a naturally occurring component of the soil as well as in building materials. Taber Consultants did not find indications of a recognized environmental condition (REC) with respect to naturally occurring asbestos (NOA). Please refer to the Air Quality section above and Mitigation Measure B for additional information regarding NOA.

Historically, asbestos was commonly used in construction materials for such things as acoustic and thermal insulation. Asbestos fibers and asbestos-containing material (ACM) may be present as a component of materials used for bridge pads or shims in the construction of bridges, particularly those built prior to 1978. Identifying the presence of asbestos-containing material prior to demolition is important because airborne asbestos fibers are generally microscopic in size and may be inhaled. Inhalation of asbestos fibers may be harmful to human health.

Taber Consultants did not observe bridge pads between the bridge deck and the abutments. No shims were observed to fill gaps in the metal materials used as structural elements of the bridge. In addition no notations were made in the bridge "as-built plans" regarding asbestos building components. Because no known ACM was observed in the study area, samples were not collected for asbestos analysis, but definitive conclusions regarding the presence or absence of asbestos were not made by a Certified Asbestos Consultant (CAC).

Any projects in which structures are demolished or renovated within Sacramento County are required to provide written notification to the Sacramento Metropolitan Air Quality Management District (SMAQMD) at least 10 business days prior to conducting the work, regardless of the presence or absence of asbestos in building materials. Under the federal asbestos National Emissions Standards for Hazardous Air Pollutants regulations (NESHAP, 40 CFR Part 61, Subpart M) a Certified Asbestos Consultant (CAC) must make definitive conclusions regarding the presence of asbestos containing materials (ACM) prior to project construction.

CHEMICALLY TREATED WOOD

The timber on the bridge railings and rail posts was tested and is not chemically treated. Four wooden posts on the corners of the bridge supporting reflective signs have been chemically treated. Taber Consultants identified a REC with respect to these posts. The removal of chemically treated wood is considered hazardous waste. The California Department of Toxic Substance Control (DTSC) regulations section 66261.9.5 outlines alternative management standards for treated wood waste. The contractor must follow these standards during construction as well as Caltrans Special Standard Provision (SSP) SSP 14-11.09, which is based on DTSCs regulations. SSP 14-11.09 includes specifications for handling, storing, transporting, and disposing of treated wood waste.

LEAD-BASED PAINT

No paint striping was identified on Michigan Bar Road. Taber Consultants observed painted metal and wood surfaces on the bridge. Because lead-based paint has historically been used on bridges, a materials evaluation was conducted to determine if lead content in the bridge paint would require special handling. The paint was tested for lead content, and found to have concentrations of lead that exceed the DTSC threshold for hazardous waste. Due to the analytical concentrations of lead in the paint material samples, Taber Consultants identified a REC with respect to lead-based paint on the bridge through site reconnaissance and laboratory analysis. The painted surfaces must be disposed of in accordance with the Caltrans Standard Special Provisions for removal of lead paint Provision 14-11.08, Disturbance of Existing Paint Systems on Bridges.

MERCURY AND GOLD MINING

Former gold mining activities are known to have occurred at Michigan Bar, and mine tailings are present in the immediate vicinity of the study area. Historic gold mining operations have been associated with mercury releases. Taber Consultants discussed the issue with Caltrans personnel specializing in hazardous materials evaluation and reviewed USGS' scientific findings regarding the mercury distribution relative to former mining operations in the Sacramento River Basin. Based on these conversations and the findings of the USGS study, the risk of encountering concentrations of mercury that exceed California Human Health Screening Levels (CHHSLs) and California Department of Toxic Substances Control (DTSC) regulatory thresholds for hazardous waste are extremely low. Taber Consultants did not identify a REC with respect to mercury within the study area. No further study is recommended.

DISCUSSION OF PROJECT IMPACTS –HAZARDS AND HAZARDOUS MATERIAL

Taber identified Recognized Environmental Concerns associated with chemically treated wood and lead based paint on the existing bridge structure. The project will result in demolition and disposal of the existing bridge. Demolition and disposal activities associated with the project will be temporary in nature. All persons involved in the handling of hazardous materials are required to use, store, and transport hazardous materials in compliance with local, state, and federal regulations during project construction. A single Lead Compliance Plan, in accordance with Caltrans Standard Specifications, Section 7-1.02K(6)(j)(ii), and Cal OSHA Title 8, Section 1532.1, must be prepared for the project due to the presence of lead paint on the bridge. Mitigation is recommended (Mitigation Measure H) to ensure that the Lead Compliance Plan is prepared and properly implemented. With mitigation, and project compliance with requirements outlined above, impacts associated with hazardous Material are ***less than significant***.

ENVIRONMENTAL MITIGATION MEASURES

Mitigation Measures A-K are critical to ensure that identified significant impacts of the project are reduced to a level of less than significant. Pursuant to Section 15074.1(b) of the CEQA Guidelines, each of these measures must be adopted exactly as written unless both of the following occur: (1) A public hearing is held on the proposed changes; (2) The hearing body adopts a written finding that the new measure is equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.

MITIGATION MEASURE A: RECREATIONAL RIVER PASSAGE

The project shall provide safe passage for boaters through the construction site at all times by one of the following methods:

1. Provide one opening within the navigable channel of the Cosumnes River for the passage of small boats. The opening must have a horizontal clearance of not less than 20 feet measured normal to the direction of flow and a vertical clearance of not less than 8 feet measured from the normal water elevation. The opening and the approach channels must be clearly marked in conformance with the requirements of the California Administrative Code, Title 14, Division 4, Department of Navigation and Ocean Development, Waterway Marking System, Sacramento, California.
2. Provide a well-marked passage to exit the river and portage through the construction site on foot. The approach channels to exit must be clearly marked in conformance with the requirements of the California Administrative Code, Title 14, Division 4, Department of Navigation and Ocean Development, Waterway Marking System, Sacramento, California. The exit and portage trail must also be clearly marked.

During operations that may result in falling debris, one watchman shall be present upstream and one watchman shall be present downstream from the work zone to ensure that boaters or hikers do not enter the work zone. The watchmen shall be equipped with hand-held loudspeakers and must be on continuous duty at a sufficient distance from the bridge so that boaters are held until allowed to proceed.

MITIGATION MEASURE B: NATURALLY OCCURRING ASBESTOS

The project shall comply with Section 93105 (e) of the California Environmental Protection Agency Air Resources Board Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations.

Prior to construction, the applicant shall submit an Asbestos Dust Mitigation Plan to the Sacramento Metropolitan Air Quality District for approval unless SMAQMD has granted approval of a request for exemption. The Asbestos Dust Mitigation Plan shall be approved by SMAQMD prior to commencement of soil disturbance activities.

MITIGATION MEASURE C: WETLANDS

To compensate for the permanent loss of wetlands, the applicant shall perform one or a combination of the following prior to issuance of building permits, and shall also obtain all applicable permits from the Army Corps of Engineers, the U.S. Fish and Wildlife Service, the Central Valley Regional Water Quality Control Board, and the California Department of Fish and Game:

- A. Where a Section 404 Permit has been issued by the Army Corps of Engineers, or an application has been made to obtain a Section 404 Permit, the Mitigation and Management Plan required by that permit or proposed to satisfy the requirements of the Corps for granting a permit may be submitted for purposes of achieving a no net-loss of wetlands. The required Plan shall be submitted to the Sacramento County Environmental Coordinator, U.S. Army Corps of Engineers, and U.S. Fish and Wildlife Service for approval prior to its implementation.
- B. If regulatory permitting processes result in less than a 1:1 compensation ratio for loss of wetlands, the Project applicant shall demonstrate that the wetlands which went unmitigated/uncompensated as a result of permitting have been mitigated through other means. Acceptable methods include payment into a mitigation bank or protection of off-site wetlands through the establishment of a permanent conservation easement, subject to the approval of the Environmental Coordinator.
- C. The Project applicant shall participate in the South Sacramento Habitat Conservation Plan Aquatic Resources Program if the Project area and activities are covered. The applicant shall prepare Project plans in accordance with that Plan and any and all fees or land dedications shall be completed prior to construction.

MITIGATION MEASURE D: CENTRAL VALLEY STEELHEAD

The project shall comply with the following measures unless otherwise indicated by permits or other documentation provided by the National Marine Fisheries Service:

1. In-water work shall be limited to the low-flow period between June 1st and November 1st when Central Valley Steelhead are least likely to occur in the project area. Temporary water diversions shall occur only during this designated work window.
2. Continuous and unobstructed water-flow shall be maintained in the project area during construction through installation of water diversion systems consistent with Section NS-5 of the Caltrans Construction Site BMPs Manual (Caltrans 2003).
3. Water diversion systems shall be installed in such a way to avoid creating impinge points where aquatic species may become trapped, and the construction area shall be dewatered slowly to allow natural movement of aquatic species away from the work zone.

4. A qualified biological monitor will be present during all construction activities involving work in the active stream channel including installation of water diversion systems, construction of the temporary stream crossing, and dewatering activities. The biologist shall have the authority to stop all activities that may result in impacts to protected species until appropriate corrective measures have been completed.
5. Pumps used for dewatering will have their intakes fitted with a smaller mesh screen or put in a slotted bucket to prevent aquatic life from entering the pump hose.
6. All construction workers shall be required to participate in environmental awareness training. The training will educate workers on: (1) special-status species that may occur in the work area, (2) procedures to follow in the event a species is observed, and (3) other environmental BMPs and emergency spill response protocols.
7. The biological monitor shall visit the job site midway through construction, and at the close of construction to monitor implementation of conservation measures.
8. Materials used to construct the temporary stream crossing shall be clean materials such as clean/washed gravel which will cause little or no siltation.
9. All temporary fill material shall be removed and portions of the river temporarily impacted by Project implementation shall be restored to pre-project contours immediately following Project completion. In locations where existing piers are removed, the grade and substrate of the river bottom shall be restored to match the surrounding conditions. The use of a gravel mixture that is suitable for salmonid spawning is preferred for channel bottom restoration.
10. If a rain event occurs during construction, the USGS stream gauge at Michigan Bar shall be monitored daily. If flows are measured above 200 cfs, the biological monitor shall contact NMFS for additional conservation recommendations.
11. If individuals of listed species are observed within the project area, NMFS shall be notified. NMFS personnel shall have access to the construction sites during construction and following completion in order to evaluate species presence and condition and/or habitat conditions.

MITIGATION MEASURE E: PARTICIPATION IN THE SSHCP

To compensate for impacts to western pond turtle, special status bats, Swainson's hawk and special status birds, the applicant shall obtain authorization through the SSHCP and conform with all applicable Avoidance and Minimization Measures, fees necessary to mitigate for impacts to species and habitat prior to construction.

MITIGATION MEASURE F: NATIVE TREE PROTECTION

For the purpose of this mitigation measure, a native tree is defined as a sycamore or valley oak having a diameter at breast height (dbh) of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined dbh of at least 10 inches.

All native trees on the project site, all portions of adjacent off-site native trees which have driplines that extend onto the project site, and all off-site native trees which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees.
4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.
8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees. Final grading shall not allow fill material to gather around the trunk of any sycamore trees along Michigan Bar Rd.
9. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with

the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".

10. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

MITIGATION MEASURE G: ESA ACTION PLAN

To avoid and protect those archaeological and tribal resources assumed eligible for the purposes of this project, Environmentally Sensitive Areas shall be protected in accordance with the approved Environmentally Sensitive Area (ESA)/Archaeological Monitoring Plan (AMA) for the Michigan Bar Bridge Replacement Project.

MITIGATION MEASURE H: LATE DISCOVERY PLAN

Ground disturbing activities (including excavation for the new bridge abutments) will be monitored by a Native American monitor and a qualified archaeologist. In the event that cultural resources are discovered, work shall be halted the resource(s) can be evaluated. The evaluation and treatment of resources shall be in compliance with the approved Late Discovery Plan (LDP) for the Michigan Bar Bridge Replacement Project.

As reiterated in the LDP, pursuant to Sections 5097.97 and 5097.98 of the State Public Resources Code, and Section 7050.5 of the State Health and Safety Code, if a human bone or bone of unknown origin is found during construction, all work is to stop and the County Coroner and the Office of Planning and Environmental Review shall be immediately notified. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission within 24 hours, and the Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposition of, with appropriate dignity, the human remains and any associated grave goods.

MITIGATION MEASURE I: NATIVE AMERICAN MONITOR

To minimize the potential for destruction of or damage to existing or previously undiscovered archaeological and cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities, the project applicant and its construction contractor(s) will implement the following measures:

1. Paid Native American Monitors from culturally affiliated Native American Tribes will be invited to monitor the vegetation grubbing, stripping, grading, or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American Representatives from

culturally affiliated tribes act as a representative of their Tribal government and shall be consulted before any ground-disturbing activities begin.

2. Native American Representatives and Native American Monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted, or slowed if such sites or objects are identified within the direct impact area; however, only a Native American Representative can recommend appropriate treatment of such sites or objects.

MITIGATION MEASURE J: ARCHAEOLOGICAL MONITOR

To minimize the potential for destruction of or damage to existing or previously undiscovered archaeological and cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities, the project proponent and its construction contractor(s) shall hire a Registered Professional Archaeologist (RPA) meeting the National Park Service professional standards for Archaeology. The archaeologist will monitor the vegetation grubbing, stripping, grading, or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources.

MITIGATION MEASURE K: HAZARDOUS MATERIALS AND LEAD COMPLIANCE PLAN

A Lead Compliance Plan shall be prepared pursuant to Title 8 of the California Code of Regulation (Section 1532.1), EPA, SMAQMD, and Caltrans standards. The plan must include:

Lead Awareness Training program;

Handling requirements of ADL soils;

Address paint abatement prior to construction; and

An acceptable disposal plan for excess soils considered hazardous waste at an approved off-site disposal facility.

MITIGATION MEASURE COMPLIANCE

Comply with the Mitigation Monitoring and Reporting Program for this project, including the payment of 100% of the Department of Community Development, Planning and Environmental Review Division staff costs, and the costs of any technical consultant services incurred during implementation of that Program.

INITIAL STUDY CHECKLIST

Appendix G of the California Environmental Quality Act (CEQA) provides guidance for assessing the significance of potential environmental impacts. Based on this guidance, Sacramento County has developed the following Initial Study Checklist. The Checklist identifies a range of potential significant effects by topical area. The words "significant" and "significance" used throughout the following checklist are related to impacts as defined by the California Environmental Quality Act as follows:

1 Potentially Significant indicates there is substantial evidence that an effect MAY be significant. If there are one or more "Potentially Significant" entries an Environmental Impact Report (EIR) is required. Further research of a potentially significant impact may reveal that the impact is actually less than significant or less than significant with mitigation.

2 Less than Significant with Mitigation applies where an impact could be significant but specific mitigation has been identified that reduces the impact to a less than significant level.

3 Less than Significant or No Impact indicates that either a project will have an impact but the impact is considered minor or that a project does not impact the particular resource.

Michigan Bar Road Over the Cosumnes River Bridge Replacement Project

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
1. LAND USE - Would the project:					
a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including but not limited to a general plan, specific plan or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?			X		The project is consistent with the environmental requirements of all applicable land use plans and policies.
b. Physically disrupt or divide an established community?			X		The project will not create physical barriers that substantially limit movement within or through the community.
2. POPULATION/HOUSING - Would the project:					
a. Induce substantial unplanned population growth in an area either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of infrastructure)?			X		The proposed infrastructure project is intended to service existing or planned development and will not induce substantial unplanned population growth.
b. Displace substantial amounts of existing housing, necessitating the construction of replacement housing elsewhere?				X	The project will not result in the removal of existing housing, and thus will not displace substantial amounts of existing housing.
3. AGRICULTURAL RESOURCES - Would the project:					
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance or areas containing prime soils to uses not conducive to agricultural production?				X	The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance on the current Sacramento County Important Farmland Map published by the California Department of Conservation. The site does not contain prime soils.

Michigan Bar Road Over the Cosumnes River Bridge Replacement Project

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
b. Conflict with any existing Williamson Act contract?			X		Portions of the project area include Active Williamson Act Parcels (69-AP-031 Private). Replacement of the bridge will not conflict with the Williamson Act contract, and will ultimately give the cattle rancher better access to his property on both sides of the river
c. Introduce incompatible uses in the vicinity of existing agricultural uses?			X		The project will not introduce incompatible uses in the vicinity of the existing agricultural uses.
4. AESTHETICS - Would the project:					
a. Substantially alter existing viewsheds such as scenic highways, corridors or vistas?			X		Michigan Bar Road is Proposed for Scenic Corridor Protection in the Sacramento County General Plan. The new bridge will not substantially alter the existing viewshed, and is expected to improve visual conditions at the site by replacing a deteriorating bridge with a new pony truss bridge.
b. Substantially degrade the existing visual character or quality of the site and its surroundings?			X		Construction will not substantially degrade the visual character or quality of the project site. The project is expected to improve aesthetics at the site by replacing an old deteriorating bridge.
c. Create a new source of substantial light, glare, or shadow that would result in safety hazards or adversely affect day or nighttime views in the area?			X		The project will not result in a new source of substantial light, glare or shadow that would result in safety hazards or adversely affect day or nighttime views in the area.
5. AIRPORTS - Would the project:					
a. Result in a safety hazard for people residing or working in the vicinity of an airport/airstrip?				X	The project occurs outside of any identified public or private airport/airstrip safety zones.
b. Expose people residing or working in the project area to aircraft noise levels in excess of applicable standards?				X	The project occurs outside of any identified public or private airport/airstrip noise zones or contours.

Michigan Bar Road Over the Cosumnes River Bridge Replacement Project

	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Result in a substantial adverse effect upon the safe and efficient use of navigable airspace by aircraft?				X	The project does not affect navigable airspace.
d. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X	The project does not involve or affect air traffic movement.
6. PUBLIC SERVICES - Would the project:					
a. Have an adequate water supply for full buildout of the project?				X	The project will not result in increased demand for water supply.
b. Have adequate wastewater treatment and disposal facilities for full buildout of the project?				X	The project will not require wastewater services.
c. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X	The Kiefer Landfill has capacity to accommodate solid waste until the year 2050.
d. Result in substantial adverse physical impacts associated with the construction of new water supply or wastewater treatment and disposal facilities or expansion of existing facilities?				X	The project will not require construction or expansion of new water supply, wastewater treatment, or wastewater disposal facilities.
e. Result in substantial adverse physical impacts associated with the provision of storm water drainage facilities?				X	Project construction would not require the addition of new stormwater drainage facilities.
f. Result in substantial adverse physical impacts associated with the provision of electric or natural gas service?			X		Utilities may be relocated to allow for construction. No interruption in service is expected to result. Please refer to Initial Study for further detail.
g. Result in substantial adverse physical impacts associated with the provision of emergency services?			X		The project would not increase demand for emergency services, and would not cause substantial adverse physical impacts associated with the provision of emergency services. Emergency services will be given road detour plans in advance of the road closure.

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	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
h. Result in substantial adverse physical impacts associated with the provision of public school services?				X	The project will not require the use of public school services.
i. Result in substantial adverse physical impacts associated with the provision of park and recreation services?			X		The project will not require park and recreation services. At the request of the State Lands Commission, a Feasibility Report was prepared regarding the feasibility of providing public access to the Cosumnes River at the project location for recreational purposes. Please refer to the Initial Study for further detail.
7. TRANSPORTATION/TRAFFIC - Would the project:					
a. Result in a substantial increase in vehicle trips that would exceed, either individually or cumulatively, a level of service standard established by the County?				X	The project will not increase vehicle trips. The project involves the replacement of an existing one lane bridge with a new one lane bridge.
b. Result in a substantial adverse impact to access and/or circulation?				X	No changes to existing access and/or circulation patterns would occur as a result of the project. The project involves the replacement of an existing one lane bridge with a new one lane bridge in the same location. A temporary road detour will be in place during construction. The detour is not expected to result in adverse impacts to access or circulation. Please refer to the Initial Study for further detail.
c. Result in a substantial adverse impact to public safety on area roadways?			X		The project will not result in adverse impacts to public safety on area roadways. The project involves the replacement of an existing one lane bridge with a new one lane bridge in the same location, and is designed to improve roadway safety.
d. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?			X		The project does not conflict with alternative transportation policies of the Sacramento County General Plan, with the Sacramento Regional Transit Master Plan, or other adopted policies, plans or programs supporting alternative transportation.

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8. AIR QUALITY - Would the project:					
a. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard?			X		The emissions from construction activities related to the project have been assessed to determine if they could result in a significant air quality impact. The project does not exceed the significance thresholds established by the Sacramento Metropolitan Air Quality Management District and will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment. Please refer to the Air Quality discussion of the Initial Study for further detail.
b. Expose sensitive receptors to pollutant concentrations in excess of standards?				X	There are no sensitive receptors (i.e., schools, nursing homes, hospitals, daycare centers, etc.) adjacent to the project site.
c. Create objectionable odors affecting a substantial number of people?			X		The project will not generate objectionable odors.
9. NOISE - Would the project:					
a. Result in exposure of persons to, or generation of, noise levels in excess of standards established by the local general plan, noise ordinance or applicable standards of other agencies?			X		The project is not in the vicinity of any uses that generate substantial noise, nor will the completed project generate substantial noise. The project will not result in exposure of persons to, or generation of, noise levels in excess of applicable standards.
b. Result in a substantial temporary increase in ambient noise levels in the project vicinity?			X		Project construction will result in a temporary increase in ambient noise levels in the project vicinity. This impact is less than significant due to the temporary nature of these activities, limits on the duration of noise, and evening and nighttime restrictions imposed by the County Noise Ordinance (Chapter 6.68 of the County Code).

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	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
10. HYDROLOGY AND WATER QUALITY - Would the project:					
a. Substantially deplete groundwater supplies or substantially interfere with groundwater recharge?			X		The project will not substantially increase water demand over the existing use. The project will not rely on groundwater supplies and will not substantially interfere with groundwater recharge.
b. Substantially alter the existing drainage pattern of the project area and/or increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?			X		The project does not involve any modifications that would substantially alter the existing drainage pattern and or/increase the rate or amount of surface runoff in a manner that would lead to flooding.
c. Develop within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map or within a local flood hazard area?			X		The project is within a 100-year floodplain as mapped on a federal Flood Insurance Rate Map (Flood Zone A). The Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standards require that the project be located outside or above the floodplain, and will ensure that impacts are less than significant. Please refer to the Initial Study.
d. Place structures that would impede or redirect flood flows within a 100-year floodplain?			X		Although the project is within a 100-year floodplain, compliance with the Sacramento County Floodplain Management Ordinance, Sacramento County Water Agency Code, and Sacramento County Improvement Standards will ensure that impacts are less than significant. Please refer to the Initial Study
e. Develop in an area that is subject to 200 year urban levels of flood protection (ULOP)?			X		The project will not expose people or structures to a substantial risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.
f. Expose people or structures to a substantial risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?			X		The project does not propose any physical changes that would affect runoff from the site.

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	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
g. Create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems?			X		Compliance with the Stormwater Ordinance and Land Grading and Erosion Control Ordinance (Chapters 15.12 and 14.44 of the County Code respectively) will ensure that the project will not create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality. Please refer to the Initial Study.
h. Create substantial sources of polluted runoff or otherwise substantially degrade ground or surface water quality?			X		The project will not substantially increase water demand over the existing use. The project will not rely on groundwater supplies and will not substantially interfere with groundwater recharge.
11. GEOLOGY AND SOILS - Would the project:					
a. Expose people or structures to substantial risk of loss, injury or death involving 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?			X		Sacramento County is not within an Alquist-Priolo Earthquake Fault Zone. Although there are no known active earthquake faults in the project area, the site could be subject to some ground shaking from regional faults. The Uniform Building Code contains applicable construction regulations for earthquake safety that will ensure less than significant impacts.
b. Result in substantial soil erosion, siltation or loss of topsoil?			X		Compliance with the County's Land Grading and Erosion Control Ordinance will reduce the amount of construction site erosion and minimize water quality degradation by providing stabilization and protection of disturbed areas, and by controlling the runoff of sediment and other pollutants during the course of construction.
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, soil expansion, liquefaction or collapse?			X		The project is not located on an unstable geologic or soil unit. A geotechnical report was prepared by Taber to identify site-specific conditions and measures (e.g., special engineering design, depth of piers, or soil replacement) that must be incorporated to ensure that soil conditions will be satisfactory for the proposed bridge construction.

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d. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available?				X	The project will not require the use of waste water disposal.
e. Result in a substantial loss of an important mineral resource?			X		The property north of the Cosumnes river within the project area is listed as an Aggregate Resource Area as identified by the Sacramento County General Plan Land Use Diagram. Although located in an area with known mineral resources, the proposed project would not significantly impact future use of important mineral resources located on site.
f. Directly or indirectly destroy a unique paleontological resource or site?			X		No known paleontological resources (e.g. fossil remains) or sites occur at the project location. Mitigation Measures for unexpected discovery of archaeological resources on site will also protect paleontological resources. Please refer to the Initial Study.
12. BIOLOGICAL RESOURCES - Would the project:					
a. Have a substantial adverse effect on any special status species, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, or threaten to eliminate a plant or animal community?		X			The project site contains potential habitat for special status fish and wildlife species including Central Valley steelhead, western pond turtle, Swainson's hawk, and other nesting raptors. Mitigation has been included to ensure that impacts are less than significant. Please refer to the Initial Study.
b. Have a substantial adverse effect on riparian habitat or other sensitive natural communities?		X			The project site does not contain any riparian habitat, but does contain a small seasonal wetland. In addition, the bed and banks of the Cosumnes River within the project site are part of the stream zone protected by Fish and Game Code 1602. Mitigation has been included to ensure that impacts are less than significant. Please refer to the Initial Study.

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	Potentially Significant	Less Than Significant with Mitigation	Less Than Significant	No Impact	Comments
c. Have a substantial adverse effect on streams, wetlands, or other surface waters that are protected by federal, state, or local regulations and policies?		X			A small seasonal wetland and 0.82 acre of the Cosumnes River occur in the project area. The project will result in temporary impacts to wetlands and streams. Mitigation has been included to ensure that impacts are less than significant. Please refer to the Initial Study.
d. Have a substantial adverse effect on the movement of any native resident or migratory fish or wildlife species?			X		Resident and/or migratory wildlife may be temporarily displaced by project construction; however, impacts are not anticipated to result in significant, long-term effects upon the movement of resident or migratory fish or wildlife species, and no major wildlife corridors would be affected. Please refer to the Initial Study.
e. Adversely affect or result in the removal of native or landmark trees?			X		No native trees are proposed for removal; some native trees occur on and adjacent to the project site.
f. Conflict with any local policies or ordinances protecting biological resources?			X		The project is consistent with local policies/ordinances protecting biological resources.
g. Conflict with the provisions of an adopted Habitat Conservation Plan or other approved local, regional, state or federal plan for the conservation of habitat?			X		There are no known conflicts with any approved plan for the conservation of habitat.
13. CULTURAL RESOURCES - Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource?		X			An historical resources survey was conducted on the project site. Historical resources were identified within the survey area. Mitigation has been included to ensure that impacts to historic resources are less than significant. Please refer to the Initial Study
b. Have a substantial adverse effect on an archaeological resource?		X			An archaeological survey was conducted on the project site. Archaeological resources were identified within the survey area. Mitigation has been included to ensure that impacts to archaeological resources are less than significant. Please refer to the Initial Study

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c. Disturb any human remains, including those interred outside of formal cemeteries?			X		The project site is located outside any area considered sensitive for the existence of undiscovered human remains. No known human remains exist on the project site. Nonetheless, mitigation has been recommended to ensure appropriate treatment should remains be uncovered during project implementation.
d. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?		X			California Native American Tribes were notified pursuant to Public Resources Code 21080.3.1. Consultation with Tribes has been ongoing throughout project design and environmental review. Mitigation has been included to ensure that impacts to tribal cultural resources are less than significant. Please refer to the Initial Study.
14. HAZARDS AND HAZARDOUS MATERIALS - Would the project:					
a. Create a substantial hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X		The project involves the transport and disposal of hazardous materials off the site (i.e., creosote wood beams and lead-based paint and soils). However, compliance with local, state and federal standards regarding the handling of such material will not create a substantial hazard to the public or environment. Please refer to the Hazardous Material discussion of the Initial Study for further detail.

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b. Expose the public or the environment to a substantial hazard through reasonably foreseeable upset conditions involving the release of hazardous materials?			X		<p>The project involves the transport and disposal of hazardous materials off the site (i.e., creosote wood beams and lead-based paint and soils). However, compliance with local, state and federal standards regarding the handling of such material will not create a substantial hazard to the public or environment. Please refer to the Hazardous Material discussion of the Initial Study for further detail.</p> <p>The project is located in an area that may contain naturally occurring asbestos. Mitigation has been included to ensure that all regulations pertaining to reducing exposure to asbestos are properly adhered to.</p> <p>Please refer to the Air Quality discussion of the Initial Study for further detail.</p>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?				X	The project site is not located within ¼ mile of an existing /proposed school.
d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, resulting in a substantial hazard to the public or the environment?				X	The project is not located on a known hazardous materials site.
e. Impair implementation of or physically interfere with an adopted emergency response or emergency evacuation plan?			X		The project would not interfere with any known emergency response or evacuation plan.
f. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to or intermixed with urbanized areas?			X		The project will replace an existing facility and will not increase the exposure of people or structures to the risk of loss associated with wildland fire.

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15. GREENHOUSE GAS EMISSIONS – Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		The project will not have the potential to interfere with the County meeting the goals of AB 32 (reducing greenhouse gas emissions to 1990 levels by 2020); therefore, the climate change impact of the project is considered less than significant.

INITIAL STUDY PREPARERS

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