



**INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION
EA 2016-0002 (Spring Valley Bridge Replacement Project)**

Project Title: Environmental Assessment EA 2016-0002 (Spring Valley Bridge Replacement Project)

Lead Agency Name and Address: County of Yuba
Planning Department
915 8th Street, Suite 123
Marysville, CA 95901

Project Location: Spring Valley Road over Little Dry Creek

Contact Person: Kevin Perkins, Planning Manager

Phone Number: (530) 749-5470

Date Prepared May 2019

Project Description

The County is planning to replace the Bridge No. 16C0091 on Spring Valley Road over Little Dry Creek. The County has nominated this bridge for replacement under the federal-aid Highway Bridge Program administered by the Federal Highway Administration through California Department of Transportation (Caltrans) Local Assistance. The existing bridge is a narrow two-lane bridge on a two-lane road that is functionally obsolete. The new bridge will meet current design standards of Yuba County, American Association of State Highway and Transportation Officials (AASHTO), and Caltrans.

The project area is located in the rural community of Loma Rica in Yuba County, California. It includes the Spring Valley Road Bridge crossing Little Dry Creek, and an area east and west of the existing bridge along Spring Valley Road. It is shown on the *Loma Rica, California* 7.5-minute U.S. Geological Survey (USGS) quadrangle in Township 16N, Range 5E, Section 3. The center of the project area is located at approximately latitude 39.276419°, longitude -121.397338° (National American Datum 83).

The existing structure is a four-span concrete structure spanning Little Dry Creek, which was originally constructed in 1920. This structure is approximately 61 feet long and 20.3 feet wide and consists of a continuous reinforced concrete slab on drop caps, three column bents, and diaphragm abutments. All existing supports appear to be founded on spread footings. The topography along the stream channel at this location is slightly too moderately steep.

The proposed project will replace the existing bridge with a longer structure located along a new alignment about 50 feet downstream of the existing bridge. The bridge will be replaced with a

new bridge that meets current applicable County, AASHTO, and Caltrans design standards. The number of through-traffic lanes will not increase along the road. There will be a raise in the roadway profile requiring approach roadway grading and fill material to conform back to the existing roadway.

The new bridge over Little Dry Creek will replace the existing bridge with a longer structure of approximately 100 feet. The replacement structure will provide a clear width between barrier rails of 32 feet per recommendations outlined in the design guidelines. A retaining wall along the southwest corner may be installed to minimize fill material and reduce permanent environmental impacts to the creek; this determination to be made in final design. The bridge will consist of two 12-foot lanes and two 4-foot shoulders. A vehicular railing will be attached to the edge of the deck of the new structure. Two different span configurations were investigated for the proposed replacement structure – a multi-span and single-span structure. The first alternative was a multispans either cast-in-place reinforced concrete flat slab or precast prestressed concrete voided slab bridge with two abutments and one or two bent supports. The second alternative was a single-span either cast-in-place prestressed concrete box girder or precast prestressed concrete wide flange girder bridge with two abutment supports. After meetings with the County and Caltrans District 3 Office of Local Assistance, the preferred alternative was selected and approved – a single-span precast prestressed concrete "California wide flange" girder bridge. The single-span structure eliminates the need for supports in the channel. The bridge foundations (abutment footings) will be on spread footings founded upon bedrock. The bridge will not require falsework supports in the creek channel, only formwork at the abutment locations. There is flow in the channel year round, so temporary dewatering embankments and culvert/piping will be needed to convey the flow through the project area during construction. It is anticipated that rock slope protection will be needed at the new bridge abutments and along the new retaining wall as a countermeasure to mitigate for potential scour. The new bridge and alignment location is approximately 50 feet south of the existing bridge. This realignment improves the existing roadway horizontal and vertical geometry and meets the standards of the County, AASHTO, and Caltrans. The alignment has a safer improved design speed, stopping sight distances, and superelevation transitions and runoffs. Having the new alignment separated from the existing alignment will make the road safer during construction for vehicular traffic, local residents, and construction workers.

With regard to traffic handling during construction and the new alignment being separated from the existing alignment – traffic can remain on the existing alignment while the new bridge and alignment are being constructed. The only potential roadway closure might be when the new roadway is connected to the existing roadway at the conform points at each end of the project. These connections are expected to take only a few days of construction work. During those few days, two traffic handling possibilities will be investigated: 1) keeping the connection locations open to one-way traffic; and 2) closing the connection locations to traffic and using traffic detours.

Ground disturbance, associated with road construction and bridge replacement, would be confined to fill material placed for the new roadway alignment and excavation for the abutment footings and placement of rock slope protection at the abutments and along the new retaining wall (Figure 2). All fill material would come from a mine site in the region that is approved under the Surface Mining and Reclamation Act. Fill for the approaches would not be placed in

Little Dry Creek. Potential staging and parking areas consist of the existing roadway and open areas located east of the existing bridge.

Bridge removal, including dismantling and offsite disposal would conform to the provisions of Section 15 of the Caltrans 2015 Standard Specifications. The existing bridge will be tested for hazardous materials prior to construction and the bridge will be dismantled and disposed of in proper landfill facilities based on the finding of the hazardous materials study. A bridge removal work plan will detail the removal sequence, temporary supports, types of protective covers, and protection of people and the environment from lead-based paint and falling objects. A tarp would likely be placed below the bridge to capture falling debris for removal while the span's members are disassembled using mechanical means. Piling, piers, and abutments would be removed at least 3 feet below finished grade. The banks and channel would be contoured to blend in with the surrounding landform. Hydroseeding and tree planting of suitable native species would facilitate restoring the site to preconstruction conditions.

Project construction is anticipated to begin in spring/summer of 2020 and be complete by fall of the same year.

Utilities

PG&E will require overhead relocation and AT&T will require underground relocation. Utility lines will be relocated within the project limits prior to construction beginning. Equipment used will be truck-mounted drilling equipment, truck-mounted cranes and associated underground communication equipment.

Right-Of-Way (ROW)

Acquisition of permanent right-of-way will be required based on the design plan/profile of the roadway and bridge. Temporary construction easements will be needed along the potential staging area and detour road. The County will provide ROW planning services, appraisal services, and acquisition services to acquire the temporary construction easements for this bridge.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

- Regional Water Quality Control Board (for grading over 1 acre in size)
- Feather River Air Quality Management District (fugitive dust control plan)
- California Dept. of Fish & Wildlife (1600 Permit)
- United States Army Corps of Engineers (404 permit)
- U.S. Fish & Wildlife Service

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, as indicated by the checklist and corresponding discussion on the following pages:

- | | | |
|--|--|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture & Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | |

- ☒ Mandatory Findings of Significance

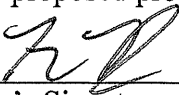
DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Planner's Signature
Kevin Perkins
Planning Manager

5-8-19

Date

PURPOSE OF THIS INITIAL STUDY

This Initial Study has been prepared consistent with CEQA Guidelines Section 15063, to determine if the Environmental Assessment EA 2016-0002 (Spring Valley Road Bridge Replacement Project), as proposed, may have a significant effect upon the environment. Based upon the findings contained within this report, the Initial Study will be used in support of the preparation of a Mitigated Negative Declaration.

EVALUATION OF ENVIRONMENTAL IMPACTS

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

incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, development code). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) The explanation of each issue should identify:
 - a) The significance criteria or threshold, if any, used to evaluate each question; and
 - b) The mitigation measure identified, if any, to reduce the impact to less than significance.

I. AESTHETICS				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less than Significant* – Scenic vistas in the project vicinity generally consist of rolling hills and roadways that will not change as a result of the bridge replacement project.. The proposed bridgework would not deviate atheistically from what currently exists on Spring Valley Road.

b) *Less than Significant* –There will be no substantial effects to rock outcroppings, historic buildings, or trees and the project site is not on a state scenic highway.

c) *No Impact* – As discussed in a) above, the existing visual characteristics of the project site would not be significantly altered by the project. There would be no change in the existing visual character or quality of the site and its surroundings.

d) *No Impact* – The proposed project would be conducted during daytime hours; no nighttime construction is proposed. No temporary or permanent lighting is proposed. There would be no effect on nighttime views.

II. AGRICULTURE AND FORESTRY RESOURCES

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

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *No Impact* – The proposed project is a bridge replacement project. Nearly all project activity is in the existing right-of-way and no farmland conversion would be needed for this project. Therefore, no loss or conversion of farmland would result from the proposed project.

b) *No Impact* – The project area, consisting predominately of public roadways, is designated Rural Community by the Yuba County 2030 General Plan. The surrounding project zoning is “RR” Rural Residential. The proposed project is consistent with the General Plan and zoning. The property is not under a Williamson Act contract, as Yuba County has not established a Williamson Act program.

c) *No Impact* – The project does not involve any activities that would result in a rezone or loss of a Timberland Preservation Zone. The long-term use of the property will remain as a road.

d) *No Impact*- As discussed in the above Environmental Setting section, the proposed project is not located in an area that contains forestland. No conversion of forests would occur because of the project.

e) *No Impact*- The project consists of replacing a structurally deficient bridge. Nothing related to the project will lead to the conversion of any type of viable agricultural land.

III. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less Than Significant Impact* – In 2010, an update to the 1994 Air Quality Attainment Plan was prepared for the Northern Sacramento Valley Air Basin (NSVAB), which includes Yuba County. The plan proposes rules and regulations that would limit the amount of certain emissions, in accordance with the 1994 State Implementation Plan (SIP). The 2010 update summarizes the feasible control measure adoption status of each air district in the NSVAB, including the Feather River Air Quality Management District (FRAQMD). The 2010 update was adopted by the FRAQMD, and development proposed by the project would be required to comply with its provisions.

The Air Quality Attainment Plan also deals with emissions from mobile sources, primarily motor vehicles and construction equipment with internal combustion engines. Data in the Plan, which was incorporated in the SIP, are based on the most currently available growth and control data. As is stated in the guidelines of FRAQMD, projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NOx), and/or 80 pounds per day for PM10. FRAQMD recommends that Type 2 District projects, like a road construction/rehabilitation project, use a District recommended land use model to calculate project related emissions.

In May 2019 a project air quality analysis was performed using the CalEEMod air quality emissions calculator to determine project daily impacts to ROG; NO_x; PM₁₀; and PM_{2.5}. The CalEEMod analysis was based on a 30-day project construction length, a project construction impact of 1.78 acres, and that twice-daily project watering would occur at the construction site. The resulting analysis determined that the project daily emission levels were: ROG 1.54 lbs/day; NO_x 10.77 lbs/day; PM₁₀ 0.77 lbs/day; and PM_{2.5} 0.77lbs/day. The CalEEMod emission analysis demonstrates that project related air quality emissions would not substantially add to the Air Quality Attainment Plan and FRAQMD thresholds. Therefore, impacts to air quality plans would be less than significant.

b) *Less Than Significant Impact* – The California Air Resources Board provides information on the attainment status of counties regarding ambient air quality standards for certain pollutants, as established by the federal and/or state government.

As of 2004, Yuba County is in non-attainment status for State and national (one-hour) air quality standards for ozone, and State standards for particulate matter less than 10 microns in diameter (PM₁₀).

As discussed above in Section A, under the guidelines of FRAQMD projects are considered to have a significant impact on air quality if they reach emission levels of at least 25 pounds per day of reactive organic gases (ROG), 25 pounds per day of nitrogen oxides (NO_x), and/or 80 pounds per day for PM₁₀. ROG and NO_x are ingredients for ozone. The CalEEMod analysis shows the project is below the PM₁₀ threshold. The proposed project does not result in any new development or have an operational emissions phase and would not contribute substantially to the existing non-attainment status for ozone and PM₁₀.

c) *Less Than Significant with Mitigation Incorporated* – As previously noted, the project proposes a bridge replacement along Spring Valley Road. There is no future development associated with the project. The only air emissions associated with the project are emissions associated with project construction and idling vehicular traffic associated with construction traffic delays. The proposed project does not exceed any daily air quality thresholds. Nevertheless, Yuba County currently is in non-attainment status for State and federal (one-hour) air quality standards for ozone, and State standards for particulate matter less than 10 microns in diameter (PM₁₀). Therefore, any pollutant contribution may be considered cumulatively considerable, especially when included with emissions from other proposed projects in the County.

The FRAQMD has a list of standard construction-phase Mitigation Measures that apply to all projects. Also, FRAQMD has established a list of Fugitive Dust Control Mitigation Measures applicable to construction activities, from its Indirect Source Review Guidelines. Based on these, the following Mitigation Measures shall be implemented.

Mitigation Measures:

MM 3.1 The most current FRAQMD Standard Mitigation Measures applicable to construction activities shall be incorporated as part of the project.

MM 3.2 To mitigate impacts of construction vehicle and equipment emissions during construction, the following Mitigation Measures shall be incorporated as part of the project and included in all construction bid documents:

1. Water inactive construction sites and exposed stockpile sites at least twice daily.
2. Pursuant to California Vehicle Code, all trucks hauling soil and other loose material to and from the construction site shall be covered or should maintain at least 6 inches of freeboard (i.e. minimum vertical distance between top of load and the trailer).
3. Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 feet in height to allow development of microorganisms prior to replacement of soil in the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.
4. Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.
5. Equipment or manual watering shall be conducted on all stockpiles, dirt/gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

Implementation of **MM 3.1 and 3.2** would further reduce potential pollutant emissions of the project, and further minimize any cumulative impact. Impacts after mitigation would be less than significant.

d) *Less Than Significant Impact* – The proposed project would be located in a sparsely populated rural area in the community of Browns Valley. The proposed construction activities are not expected to generate pollutant concentrations at a sufficient level to be noticed by any nearby residences, particularly given the rural nature of the project area.

e) *No Impact* – The project would not allow activities that generate odors considered objectionable. Furthermore, the project is located in a rural area, and as noted above, any odors generated by the project would be temporary and consistent with odors emitted from the surrounding rural residences.

IV. BIOLOGICAL RESOURCES			Less Than	
Would the project:	Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a, b, c) Stantec Environmental prepared a Natural Environment Study for the project and below are the results of the study.

Informational Review

Special-status plant and animal species and/or special habitats having the potential to occur in the BSA were determined, in part, using several database searches and review of a species list provided by the U.S. Fish and Wildlife Service (USFWS). Prior to conducting field assessments, the following information sources were reviewed:

- *Loma Rica, California*, USGS 7.5-minute quadrangle;
- Aerial photographs of the BSA and vicinity (Google Earth imagery dated February 1, 2008, September 15, 2010, June 26, 2011, May 2, 2013, and April 14, 2015);
- USFWS list of endangered and threatened species that may occur in the vicinity of the BSA (Appendix A);
- California Natural Diversity Data Base (CNDDB; California Department of Fish and Wildlife 2017a) and California Native Plant Society (CNPS) records for the *Loma Rica, California* USGS 7.5-minute quadrangle and the eight surrounding quadrangles (Appendix A);
- California Wildlife Habitat Relationships (CWHR) System (California Department of Fish and Game 2008); and
- Pertinent literature, including the online *Inventory of Rare and Endangered Vascular Plants of California* (California Native Plant Society 2012; Appendix A), *California Mosses* (Malcolm et al. 2009), *The Jepson Manual, 2nd edition* (Baldwin et al. 2012), *Amphibian and reptile species of special concern in California* (Jennings and Hayes 1994), *California bird species of special concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California*, *Studies of Western Birds 1* (Shuford and Gardali 2008), and *Mammals of the Pacific Northwest* (Maser 1998).

Biological Study Area

The BSA includes Spring Valley Road and road shoulders that are within the right-of-way (ROW), and Little Dry Creek that includes the existing and proposed bridge alignments. The BSA encompasses 6.40 acres and includes annual grassland, pasture, barren, blue oak woodland, valley foothill riparian, riverine, and lacustrine habitats.

Survey Methods

Biological surveys were conducted on April 29, August 7 and August 14, 2014 in general accordance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (California Department of Fish and Game 2009). Per the CDFW guidelines, a target list of special-status plant species with the potential to occur on the site was developed prior to the survey through interpretation of the CNDDB and CNPS query results (Appendix A). A list of all plant species observed is provided in Appendix B. Invasive plant species designated with a California Invasive Plant Council rating of “High” or a California Department of Food and Agriculture rating of “A”, present in the BSA were also recorded and listed in Section 3.1.3.

On August 7 and 14, 2014, a Corps jurisdictional wetland determination was performed according to methodology described in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987). A copy of the report is included as Appendix C.

Personnel and Survey Dates

Following is a list of personnel and tasks performed during visits to the BSA:

- Patrick Martin, Wildlife Biologist, North State Resources, Inc. Biological habitat assessment, wetland delineation survey, botanical survey, August 7 and 14, 2014.
- Paul Kirk, Botanist, North State Resources, Inc. Botanical survey April 29, 2014.

Agency Coordination and Professional Contacts

On November 8, 2017 a list (Appendix A) of federally listed species with the potential to occur in Yuba County was obtained from the USFWS website.

Limitations That May Influence Results

All field studies were conducted in accordance with applicable protocols. Therefore, no limitations that may influence the results of biological field studies are known to have occurred.

Results: Environmental Setting

Description of Existing Physical and Biological Conditions

Study Area

The 6.40-acre BSA is located along Spring Valley Road in the rural community of Loma Rica in Yuba County, California. Public lands within the BSA include Spring Valley Road and road shoulders that are within the ROW, and a portion of Little Dry Creek that includes the existing and proposed bridge alignments. The potential staging areas east and west of the bridge and portions of parcels along Spring Valley Road are public and private lands.

CURRENT/RECENT LAND USE

The BSA is largely bounded by rural residential lands with large acre parcels on the south and north side of the BSA. Properties are private residences with livestock and grazing pastures.

Physical Conditions

SITE TOPOGRAPHY AND ELEVATION

The topography of the BSA is described as rolling foothills, with the lowest point along Little Dry Creek which bisects the BSA. The BSA runs perpendicular to Little Dry Creek and an unnamed drainage, which are the only natural drainages in the BSA. The BSA occurs at an elevation of approximately 300 feet.

CLIMATE

Climate within the BSA is described based on historical precipitation and temperature data collected at Marysville, California 14 miles southwest of the BSA (Western Regional Climate Center 2017). The BSA is characterized by a Mediterranean climate with moderate winters and hot, dry summers. Precipitation in the BSA primarily falls as rain. Average annual rainfall is approximately 22 inches (Western Regional Climate Center 2017). Air temperatures in the BSA range between an average January high of 54 degrees Fahrenheit (°F), and an average July high

of 96 °F. The year-round average high is approximately 76 °F (Western Regional Climate Center 2017).

HYDROLOGICAL RESOURCES

The hydrology within the BSA is provided by Little Dry Creek, an unnamed intermittent stream, perennial pond and roadside drainage ditches. The BSA is located within the Yuba River Watershed, which covers approximately 1,340 square miles. Hydrology for streams is generally provided by sheet flow, springs, and groundwater. Drainage within the BSA is primarily from north to south. Little Dry Creek provides hydrology that supports adjacent riparian wetlands. Little Dry Creek is tributary to the Yuba River.

Biological Conditions in the Biological Study Area

Vegetation communities were classified based on habitat descriptions provided in *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer 1988). Six vegetation communities occur in the BSA: annual grassland, pasture, barren, blue oak woodland, valley foothill riparian and riverine (Figure 3). Three noxious weeds (as defined in Section 2.3.3 above) were observed in the BSA: medusahead (*Elymus caput-medusae*), yellow star-thistle (*Centaurea solstitialis*), and Himalayan blackberry (*Rubus armeniacus*).

ANNUAL GRASSLAND

Annual grassland occurs throughout the BSA between Spring Valley Road and the nearby blue oak woodland, and within the understory of the blue oak woodland. The annual grassland is characterized as a dense herbaceous layer and is dominated by introduced annual grass species, including soft brome (*Bromus hordeaceus*), ripgut brome (*B. diandrus*), cheatgrass (*B. tectorum*), wild oats (*Avena fatua*), and medusahead. Other common herbaceous species include black mustard (*Brassica nigra*), redstem filaree (*E. cicutarium*), yellow star thistle, turkey mullein (*Croton setigerus*), and vinegarweed (*Trichostema lanceolatum*).

Annual grasslands are productive wildlife habitat. Grassland bird species, such as mourning dove (*Zenaida macroura*), savannah sparrow (*Passerculus sandwichensis*), and white-crowned sparrow (*Zonotrichia leucophrys*) as well as rodents, including California ground squirrel (*Spermophilus beecheyi*), Botta's pocket gopher (*Thomomys bottae*), and deer mouse (*Peromyscus maniculatus*), forage on the seed crop this community provides. These species, in turn, attract predators such as gopher snake (*Pituophis catenifer*), American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), barn owl (*Tyto alba*), gray fox (*Urocyon cinereoargenteus*), and coyote (*Canis latrans*).

PASTURE

Pasture occurs as irrigated cattle and horse pasture in the west and east portions of the BSA. The vegetation is dominated by tall fescue (*Festuca arundinacea*) in the western pasture and bare ground and herbaceous weedy species such as vinegarweed, and turkey mullein in the eastern pasture.

Pastures may be used by a variety of wildlife depending on the specific location and adjacent habitats. Pastures may provide habitat for ground-nesting birds or foraging areas for overwintering birds. Flooded pastures may also provide habitat for waterfowl and other wetland type species. Pastures may also attract larger species of wildlife such as deer.

BARREN

Barren occurs as paved roads, dirt driveways and the associated road shoulders. Vegetation is usually not present, although sparse opportunistic grasses and forbs or weedy species may occur. This habitat provides few resources for wildlife species. Although some species associated with adjacent habitats likely forage in the barren habitat to some extent, use of this habitat by wildlife is expected to be limited.

BLUE OAK WOODLAND

Blue oak woodland occurs throughout the BSA, and is characterized by a moderately dense canopy with an open understory dominated by annual grasses. The dominant overstory species are blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), and valley oak (*Quercus lobata*). Understory shrub vegetation is sparse, but includes Himalayan blackberry, and poison-oak (*Toxicodendron diversilobum*). The herbaceous layer includes ripgut brome, cheatgrass, and wild oat.

Blue oaks produce an abundant seed crop every 2 to 3 years and are an important resource for many species of birds and mammals (Mayer and Laudenslayer Jr. 1988). Species dependent on acorns include acorn woodpecker (*Melanerpes formicivorus*), western scrub-jay (*Aphelocoma californica*), western gray squirrel (*Sciurus griseus*), and mule deer (*Odocoileus hemionus*). The newly emerged leaves of oaks in the spring support an abundance of insects that attract migrating and nesting warblers, vireos, flycatchers and other insectivorous birds. In addition, the shrubs provide habitat for bird species such as spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), wrentit (*Chamaea fasciata*), and blue-gray gnatcatcher (*Poliophtila caerulea*). Characteristic reptile and amphibian species include western toad (*Anaxyrus boreas*), a wide variety of snakes (common garter snake [*Thamnophis sirtalis*], California striped racer [*Coluber lateralis*], gopher snake and western rattlesnake [*Crotalus oreganus*], among others), western skink (*Plestiodon skiltonianus*), southern alligator lizard (*Elgaria multicarinata*), and western fence lizard (*Sceloporus occidentalis*).

VALLEY FOOTHILL RIPARIAN

The valley foothill riparian community occurs along the banks and lower terraces adjacent to Little Dry Creek. Dominant canopy trees in this community include white alder (*Alnus rhombifolia*), interior live oak, mulberry (*Morus alba*), and valley oak. White alder, narrow-leaf willow (*Salix exigua*), interior live oak, and Himalayan blackberry dominate the gravel bars and the shrub layer within Little Dry Creek and along its banks. Other common woody and herbaceous plants include rip gut brome, California grape (*Vitis californica*), western rush (*Juncus occidentalis*), and beard grass (*Polypogon australis*).

Riparian woodlands represent some of the most important wildlife habitats due to their high floristic and structural diversity, high biomass (and therefore high food abundance), and water availability. In addition to providing breeding, foraging, and roosting habitat for a diverse array of animals, riparian habitats also provide movement corridors.

The leaf litter, fallen tree branches, and logs associated with the riparian communities provide cover for amphibian species such as western toad and Pacific chorus frog (*Pseudacris regilla*). Western fence lizard, and western skink are also expected to occur here, as are several snake

species, including western rattlesnake, yellow-bellied racer (*Coluber constrictor*), and common kingsnake (*Lampropeltis getula*).

Common bird species nesting and foraging in this habitat, primarily in the riparian tree canopy, include bushtit (*Psaltiriparus minimus*), black phoebe (*Sayornis nigricans*), Nuttall's woodpecker (*Picoides nuttallii*), northern flicker, and downy woodpecker (*Picoides pubescens*). Other resident species, such as spotted towhee and song sparrow (*Melospiza melodia*), often nest and forage in dense understory vegetation. Several species of raptors, including red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), American kestrel, and great horned owl, are also year-round residents of riparian communities.

Several mammals also occur in riparian communities. Small mammals, such as Botta's pocket gopher and deer mouse may burrow or find refuge in dense grass or brushy thickets. Mule deer frequently use riparian habitats, and opportunists, such as raccoon (*Procyon lotor*), are attracted by the abundance of prey and cover.

RIVERINE

Riverine habitat consists of Little Dry Creek in the central portion of the BSA. It is dominated by run and riffle areas with boulder, cobble, gravel, and sand substrates. Vegetation within the active river channel occurs as riparian wetland on sand gravel bars.

Riverine habitat provides critical food, water, and cover to a variety of wildlife species. Many amphibians, fish, and invertebrates are dependent on riverine habitat for survival. Several species of waterfowl and wading birds use riverine habitats to escape predation and seek refuge. Additionally, many species of insectivorous birds and bats find their prey over water. River otter (*Lontra canadensis*) is also a common resident of riverine habitat.

Habitat Connectivity

Environmental corridors are segments of land that provide a link between these different habitats while also providing cover. On a broader level, corridors also function as avenues along which wide-ranging animals can travel, plants can propagate, genetic interchange can occur, populations can move in response to environmental changes and natural disasters, and threatened species can be replenished from other areas. In California, environmental corridors often consist of riparian areas along streams, rivers, or other natural features.

Regional Species and Habitats of Concern

Anadromous Fish

Aquatic habitat is present in the BSA. Native fish, such as Sacramento pike-minnow (*Ptychocheilus grandis*), and non-native fish such as green sunfish (*Lepomis cyanellus*), black bass (*Micropterus* spp.), and carp (*Cyprinus carpio*) along with other populations of native and non-native warm water fish species, have the potential to occur, or are known to occur within the vicinity of the BSA. However, the aquatic habitat within the BSA does not provide holding, spawning, or rearing habitat suitable for special-status anadromous fish species such as Chinook salmon (*Oncorhynchus tshawytscha*) or steelhead (*Oncorhynchus mykiss*). Mosquitofish (*Gambusia affinis*) and Sacramento pikeminnow were observed in Little Dry Creek in the BSA.

during the August 7 and 14, 2014 site visits. Little Dry Creek has private dams upstream and downstream of the BSA.

Riparian Habitat

Riparian habitat (valley foothill riparian) is considered a sensitive natural community by the Corps, CDFW, and the County, and is present in the BSA. In addition to providing habitat for many wildlife species, riparian areas provide shade, sediment, nutrient or chemical regulation, stream bank stability, and input for large woody debris or organic matter to the channel, which are necessary habitat elements for fish and other aquatic species. Based on field observations, all of the valley foothill riparian vegetation in the BSA occurs within or adjacent to waters of the United States. Activities within these areas may be regulated by the Corps under the CWA. The CDFW may require a discretionary Stream Alteration Agreement to be issued prior to initiating construction within riparian habitat that is adjacent to streambeds. Potential adverse effects on riparian habitat are discussed in Section 4.1.2.2.

Waters of the United States

NSR conducted a delineation of waters of the United States within the BSA on August 7 and 14, 2014 (Appendix C). Verification of the delineation by the Corps is pending. Potential waters of the United States include riparian wetland, seasonal wetland, intermittent stream, and perennial stream. These features occupy a total of 0.492 acre of the BSA. Table 1 provides an acreage and linear distance summary by feature type. The boundaries of potential waters of the United States within the BSA are illustrated in Figure 4. Potential adverse effects and avoidance and minimization measures for waters of the United States are discussed in Chapter 4.

Table 1. Acreage Summary of Potential Waters of the United States

Waters of the United States	Total Acreage	Total Linear Feet
Other Waters		
Intermittent Stream	0.005	69
Perennial Stream	0.220	365
Wetlands		
Riparian Wetland	0.222	N/A
Seasonal Wetland	0.045	N/A
Total Waters of the United States	0.492	434

Special-Status Plants

For the purpose of this evaluation, special-status plant species include plants that are (1) listed as threatened or endangered under the CESA or the ESA; (2) designated as rare by the CDFW; (3) state or federal candidate or proposed species for listing as threatened or endangered; and/or (4) have a California Rare Plant Rank of 1A, 1B, 2A, or 2B.

Regionally occurring special-status plant species were identified based on a review of pertinent literature, the USFWS species list, CNDDDB, and CNPS database records, and the field survey results. The status of each special-status plant species was verified using the *Special Vascular Plants, Bryophytes, and Lichens List* (California Department of Fish and Wildlife 2017b) and the *State and Federally Listed Endangered, Threatened and Rare Plants of California* (California Department of Fish and Wildlife 2017c). For each species, habitat requirements were assessed and compared to the habitats in the BSA and immediate vicinity to determine if potential habitat occurs in the BSA. Based on the habitat assessment and the results of the botanical survey, it was determined that special-status plant species do not have the potential to occur in the BSA.

Special-Status Animals

Special-status animal species include species that are (1) listed as threatened or endangered under the CESA or the ESA; (2) proposed for federal listing as threatened or endangered; (3) state or federal candidates for listing as threatened or endangered; and/or (4) identified by the CDFW as Species of Special Concern or California Fully Protected Species.

A list of regionally occurring special-status animal species was compiled based on a review of pertinent literature, the results of the field surveys, review of the USFWS species list, CNDDDB database records, and a query of the CWHR system. The status for each special-status wildlife species was verified using the *Special Animals List* (California Department of Fish and Wildlife 2017d) and the *State and Federally Listed Endangered and Threatened Animals of California* (California Department of Fish and Wildlife 2017e). The CWHR system was used to help determine wildlife species that potentially occur in the vegetation communities within the BSA. The CWHR is a predictive database system based on scientific information concerning wildlife species and their habitat relationships. Fish and invertebrates are not included in the CWHR system.

For each species, general habitat requirements were assessed and compared to the habitats within the BSA and immediate vicinity in order to determine their potential to be adversely affected by the proposed project. Based on this review of general habitat requirements, and the results of the field assessment, nine special-status animal species were determined to have the potential to occur in the BSA (Table 2). Potential adverse effects and avoidance and minimization measures for these special-status species are discussed in Chapter 4. For the purposes of this review, all regionally occurring wildlife species listed under ESA or CESA are included in Table 2, regardless of whether the BSA provides potential habitat.

Table 2. Special-Status Wildlife Potentially Occurring or Known to Occur in the BSA

Common Scientific Name	Name ¹ (Fed/State)	General Habitat Description	Habitat Assessment ²	Rationale
<i>Federal- or State-Listed Species</i>				
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T/—	Elderberry shrubs having stems with a basal diameter equal to or greater than 1 inch. Typically associated with riparian habitat.	A	The BSA does not contain any elderberry shrubs.

Table 2. Special-Status Wildlife Potentially Occurring or Known to Occur in the BSA

Common Scientific Name	NameStatus ¹ (Fed/State)	General Habitat Description	Habitat Assessment ²	Rationale
delta smelt <i>Hypomesus transpacificus</i>	T/E	Endemic to Sacramento-San Joaquin River Delta in open, shallow, low salinity (<1%) waters. Spawns in middle and upper reaches of Delta from late winter to spring	A	The BSA is outside the range of this species.
California legged frog <i>Rana draytonii</i>	red- T/SSC	Requires aquatic habitat for breeding, also uses a variety of other habitat types including riparian and upland areas. Adults utilize dense, shrubby or emergent vegetation associated with deep-water pools with fringes of cattails and dense stands of overhanging vegetation. This species may also breed in ephemeral ponds that support little or no vegetation.	HP	Suitable aquatic habitat is present in the BSA within Little Dry Creek.
giant garter snake <i>Thamnophis gigas</i>	T/ST	Freshwater marshes and low gradient streams with emergent vegetation. Adapted to drainage canals and irrigation ditches with mud substrate.	A	The BSA lacks freshwater marshes and low gradient streams with emergent vegetation for the species.
California black rail <i>Laterallus jamaicensis coturniculus</i>	—/T	Coastal brackish marshes dominated by pickleweed or fresh emergent wetlands in the Sierra Nevada foothills.	A	The BSA lacks suitable nesting habitat in fresh emergent wetlands.
Swainson's hawk <i>Buteo swainsoni</i>	—/T	Breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannah; forages in adjacent livestock pasture, grassland or grain fields.	HP	Trees in the blue oak woodland provide suitable nesting habitat for this species.

Table 2. Special-Status Wildlife Potentially Occurring or Known to Occur in the BSA

Common Scientific Name	Name	Status ¹ (Fed/State)	General Habitat Description	Habitat Assessment ²	Rationale
Other Special-Status Species					
foothill legged <i>Rana boylei</i>	yellow- frog	—/CT	Requires partly shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg laying.	HP	The BSA contains suitable aquatic habitat for the species in Little Dry Creek.
western pond turtle <i>Actinemys mamorata</i>		—/SSC	Slow water aquatic habitat with available basking sites. Hatchlings require shallow water with dense submergent or short emergent vegetation. Require an upland oviposition site in the vicinity of the aquatic site	HP	Little Dry Creek and adjacent upland provides potential habitat for the species.
long-eared owl <i>Asio otus</i>		—/SSC	Requires riparian habitat or live oak thickets and other dense stands of trees.	HP	Riparian trees in the BSA provides potential habitat for the species.
white-tailed kite <i>Elanus leucurus</i>		—/FP	Nests in lowlands with dense oak or riparian stands near open areas, forages over grassland, meadows, cropland and marshes.	HP	Blue oak woodland provides potential nesting habitat; open areas in the vicinity provides potential foraging habitat.
loggerhead shrike <i>Lanius ludovicianus</i>		—/SSC	Forages in open grassland habitats throughout the Central Valley of California. Nests in shrubs and trees.	HP	The annual grassland and blue oak woodland in the BSA provide suitable habitat for this species.
pallid bat <i>Antrozous pallidus</i>		—/SSC	Forages over many habitats; roosts in buildings, large oaks, rocky outcrops and rocky crevices in mines and caves.	HP	Riparian trees and rock outcrops in the BSA provide potential roosting habitat for the species.

Table 2. Special-Status Wildlife Potentially Occurring or Known to Occur in the BSA

Common Scientific Name	Name/Status ¹ (Fed/State)	General Habitat Description	Habitat Assessment ²	Rationale
western red bat <i>Lasiurus blossevillii</i>	—/SSC	Typically roost solitarily in dense tree foliage, particularly in willows, cottonwoods, and sycamores. Strongly associated with riparian habitats, particularly mature stands of cottonwood or sycamore.	HP	The riparian vegetation within and adjacent to the BSA may provide suitable roosting habitat for western red bat.
American badger <i>Taxidea taxus</i>	—/SSC	Herbaceous, shrub, and open stages of most habitats with dry, friable soils.	HP	The annual grassland and blue oak woodland within the BSA may provide suitable habitat for American badger.

¹ Status Codes: Endangered (E); Threatened (T); Candidate Threatened (CT); State Fully Protected (FP); State Species of Special Concern (SSC).

² Assessment Codes. Absent (A): No habitat present and no further work needed. Habitat Present (HP): Habitat is, or may be present. The species may be present. Present (P): The species is present. Critical Habitat (CH): BSA is located within a designated critical habitat unit [this does not necessarily mean that appropriate habitat is present].

Results: Biological Resources, Discussion of Impacts and Mitigation

Habitats and Natural Communities of Concern

Riparian Habitat

SURVEY RESULTS

Riparian habitat was mapped in the BSA adjacent to Little Dry Creek (Figure 3).

PROJECT IMPACTS

The proposed project may result in permanent impacts on approximately 0.157 acre of valley foothill riparian habitat (Figure 5). These impacts would be due to the construction of the new bridge, including the placement of work platforms, and removal of the old bridge, including removal of piling, piers, and abutments.

AVOIDANCE AND MINIMIZATION EFFORTS

By implementing the conservation measures provided in Section 1.3, the project will avoid or minimize the potential for adverse impacts on riparian habitat.

COMPENSATORY MITIGATION

Impacts on riparian habitat will be mitigated for as described in Section 1.3.5.

CUMULATIVE IMPACTS

With implementation of the above measures, the proposed project would not result in cumulatively considerable adverse impacts on riparian habitat.

Waters of the United States, Including Wetlands

SURVEY RESULTS

The field delineation was conducted by NSR on August 7 and 14, 2014. A total of 0.492 acre of waters of the United States was mapped in the BSA. Potential waters of the United States occur as riparian wetland (0.222 acre), seasonal wetland (0.045 acre), intermittent stream (0.005 acre, 69 feet), and perennial stream (0.220 acre, 365 feet).

PROJECT IMPACTS

The proposed replacement bridge is a single-span structure that eliminates the need for supports in the channel. The bridge foundations (abutment footings) will be on spread footings founded upon bedrock. The bridge will not require falsework supports in the creek channel, only formwork at the abutment locations. There is flow in the channel year round, so temporary dewatering embankments and culvert/piping will be needed to convey the flow through the project area during construction. It is anticipated that rock slope protection will be needed at the new bridge abutments and along the new retaining wall as a countermeasure to mitigate for potential scour.

Construction of the new bridge, including placement of rock slope protection, and removal of the old bridge, including removal of pilings, piers, and abutments will have permanent impacts on up to 0.059 acre (40 feet) of potential waters of the United States and temporary impacts on up to 0.200 acre (196 feet) of potential waters of the United States (Figure 5).

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures provided in Chapter 1, the following measures shall be implemented to avoid or minimize the potential for adverse impacts on potential waters of the United States.

- | | |
|-------------------------------|---|
| Mitigation Measure 4.1 | Prior to any discharge of dredge or fill material into Little Dry Creek, the required permits/authorizations shall be obtained from the Corps and the RWQCB. All terms and conditions of the required permits/authorizations shall be implemented. |
| Mitigation Measure 4.2 | Prior to any activities that would obstruct the flow of, or alter the bed, channel, or bank of Little Dry Creek, notification of streambed alteration shall be submitted to the CDFW. If required, a streambed alteration agreement shall be obtained from CDFW and all conditions of the agreement shall be implemented. |
| Mitigation Measure 4.3 | All waters of the United States that are temporarily affected by project construction shall be restored as close as practicable to their original contour and conditions within 10 days of the completion of construction activities. |

COMPENSATORY MITIGATION

Permanent impacts on up to 0.059 acre of potential waters of the United States will be partially offset by the revegetation of areas where the exiting bridge will be removed. Avoidance and minimization efforts combined with revegetation activities will minimize the impacts on

potential waters of the United States and compensatory mitigation is not anticipated to be required.

CUMULATIVE IMPACTS

With implementation of the above measures, the proposed project would not result in cumulatively considerable adverse impacts on waters of the United States, including wetlands.

Special-Status Plant Species

Based on this review of habitat requirements and the results of the field assessment, it was determined that the BSA only provides marginal habitat for the special-status plant species with potential to occur in the region. No special-status plant species were detected during the botanical survey conducted on April 29, 2014. Thus, implementation of the proposed project is not expected to adversely affect any special-status plant species.

Special-Status Animal Species

Potential habitat for ten special-status animal species occurs in the BSA. These species include California red-legged frog, foothill yellow-legged frog, western pond turtle, white-tailed kite, Swainson's hawk, long-eared owl, loggerhead shrike, pallid bat, western red bat, and American badger. There were no incidental observations of special-status species during the site visits. A discussion of the regulatory status, habitat requirements, potential for occurrence, recommended avoidance and minimization measures, potential project-related impacts, and cumulative effects for each of these species is provided below.

California Red-legged Frog

SURVEY RESULTS

California red-legged frog is listed as a threatened species under the ESA, and is designated as a species of special concern by the CDFW. California red-legged frog habitat requirements are varied, and often include a diverse set of conditions from sea level up to 5,200 feet. Ponds often support all life stages of this species, but California red-legged frogs also use various aquatic and upland habitats for movement corridors. Ideal habitat conditions for this species are a complex of breeding ponds or other such sites that provide diverse conditions which allow the frogs to tolerate dynamic climatic variation (U.S. Fish and Wildlife Service 2002). Upland movements to or from breeding sites typically occur during wet weather at night, and may extend up to 1 mile. This species may travel along riparian corridors or in straight line movements not associated with riparian corridors (U.S. Fish and Wildlife Service 2002).

California red-legged frogs historically occurred across the western slope of the Sierra Nevada, from Shasta County to Tulare County. Populations and habitat within this historic range have been fragmented and nearly eliminated in some areas (U.S. Fish and Wildlife Service 2002). The BSA occurs within the current range of California red-legged frog but is not within designated critical habitat for this species. There are no CNDDDB records for California red-legged frog in the Little Dry Creek watershed or within 5 miles of the BSA. The nearest CNDDDB record for this species occurs approximately 15 miles northeast of the BSA in two

spring-fed tailings ponds located adjacent to Little Oregon Creek. This population has historically consisted of few individuals, with zero to six frogs observed in surveys between 2000 and 2011 (Barry and Fellers 2013). The most recent reported positive observation of California red-legged frog at the Little Oregon Creek population was in 2008, when one adult was observed (Barry and Fellers 2013).

The BSA provides some habitat components for this species such as perennial water in Little Dry Creek. However, the shallow runs and rifles in the BSA are not anticipated to provide suitable breeding habitat for California red-legged frog. A review of USGS topographic maps and Google Earth aerial imagery provided information regarding potentiality suitable habitats for California red-legged frog within 1 mile of the BSA. Potentially suitable California red-legged frog breeding habitat is present within 1 mile of the BSA and occurs in rural residential agricultural ponds. The nearest potentially suitable breeding habitat occurs approximately 500 feet northeast of the existing bridge in a rural residential agricultural pond. None of the potentially suitable breeding habitat was directly observed in the field and the quality of the habitat is unknown. If fish or bullfrogs are present in the ponds, the habitat suitability may be poor.

Little Dry Creek has sufficient flow, duration, and near-stream upland habitat to be considered potentially suitable California red-legged frog dispersal, resting, and migration habitat. However, Little Dry Creek in the vicinity of the BSA is considered to be relatively low quality habitat for dispersal, resting, and migration because: 1) the likely presence of predators such as northern raccoon, striped skunk, warm water fish species, and terrestrial garter snakes; 2) there are no reported populations of California red-legged frog in the Little Dry Creek watershed; and 3) ponds in the vicinity of the BSA may support bullfrogs which would reduce the suitability for potential breeding. Therefore, it is unlikely that the BSA and vicinity would be used by California red-legged frog for dispersal, resting, and migration.

Although there is a known population of California red-legged frog approximately 15 miles northeast of the BSA near Little Oregon Creek, individuals from this population would not be expected to occur in the BSA because: 1) Little Oregon Creek and Little Dry Creek are not in the same watershed; 2) the Little Oregon Creek population is very small and does not appear to be expanding into nearby suitable habitat (Barry and Fellers 2013); 3) recent observations and research indicate that small populations of Sierran California red-legged frog may not disperse far from their home ponds (Richmond et al. 2014); and 4) agricultural ponds in the vicinity of the BSA are likely to support bullfrogs and fish.

PROJECT IMPACTS

As discussed above, California red-legged frog is not expected to occur within the BSA and no effects on California red-legged frog are anticipated as a result of the project. The project is a short-term construction activity that consists of replacing an existing structurally bridge with new structure of similar length. Implementation of the project would not significantly alter habitat suitability for California red-legged frog and would not result in indirect effects on this species.

With implementation of the conservation measures discussed in section 1.3, and mitigation measure 4 discussed below, the project would not affect California red-legged frog. The project would not affect designated critical habitat for California red-legged frog.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3, the following measure shall be implemented to avoid the potential for adverse effects on California red-legged frog.

Mitigation Measure 4.4 All construction personnel shall complete environmental awareness training prior to beginning work. The training shall inform construction personnel of: 1) conservation measures for protection of special-status wildlife species (e.g., inspecting around equipment and work area before operating, minimize vegetation disturbance, protect water quality); 2) identification of potentially occurring special-status species and potential habitat in the project area; and 3) procedures to follow if special-status species are observed. If special-status species are encountered within the work area during project construction, work activity with a potential to disturb the special-status species will cease until the special-status species has left the work area.

COMPENSATORY MITIGATION

None required.

CUMULATIVE EFFECTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative impacts are not anticipated.

Foothill Yellow-Legged Frog

SURVEY RESULTS

The foothill yellow-legged frog is a native species of the Sierra Nevada foothill region and is designated by CDFW as a state candidate for listing as an endangered species (California Department of Fish and Wildlife 2017c). This species is found in a variety of riparian and aquatic habitats, including valley foothill riparian and riverine. Its known elevation range extends from near sea level to 6,370 feet in the Sierra Nevada (Thomson et al. 2016). Foothill yellow-legged frog was historically distributed throughout the foothill portions of most drainages from the Oregon border to the San Gabriel River but has been declining (Thompson et al. 2016). The species generally utilizes partially shaded, cool, clear, shallow, flowing water, and typically occurs in small-to moderate-sized streams situations with at least some cobble-sized substrate. This habitat provides basking and oviposition opportunities, and refuge for larvae and post metamorphs (Jennings and Hayes 1994). Unlike most other ranid frogs in California, this species is rarely encountered (even on rainy nights) far from permanent water.

The BSA occurs within the foothill yellow-legged frog current and historic range. Suitable breeding, larval development, and dispersal habitat for foothill yellow-legged occurs within Little Dry Creek. This habitat occurs as a small perennial stream containing boulder, cobble, gravel, and sand substrates. Foothill yellow-legged frog was not observed during the August 7 and 14, 2014 surveys of the BSA. The nearest CNDDDB occurrences for foothill yellow-legged frog is 7 southeast in the Yuba River (California Department of Fish and Wildlife 2017a). Since

suitable habitat is present within the BSA, there is a potential for this species to occur in the BSA.

PROJECT IMPACTS

The project is not anticipated to result in any permanent impacts on riverine habitat in Little Dry Creek. New bridge abutments will be constructed outside of the ordinary high water mark of the creek. Temporary construction-related impacts in and near aquatic habitat could result in adverse effects on foothill yellow-legged frog if they are present during construction.

Activities related to the construction of the new bridge, replacement of bridge abutments and removal of the existing bridge would result in removal of some riparian vegetation and general disturbance to the soil. Removal of vegetation and soil can accelerate erosion processes in the project area and increase the potential for sediment to enter Little Dry Creek. Excessive sedimentation into the creek channel has the potential to reduce habitat quality for foothill yellow-legged frogs and could decrease the availability of prey items including aquatic invertebrates.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3 and mitigation measure 4, the following mitigation measure shall be implemented to avoid or minimize the potential for adverse effects on foothill yellow-legged frog.

Mitigation Measure 4.5 If foothill yellow-legged frog remains on the CESA candidate species list or is formerly listed under CESA at the time of project construction, CDFW will be contacted prior to project construction to determine if additional measures may be necessary. These measures may include, but are not limited to, worker environmental awareness training, preconstruction surveys, biological monitoring, and additional coordination with CDFW if foothill yellow-legged frogs are detected in or near the work area.

COMPENSATORY MITIGATION

None Required

CUMULATIVE IMPACTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative impacts are not anticipated.

Western Pond Turtle

SURVEY RESULTS

The western pond turtle is designated as a species of special concern by the CDFW. This species is found in ponds, marshes, creeks, and irrigation ditches. Within their aquatic habitat, they are associated with areas that contain underwater refugia such as rocks, submerged vegetation, or holes along a bank (Hays et al. 1999). This species also requires basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. They frequently bask on logs or other objects out of the water when water temperatures are low and air temperatures are greater than water temperatures. When air temperatures become too warm, western pond turtles

water bask by lying in the warmer surface water layer with their heads out of the water. Hibernation in colder areas is passed underwater in bottom mud (Zeiner et al. 1988). Mating typically occurs in late April or early May, but may occur year-round. Nests are located in an upland location that may be a considerable distance from the aquatic site (up to ¼ mile) (Jennings and Hayes 1994). Females excavate an upland nest chamber in which the eggs are laid and subsequently buried. Hatchling turtles are thought to emerge from the nest and move to the aquatic site in the spring. The western pond turtle is a dietary generalist, often foraging on the bottom of water features for aquatic invertebrates. This species occurs throughout California west of the Sierra crest and is absent from desert regions except for along the Mojave River (Zeiner et al. 1988).

Little Dry Creek and ponds adjacent to the BSA provide suitable aquatic and upland habitat for western pond turtle. Upland areas along the banks of Little Dry Creek and in upland riparian areas provide suitable nesting habitat for western pond turtle. Western pond turtle could occur foraging in Little Dry Creek and nesting along its banks. There are three CNDDDB records for western pond turtle within a 5-mile radius of the BSA.

PROJECT IMPACTS

Potential project-related impacts on western pond turtle are similar to those identified above for foothill yellow-legged frog.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3 and mitigation measures 4 and 6, the following measure shall be implemented to avoid or minimize the potential for adverse effects on western pond turtle.

Mitigation measure 4.6 If western pond turtles are encountered within the BSA during construction, work activity in the immediate vicinity will cease until any turtles have left the work area. If the turtles do not leave the work area and relocation is necessary, they shall be relocated only by a qualified biologist.

COMPENSATORY MITIGATION

None required.

CUMULATIVE IMPACTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative effects are not anticipated.

Swainson's Hawk

SURVEY RESULTS

Swainson's hawk is a state-listed threatened species. This species generally nests in isolated stands of trees and along forested edges near open habitats, such as annual grasslands and row crops that provide foraging habitat. The nesting season (nesting building to post-fledging) generally occurs between April 1 and July 30 (Swainson's Hawk Technical Advisory Committee 2000), but some active nesting activity may occur into August.

Large trees that provide nesting habitat are present in blue oak woodlands in the BSA. Swainson's hawk prefer open habitat with scattered trees for nesting and foraging. Foraging habitat is present in the annual grassland and pasture areas in the BSA. Preferred open habitat is located west of the BSA where agricultural lands and annual grasslands are more dominant. No large stick nests were identified within the BSA. Swainson's hawk is unlikely to nest in the BSA and is more likely to occur at lower elevations in more open habitat. There are three CNDDDB records for this species within a 10-mile radius of the BSA.

PROJECT IMPACTS

If Swainson's hawks are nesting within 0.25 mile of the BSA, construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment (Swainson's Hawk Technical Advisory Committee 2000). No foraging habitat would be converted to other uses; therefore, the proposed project is not anticipated to result in impacts on Swainson's hawk foraging habitat.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3, the following measure shall be implemented to avoid or minimize the potential for adverse effects on Swainson's hawk.

Mitigation measure 4.7 If construction activities must occur during the nesting season (i.e., February 1 through August 31), the following measure shall be implemented. A minimum of one pre-construction survey for active Swainson's hawk nests within 0.25 mile (where accessible) of the project area shall be conducted by a qualified biologist within 15 days prior to the initiation of construction activities. If any Swainson's hawk nests are identified, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to, establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.

COMPENSATORY MITIGATION

None required.

CUMULATIVE EFFECTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative effects are not anticipated.

Long-eared owl, White-tailed kite, and Loggerhead Shrike

SURVEY RESULTS

Long-eared owl

The long-eared owl is designated as a species of special concern by the CDFW. This species occurs as a permanent resident or winter visitor throughout much of the northern portion of the state. It requires wooded areas for roosting and breeding and often frequents riparian habitats.

At higher elevations, this species can be found in dense conifer stands. The long-eared owl typically forages in open habitats, primarily for small rodents. The cause for this species' decline is unclear, although loss of riparian habitat may play a role.

Blue oak woodland, valley foothill riparian, pasture and annual grasslands and habitat edges within and adjacent to the BSA provides potential foraging and nesting habitat for long-eared owl. No large stick nests were identified within the BSA during the site visit on August 7 and 14, 2014, although red-shouldered hawk (*Buteo lineatus*) and American crow (*Corvus brachyrhynchus*) were observed in the BSA that could build suitable nest structures that could be used by long-eared owl. There are no CNDDDB records for long-eared owl within a 5-mile radius of the BSA.

White-tailed kite

The white-tailed kite is designated as a fully protected species by CDFW. This species can be found in association with the herbaceous and open stages of a variety of habitat types, including open grasslands, meadows, emergent wetlands, and agricultural lands. The white-tailed kite is a year-round resident in California. Nests are constructed near the top of dense oaks, willows, or other tree stands located adjacent to foraging areas. The species forages in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands. White-tailed kites are seldom observed more than 0.5 mile from an active nest during the breeding season (Zeiner et al. 1990).

Annual grasslands and scattered trees within and adjacent to the BSA provides potential foraging and nesting habitat for white-tailed kite. No large stick nests were identified within the BSA during the site visit on August 7 and 14, 2014. There are no CNDDDB records for white-tailed kite within a 5-mile radius of the BSA.

Loggerhead shrike

Loggerhead shrike is designated as a species of special concern by the CDFW. This species is generally found in open grasslands, relatively open woodlands, and ruderal agricultural settings throughout the Central Valley. Loggerhead shrike nests in trees or shrubs and generally requires barbed-wire fences, thorn bushes, or similar barbed structures for impaling and storing prey items. In the Central Valley, the nesting season for this species occurs between March and August (California Department of Fish and Game 2008).

Potential nesting and foraging habitat for loggerhead shrike is present in and adjacent to the BSA. Barbed-wire fences generally run along the ROW in the BSA that could be used by shrikes for impaling larger prey items. Nesting habitat is limited to riparian trees and shrubs within the BSA. There are no CNDDDB records for loggerhead shrike within a 5-mile radius of the BSA.

PROJECT IMPACTS

Long-eared owl, white-tailed kite, and loggerhead shrike may nest in or adjacent to the BSA. Thus, construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment or nest destruction. Loss of fertile eggs or nesting special-status birds, or any activities resulting in nest abandonment or destruction, may adversely affect the species. The proposed project may also result in a small, temporary reduction of foraging and/or nesting and/or roosting habitat for the species. However, due to the

regional abundance of similar habitats, temporary habitat loss is not expected to result in adverse effects on these species.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3, the following measures shall be implemented to avoid or minimize the potential for adverse effects on nesting long-eared owl, white-tailed kite, and loggerhead shrike.

Mitigation Measure 4.8 Vegetation removal, grading, and other construction activities shall be scheduled to avoid the breeding season for nesting raptors and other special-status birds (i.e., February 15 through August 31) to the extent practicable. If construction occurs outside of the breeding season, no further mitigation is necessary. If the breeding season cannot be completely avoided, then mitigation measure 10 will be implemented.

Mitigation Measure 4.9 A qualified biologist shall conduct a minimum of one pre-construction survey for nesting migratory birds and raptors within the BSA and a 250-foot buffer around the BSA. The survey should be conducted no more than 15 days prior to the initiation of construction. If an active nest is found, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to: establishing a construction-free buffer zone around the active nest site, biological monitoring of the active nest site, and delaying construction activities in the vicinity of the active nest site until the young have fledged.

COMPENSATORY MITIGATION

None required.

CUMULATIVE IMPACTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative effects are not anticipated.

Pallid Bat and Western Red Bat

SURVEY RESULTS

Pallid bat

The pallid bat is designated as a species of special concern by the CDFW. This species is a year-round resident throughout California, except in the high Sierra Nevada and in Del Norte and western Siskiyou counties in the northwestern corner of the state. Pallid bats often roost in groups (10–100+ individuals). They typically use separate day and night roosts and, in general, day roosts are in more enclosed, protected spaces than are night roosts (Tatarian 2001). The well-protected day roosts are required for maternity roosts where the young are reared (i.e., nursery colonies). Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, large tree cavities and various human structures such as bridges (especially wooden and

concrete girder designs), barns, and vacant buildings (Sherwin and Rambaldini 2005). Maternity roosts are established in April, with young born in May through June. The young are typically volant (i.e., flying) by July through early August.

The existing bridge does not have any suitable roosting crevices. The riparian and oak woodland habitat along Little Dry Creek may provide suitable night roosting and foraging habitat for pallid bat. Private ponds east of the BSA may also provide foraging habitat. There are no CNDDDB-reported occurrences of bat roosts in the vicinity of the BSA. Given the absence of mines, caves, rock crevices, and large snags, the BSA is not anticipated to provide suitable breeding habitat (e.g., maternity roosts) for pallid bat.

Western red bat

The western red bat is designated as a species of special concern by CDFW. This species utilizes sites with a mosaic of habitats that includes large trees for roosting and open areas for nocturnal foraging. Western red bat is strongly associated with riparian habitats (California Department of Fish and Game 2008).

Western red bat could roost and breed in tree foliage in the BSA. Riparian habitat is present for western red bat in the BSA along Little Dry Creek and at adjacent private ponds. Open areas for foraging include pasture and annual grasslands which are located in the BSA and are interspersed throughout blue oak woodland and narrow riparian bands. No active bat roosts or evidence of roosting bats were detected within or adjacent to the BSA. There is one reported CNDDDB occurrence of western red bat within 5 miles of the BSA.

PROJECT IMPACTS

Due to the ability of individual bats to move away from disturbance, direct impacts on bats are not expected when the bats are not in a maternity colony. Bats may form maternity colonies in mature riparian trees in the BSA. If a tree is removed that contains a bat colony, the disturbance could result in bat mortality or injury. Indirect impacts may occur from construction disturbances if a maternity colony is present in or adjacent to the BSA. Significant noise disturbance could result in adults temporarily or permanently leaving the maternity colony.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3, the following measures shall be implemented to avoid or minimize the potential for adverse effects on pallid bat and western red bat.

- | | |
|--------------------------------|--|
| Mitigation Measure 4.10 | To the extent practicable, removal of mature riparian trees shall occur before maternity colonies form (i.e., prior to March 1) or after young are volant (i.e., after August 15). |
| Mitigation Measure 4.11 | If construction (including the removal of large trees) occurs during the non-volant season (March 1 through August 15), a qualified biologist shall conduct a pre-construction survey of the BSA for maternity colonies. The pre-construction survey will be performed no more than 14 days prior to the implementation of construction activities (including staging and equipment access). If a lapse in |

construction activities for 14 days or longer occurs between those dates, another pre-construction survey will be performed. If any maternity colonies are detected, appropriate conservation measures (as determined by a qualified biologist) shall be implemented. These measures may include, but are not limited to: establishing a construction-free buffer zone around the maternity colony site, biological monitoring of the maternity colony, and delaying construction activities in the vicinity of the maternity site.

COMPENSATORY MITIGATION

None required.

CUMULATIVE IMPACTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative effects are not anticipated.

American Badger

SURVEY RESULTS

The American badger is designated as a species of special concern by CDFW. This species occurs in a variety of habitats, but is most abundant in dry open habitats, such as shrub, forest and herbaceous habitats (California Department of Fish and Game 2008). American badger requires friable soil for burrowing and an abundance of mammals for prey, typically fossorial mammals (California Department of Fish and Game 2008). American badger may feed on other vertebrates and on invertebrates as prey availability shifts.

Pasture habitat and open stages of blue oak woodland north and south of Spring Valley Road provide suitable habitat for American badger. Denning habitat could be present in areas surrounding the BSA. No burrows associated with American badger were observed during the reconnaissance-level surveys on August 7 and 14, 2014. No CNDDDB occurrences for American badger are recorded within 5 miles of the BSA. This species is not expected to breed in the BSA, but could move through the BSA.

PROJECT IMPACTS

If American badger is present in the BSA during project activities, potential adverse impacts include mortality, increased risk of predation, and increased stress resulting from removal of vegetation, or the filling or crushing of burrows or crevices used for refuge and winter retreats.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3, the following measures shall be implemented to avoid or minimize the potential for adverse effects on American badger.

Mitigation Measure 4.12 If an American badger is encountered during construction, activities in the vicinity shall cease until appropriate corrective measures have been implemented or it has been determined that American badger will not be harmed. Any American badger encountered during construction shall be allowed to move away on

their own. Any trapped, injured, or killed American badgers shall be reported immediately to CDFW.

COMPENSATORY MITIGATION

None required.

CUMULATIVE IMPACTS

No future projects near the current proposed project are known at this time. The bridge replacement project would not result in a change of road use along the adjacent roads, and cumulative effects are not anticipated.

Nesting Raptors and Migratory Birds

SURVEY RESULTS

Raptors and migratory birds and their nests are protected under the MBTA (50 CFR 10 and 21) and California Fish and Game Code.

Riparian and forest habitats in and near the BSA provide suitable nesting habitat for raptors (e.g., red-tailed hawk). Grasslands, riparian vegetation, and other nesting substrates (e.g., artificial structures), provide nesting substrates for migratory birds. Cliff swallows (*Petrochelidon pyrrhonota*), barn swallows (*Hirundo rustica*), black phoebes, and other migratory birds are known to build nests under bridges. The existing bridge structure was visually surveyed for evidence of previous migratory bird nesting activity (e.g., remnant mud nests) during the August 7 and 14, 2014 field assessment. Inactive swallow nests were observed underneath the bridge indicating previous nesting activities.

PROJECT IMPACTS

If migratory birds or raptor species are nesting within the BSA, construction disturbance during the breeding season could result in the loss of fertile eggs or lead to nest abandonment.

AVOIDANCE AND MINIMIZATION EFFORTS

In addition to the conservation measures discussed in section 1.3 and mitigation measures 8 and 9, the following measure shall be implemented to avoid or minimize the potential for adverse effects on nesting migratory birds or raptors.

Mitigation Measure 4.13 If necessary and practicable, measures may be implemented to prevent swallows and other birds from nesting on the bridge. The measures may include:

- 1) Prior to the start of the nesting season, exclusion netting, or equivalent material, may be installed on the underside of the existing bridge to prevent swallows or other birds from nesting on the bridge. The exclusion device shall be monitored regularly, especially during the on-set of the nesting season when nest-building activities are the most intense. Any foundational nest material that may develop on either the netting or unnetted areas of the bridge shall be removed on a regular basis. Any deficiencies in the netting system (e.g., tears, unsecured areas) shall be repaired as

soon as possible following observation. Exclusion structures shall be left in place and maintained until construction activities begin; or

2) During the nesting season, or as long as swallows or other birds attempt to nest on the bridge, all unfinished nests will be removed from the underside of the bridge on as frequent a basis as necessary to ensure that no nesting occurs. Nests will be removed using a high powered water hose, a long pole, or equivalent method. If occupied nests are found, activities that would disturb the occupied nests shall be rescheduled until nesting activities cease.

d) *Less than Significant with Mitigation Incorporated* –The proposed project could affect wildlife nursery sites, but will not affect any migration patterns of any migratory fish or other species as Spring Valley Road is an existing road and the project is replacing an existing bridge. Aforementioned mitigation measures would ensure that impacts to nursery sites are mitigated to a less than significant level.

e) *No Impact* –There would be no conflicts with General Plan policies regarding Mitigation of biological resources. The County has no ordinances explicitly protecting biological resources.

f) *No Impact* – No habitat conservation plans or similar plans currently apply to the project site. Both Yuba and Sutter Counties recently ended participation in a joint Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The project site was not located within the proposed boundaries of the former plan and no conservation strategies have been proposed to date which would be in conflict with the project.

V. CULTURAL RESOURCES		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d)	Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less Than Significant* – A Historic Property and Archaeological Survey Report was conducted for the project by Northstate resources in January 2016. The HPSR/ASR searched State and other databases at the North Central Information Center for historic site/survey records within ¼ mile of the project site, a pedestrian field survey was conducted, and various Native America groups and the Native American Heritage Society were contacted to identify potential historic sites or cultural issues of concern.

Additionally, it was determined that nothing associated with the project was eligible for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) and that the project does not appear to be a historical resource for the purposes of CEQA.

b) *Less Than Significant With Mitigation Incorporated* – NSR archaeologist Amy MacKinnon surveyed the entire APE on August 7, 2014. The survey consisted of examining both sides of the APE along Spring Valley Road, generally on a single transect. Multiple transects were generally not possible due to the narrow configuration of portions of the APE (along Spring Valley Road). Ground surface visibility varied from 10 to 95 percent, dependent on vegetation cover (e.g., thick grasses and blackberry bushes) and built environment (e.g., paved road surfaces, gravel shoulders, existing bridge support structures). The overall APE and surrounding area were documented with digital photography.

Archival research for the Project included a records search conducted through the North Central Information Center (NCIC) of the California Historical Resources Information System at California State University, Sacramento. The records search covered the APE and a distance of up to 0.5 mile from its boundaries. The purpose of this research was to determine whether any prehistoric or historic-era cultural resources were known to exist in or in the vicinity of the APE. Conducted by NSR on June 6, 2014 (NCIC Records Search No. YUB-14-19), the record search included, but was not necessarily restricted to a review of the following sources:

- *National Register of Historic Places (NRHP)*
- *California Register of Historic Resources (CRHR)*

- *California Historical Landmarks*
- *California Inventory of Historic Resources*
- *Historic Properties Directory*
- General Land Office (GLO) Plat maps
- Historic USGS topographic quadrangles
- *Caltrans Historic Bridge Inventory: Local Agency Bridges List*.

The NCIC records search results noted that no prehistoric or historic-era sites, features, or artifacts were known to exist in the APE. The NCIC records search results also noted that no previous archaeological surveys had occurred in the APE. Two surveys were conducted for the area within 0.5 mile of the APE, but no cultural resources were documented in or adjacent to the APE as a result.

Cultural resources that have been previously recorded within 0.5 mile of the APE include four prehistoric sites, one multi-component occurrence, and one historic-era site (Table 1). CA-YUB-155 consists of a large bedrock milling station along Little Dry Creek; this site contains 26 mortars spread across two separate outcrops. This large milling station is on the east side of Little Dry Creek, 0.21 mile west of the Spring Valley Road Bridge. CA-YUB-156 is a bedrock milling station exhibiting 15 mortars. The milling station is on the northeast slope of a ridge on the west side of Little Dry Creek. Although it is in vicinity of the APE, CA-YUB-156 is not accessible from the road due to a chain link fence barrier that extends from the east and west side of the bridge and runs along the south side of Spring Valley Road. This fence is a significant physical barrier that restricts access to the site and prevents equipment access and ground-disturbing activities from impacting the site.

CA-YUB-157 consists of another bedrock milling station with two mortars on the same outcrop. The outcrop is on a small knoll between Little Dry Creek and an intermittent stream. CA-YUB-1524, another bedrock milling station, has four mortars directly adjacent to Little Dry Creek and lies 0.5 mile northwest of the APE. These findings suggest that similar cultural resources could occur within the APE.

CA-YUB-336/H is a multi-component village site that consists of five house pits and historic glass fragments. This site is on a small knoll 0.35 mile east of the APE. Only one historic site has been recorded within 0.5 mile of the APE. This site is CA-YUB-193H, the historic Peoria Cemetery. This cemetery is still in use today and contains many of the first Euro-American settlers to this area in addition to some of the local Maidu. The potential exists for other historical resources to be found within the APE.

Table 1. Cultural Resources within 0.5 Mile of the APE

SITE	COMPONENT	DESCRIPTION	DISTANCE FROM APE
CA-YUB-155	Prehistoric	Milling station	0.21 mile southwest
CA-YUB-156	Prehistoric	Milling station	0.04 mile south
CA-YUB-157	Prehistoric	Milling station	0.17 mile southeast
CA-YUB-193H	Historic	Peoria Cemetery associated with Browns Valley and	0.5 mile northeast

		Loma Rica	
CA-YUB-336/H	Multi-component	Village site	0.35 mile east
CA-YUB-1524	Prehistoric	Milling station	0.5 mile northwest

Summary of Others Consulted

Additional research included a review of historic maps, topographic quadrangles, and patents of the APE and surrounding vicinity. The 1895 USGS *Smartsville, California* 30-minute topographic quadrangle map, does not depict any historic-era buildings or structures near the APE. This map does, however show two major roads in the vicinity of the

APE that were established and used in the late nineteenth century. Although not named on the 1895 map, these alignments correspond with Spring Valley Road and Marysville Road. By the mid-twentieth century, as indicated on the 7.5-minute 1947 USGS *Loma Rica, California* topographic quadrangle map, major road alignments appearing on contemporary maps are largely in place, including Spring Valley Road, which is in the APE. Additionally, the 1947 map depicts the location of the Spring Valley Road bridge over Little Dry Creek and one structure north of the APE, but no structures in or immediately adjacent to the APE.

A review of the 1867 GLO plat map for Township 16 North, Range 5 East, revealed historic activity in the vicinity of the APE, including the Sweet Vengeance Mine, Prairie Diggings, and a ditch. Additional features include a structure labeled “Babcock’s House” and a field. Prairie Diggings is also noted on Wescoatt’s 1861 Official Map of Yuba County as well as a structure labeled “Empire House” that is near the APE. Research conducted by Regina Zurakowski, Archives Librarian at the Yuba County Library in Marysville indicates that the father of E.M. Benninger built the Empire House hotel in the early 1850s. The popular rest stop and meeting place visited frequently by General John Sutter burned to the ground in 1912 (Daily Appeal June 30, 1912). In addition, Prairie Diggings, just west of the Empire House on the 1861 Official Map of Yuba County, is noted to have been the location of several “Indian battles” between the “Yuba City Indians and the mountain tribes from Hansonville or Dobbins Ranch” (Daily Appeal June 30, 1912).

A review of GLO land patents revealed that the APE lies in lands once held by the Central Pacific Railroad (Oregon and California Railroad Grant, 1880) (Bureau of Land Management 2014). Parcels of land surrounding and near the APE were owned by E. M. Benninger, D. T. Benninger, and C. (D.?) Benninger as indicated on Doyle’s 1887 Official Map of Yuba County. The Benninger (also spelled Binninger) family built, owned, and operated the Empire House hotel until the title passed to Swiss land speculators in the early 1890s (Daily Appeal June 30, 1912).

The results of the NCIC research and other NSR archival research suggest that the main historical themes relevant to the APE and its vicinity consist of placer mining operations and ranching. With these activities having occurred near the APE, it is expected that resources

associated with these themes could be documented during an archaeological survey (see Section 3.7, *History*, below).

On November 4, 2015 NSR contacted Ms. Elizabeth Belle, director of the Yuba Feather Historical Association and Museum. Ms. Belle stated that the historical records held by the museum and historical association do not cover the project area. On November 4, 2015 an attempt to contact the Yuba County Historical society revealed that their phone number has been disconnected.

Summary of Native American Outreach

To determine whether any culturally significant Native American properties were situated in or near the APE, NSR contacted the Native American Heritage Commission (NAHC) on June 4, 2014, requesting a search of the Sacred Lands File and a list of appropriate Native American representatives who might have an interest in or concerns with the Project. The NAHC replied to NSR on June 12, 2014, stating that no culturally significant properties were located in or near the APE (see Appendix C). The NAHC also provided contact information for the following Native American representatives and organizations:

- Mr. Ren Reynolds, Butte Tribal Council
- The Honorable Mr. Gary Archuleta, Chairperson, Mooretown Rancheria of Maidu Indians
- Mr. James Sanders, Tribal Administrator, Mooretown Rancheria of Maidu Indians
- The Honorable Ms. Glenda Nelson, Chairperson, Enterprise Rancheria of Maidu Indians
- Mr. Art Angle, Vice-Chairperson, Enterprise Rancheria of Maidu Indians
- The Honorable Mr. Gene Whitehouse, Chairperson, United Auburn Indian Community (UAIC) of the Auburn Rancheria
- Mr. Marcos Guerrero, Tribal Preservation Committee, UAIC of the Auburn Rancheria
- Mr. Jason Camp, Tribal Historic Preservation Officer (THPO), UAIC of the Auburn Rancheria
- The Honorable Mr. Don Ryberg, Chairperson, T'Si-Akim Maidu
- The Honorable Ms. Eileen Moon, Vice Chairperson, T'Si-Akim Maidu
- Mr. Grayson Coney, Cultural Director, T'Si-Akim Maidu
- Ms. Judith Marks, Colfax-Todds Valley Consolidated Tribe
- The Honorable Ms. Cathy Bishop, Chairperson, Strawberry Valley Rancheria

Information outreach letters were sent to the individuals listed above on July 3, 2014. On July 14, 2014, Mr. Ren Reynolds, representing Butte Tribal Council and Enterprise Rancheria, responded to the outreach letter by email stating that Enterprise Rancheria was interested in providing monitoring for the Project, suggesting that it will occur in a region that is sensitive for his tribe. On July 30, 2014, Honorable Mr. Gene Whitehouse, Chairperson of the UAIC, responded to outreach efforts by letter, indicating, "The UAIC is concerned about development in its aboriginal territory that has potential to impact the lifeways, cultural sites, and landscapes that may be of sacred or ceremonial significance." Mr. Whitehouse requested that the UAIC receive copies of Project environmental documents to allow for comment, as well as the "opportunity to have ... tribal monitors accompany ... [archaeologists] during field survey."

Messages were left on September 23, 2014, with Mr. Reynolds of Enterprise Rancheria, Mr. Marcos Guerrero, and Mr. Jason Camp of UAIC, to discuss a possible field visit and request more information regarding potential concerns related to cultural sensitivities for this project.

On September 23, 2014, NSR also attempted to follow the information solicitation letters with phone calls to the individuals listed above for whom contact information was provided. Mr. Grayson Coney, Cultural Director of the T'Si-Akim Maidu, indicated that they did not have any concerns regarding the Project at this time. Messages were left with the remaining Native American contacts listed above, but responses were not received as of October 29, 2014.

On October 8, 2014, UAIC requested a field visit to address potential concerns related to cultural sensitivities for this project. NSR Cultural Resource Specialist Amy MacKinnon and Yuba County Associate Engineer Kenneth Godleski met with Jason Camp, UAIC THPO, and Marcos Guerrero, UAIC, at Spring Valley Road Bridge (16C-0091) at Little Dry Creek on October 21, 2014. Mr. Godleski described the Project in detail. Mr. Guerrero inspected the banks and streambed of Little Dry Creek for cultural resources. Mr. Guerrero identified a possible cultural resource site on a hill, north and outside of the APE on private property. As a result of the field review, Mr. Guerrero and Mr. Camp determined that the project was unlikely to disturb cultural resources. Mr. Camp and Mr. Guerrero indicated that they would provide the County with informational material regarding cultural resources identification and avoidance, and requested that the information be discussed before the start of construction.

Survey Results

Four cultural resources were identified in the APE and consist of Bridge 16C-009; a stacked rock alignment; one isolate consisting of an olive-amber hand blown bottle neck with hand-applied lip; and two isolates consisting of three mid-twentieth century bottle glass fragments. Caltrans presently lists Bridge 16C-0091 as Category 5 structure, which identifies it as not eligible for listing on the National Register of Historic Places.

The stacked rock alignment is 731 feet (0.14 mile) west of the bridge on the north side of Spring Valley Road. This alignment represents a property boundary between a field to the west and a drainage to the east. This property is fenced, and barbed wire fencing is placed directly on top of the stacked rock alignment. The alignment is 15 feet long and 1 to 1.5 feet in width. The alignment is approximately one foot in height above the ground surface. Moderate lichen growth is present on the stacked rocks, but the age of this feature is unknown. The portion of the segment closest to the road is at UTM's NAD 83: 638046mE; 4348569mN.

Isolate 1 consists of an olive-amber hand-blown bottle neck with a hand-applied lip. It was found on the north side of Spring Valley Road 1,010 feet (0.19 mile) west of the bridge at the base of the black mailbox for residence #10750. The glass has striations due to irregularities in the glassblowing process that indicate the glass was made by hand (<http://www.sha.org/bottle/body.htm#BodyIrregularities>). The distinctive olive-amber color of the glass was more common before 1890 and was almost unknown after 1900 (<http://www.sha.org/bottle/colors.htm>). Isolate 1 is at UTM's NAD 83: 637965mE; 4348550mN.

Isolate 2 consists of three fragments of mid-twentieth century glass. These fragments were found 40 feet east of Isolate 1 on the north side of Spring Valley Road. One fragment is a green bottle base with an Owens-Illinois maker's mark and the brand name "Duraglas" (Figure 12). This maker's mark dates to the 1940s–1960s (<http://www.glassbottlemarks.com/owens-illinois-glass-company-bottle-container-marks/>). There is one colorless machine-made screw cap bottle neck and one decorative colorless glass bottle or vase fragment. Isolate 2 is at UTM's NAD 83: 637977mE; 4348551mN.

The rock alignment and glass fragments are considered isolates and as such are exempt from further evaluation. Moreover, the rock alignment is exempt under Property Type 1 of the Caltrans Attachment 4: Properties Exempt from Evaluation (SER Vol 2 Exhibit 1.1). No other historic-era or prehistoric sites, features, or artifacts, or potentially sensitive landforms or soil deposits were noted in the APE as a result of the archaeological survey. Exposed soils on the surface in and near the APE appear to be the result of bedrock decomposition and alluvial deposition from Little Dry Creek, as well as landscape grading activities for the construction related to residences adjacent to the APE.

Unidentified Cultural Materials

MM 5.1 If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveying will be needed if Project limits are extended beyond the present survey APE limits.

Human Remains

MM 5.2 If human remains are discovered during Project activities, all activities in the vicinity of the find will be stopped and the Yuba County Sheriff–Coroner's Office shall be notified. If the coroner determines that the remains may be those of a Native American, the coroner will contact the NAHC. Treatment of the remains shall be conducted in accordance with further direction of the NAHC-designated Most Likely Descendent and landowner as appropriate.

Implementation of the above Mitigation Measure would reduce potential adverse impacts on uncovered cultural resources. Impacts after mitigation would be less than significant.

c) *No Impact* – No known record exists of any paleontological resources on the project site and no known unique geological features were identified or are known to exist on the project site.

d) *Less Than Significant Impact* – There are no known burial sites within the project site. If human remains are unearthed during construction, the provisions of California Health and Safety Code Section 7050.5 shall apply. Under this section, no further disturbance of the remains shall occur until the County Coroner has made the necessary findings as to origin, pursuant to California Public Resources Code Section 5097.98. If the remains are determined to be Native American, the County Coroner shall contact the Native American Heritage Commission within 24 hours.

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

VI. ENERGY	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION/CONCLUSION/MITIGATION:

a) b) The proposed project is a bridge replacement project would not impact energy resources and conflict with local plans for energy and therefore would create a *less than significant impact*.

VII. GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Section 1803.5.3 to 1808.6 of the 2010 California Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a

i) *Less Than Significant*- Yuba County 2030 General Plan describes the potential for seismic activity potential within Yuba County as being relatively low and it is not located within a highly active fault zone. No Alquist-Priolo Earthquake Fault Zones are located within the County. The faults that are located within Yuba County are primarily inactive and consist of the Foothills Fault System, running south-southeastward near Loma Rica, Browns Valley and Smartsville. Faults within the Foothill Fault System include Prairie Creek Fault Zone, the Spenceville Fault, and the Swain Ravine Fault. The project area is not known to be prone to liquefaction as well.

ii) *Less Than Significant Impact* – Within Yuba County, the Swain Ravine Lineament of the Foothills Fault system is considered a continuation of the Cleveland Hill Fault, the source of the 1975 Oroville earthquake. The Foothill Fault System has not yet been classified as active, and special seismic zoning was determined not to be necessary by the California Division of Mines and Geology. While special seismic zoning was not determined to be necessary, the Foothill Fault system is considered capable of seismic activity. In addition, the County may experience ground shaking from faults outside the County.

The bridge replacement will be constructed to meet all applicable State of California seismic building codes and design as applicable to the project.

iii) *No Impact* – Ground failures, such as differential compaction, seismic settlement and liquefaction, occur mainly in areas that have fine-grained soils and clay. The proposed project would not result in any people or new structures in the project area.

iv) *No Impact* – Landslides are most likely to form when the ground is sloped. The project site has flat topography and no steep slopes (defined as slopes exceeding 60 percent grade). The proposed project would not result in any new structures in the project area.

b) *Less Than Significant Impact* –As part of the construction process, projects are required to submit plans for the disposition of surface runoff and erosion control to the County's Public Works Department. In addition, the Feather River Air Quality Management District has standard Mitigation Measures that address earth-disturbing activities. Mitigation Measures in the Air Quality section have incorporated these measures.

c) *No Impact* – The proposed project would not be subject to significant hazards associated with landslides, lateral spreading, liquefaction, or collapse. Activities that would cause subsidence include groundwater pumping and natural gas extraction. There are a number of wells in the project vicinity that are used to supply water for agricultural and residential uses. These wells will continue to be used in the future. However, the project would not result in an increased demand for water. Water usage associated with the proposed project would not significantly draw down aquifers in the area to a level that would cause subsidence.

d) *No Impact* – Expansive soils could cause damage to structures; however, the project will be required to meet all applicable State of California building code requirements.

e) *No Impact* – The project does not propose any residential uses and would not generate any wastewater. No septic systems are proposed.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Significant Mitigation Incorporated	Than With	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less Than Significant*- Global Warming is a public health and environmental concern around the world. The predominant opinion within the scientific community is that global warming is currently occurring, and that it is being caused and/or accelerated by human activities, primarily the generation of "greenhouse gases" (GHG).

In 2006, the California State Legislature adopted AB32, the California Global Warming Solutions Act of 2006, which aims to reduce greenhouse gas emissions in California. Greenhouse gases, as defined under AB32, include carbon dioxide, methane, nitrous oxide, hydro-fluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires that the state's GHG emission be reduced to 1990 levels by 2020.

In 2008, the California Air Resources Board (CARB) adopted the Scoping Plan for AB32. The Scoping Plan identifies specific measures to reduce GHG emissions to 1990 levels by 2020, and requires ARB and other state agencies to develop and enforce regulations and other initiatives for reducing GHGs. The Scoping Plan also recommends, but does not require, an emissions reduction goal for local governments of 15% below "current" emissions to be achieved by 2020 (per Scoping Plan current is a point in time between 2005 and 2008). The Scoping Plan also recognized that Senate Bill 375 Sustainable Communities and Climate Protection Act of 2008 (SB 375) is the main action required to obtain the necessary reductions from the land use and transportation sectors in order to achieve the 2020 emissions reduction goals of AB 32.

SB 375 complements AB 32 by reducing GHG emission reductions from the State's transportation sector through land use planning strategies with the goal of more economic and environmentally sustainable (i.e., fewer vehicle miles travelled) communities. SB 375 requires that the ARB establish GHG emission reduction targets for 2020 and 2035 for each of the state's 18 metropolitan planning organizations (MPO). Each MPO must then prepare a plan called a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its SB 375 GHG reduction target through integrated land use, housing, and transportation planning.

The Sacramento Area Council of Governments (SACOG), the MPO for Yuba County, adopted an SCS for the entire SACOG region as part of the 2035 Metropolitan Transportation Plan

(MTP) on April 19, 2012. THE GHG reduction target for the SACOG area is 7 percent per capita by 2020 and 16 percent per capita by 2035 using 2055 levels as the baseline. Further information regarding SACOG's MTP/SCS and climate change can be found at <http://www.sacog.org/2035/>.

While AB32 and SB375 target specific types of emissions from specific sectors, and ARBs Scoping Plan outlines a set of actions designed to reduce overall GHG emissions it does not provide a GHG significance threshold for individual projects. Air districts around the state have begun articulating region-specific emissions reduction targets to identify the level at which a project may have the potential to conflict with statewide efforts to reduce GHG emissions (establish thresholds). To date, the Feather River Air Quality Management District (FRAQMD) has not adopted a significance threshold for analyzing project generated emissions from plans or development projects or a methodology for analyzing impacts. Rather FRAQMD recommends that local agencies utilize information from the California Air Pollution Control Officers Association (CAPCOA), Attorney General's Office, Cool California, or the California Natural Resource Agency websites when developing GHG evaluations through CEQA.

GHGs are emitted as a result of activities in residential/commercial buildings when electricity and natural gas are used as energy sources. New California buildings must be designed to meet the building energy efficiency standards of Title 24, also known as the California Building Standards Code. Title 24 Part 6 regulates energy uses including space heating and cooling, hot water heating, ventilation, and hard-wired lighting that are intended to help reduce energy consumption and therefore GHG emissions. Replacing an existing bridge will not create any new sources of GHG outside of the small emission that would take place during project construction that are within the limits allowed in the Yuba County 2030 General Plan.

Therefore a bridge replacement project on an existing road would likely not generate significant GHG emissions that would result in a cumulatively considerable contribution to climate change impacts.

b) No Impact- Yuba County is currently preparing a Resource Efficiency Plan that will address Greenhouse Gas emissions; however there is not a plan in place at this time. The project is consistent with the Air Quality & Climate Change policies within the Public Health & Safety Section of the 2030 General Plan therefore, the project does not conflict with any applicable plan, policy or regulation.

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

IX. HAZARDS AND HAZARDOUS MATERIALS	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less than Significant*– The project consists of a bridge replacement along a section of Spring Valley Road. Construction equipment typically uses only a minor amount of hazardous materials, primarily motor vehicle fuels and oils. Because of their limited quantity, these materials would present a minor hazard, and only if spillage occurs. Standard spill prevention

and control measures will be maintained by the contractor. Use of these materials would cease once project construction is completed.

b) *No Impact* – As noted in a) above, only a limited amount of hazardous materials would be used by construction equipment during road construction. Spills of these materials could potentially occur, but they would be minor and would not lead to an evacuation in a rural area.

c) *No Impact* – There are no schools located near the project site. As noted in a) above, the only hazardous materials associated with proposed project are motor vehicle fuels and oils which would not present a significant hazard. The project would not include any activities that would generate hazardous material emissions or use acutely hazardous materials.

e) *No Impact*-. The project is proposing a bridge replacement along an existing stretch of road and does not have a land-use element that is inconsistent with the BAFB or Yuba County Airport Land Use Compatibility Plans or base operations. The project site is well over 2-miles from either one of the aforementioned airports.

d) *No Impact* – The project is not located on a site known for having any hazardous materials.

f) *No Impact* – There are no private airstrips located near the project site. Therefore, the project will not have any potential safety impacts related to private airstrips.

g) *No Impact* – The County is currently developing a Pre-Disaster Multi-Hazard Mitigation Plan (MHMP), in accordance with the Disaster Mitigation Act of 2000, to develop activities and procedures to reduce the risk of loss of life and property damage resulting from natural and man-made hazards and disasters. The 2030 General Plan contains safety and seismic safety policies. The project is not expected to have an impact on any of the County's emergency response plans or policies. The project does not propose any development that would have to evacuate and would not interfere with an emergency evacuation of the area.

h) *No Impact* – The project does not propose any development; therefore, it would not expose people or structures to wildland fires. All heavy equipment used during the construction of the project will be mandated to possess fire extinguishers and all construction personal training to use the fire extinguishers.

X. HYDROLOGY AND WATER QUALITY				
Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (Source:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) The project may result in ground disturbance equal to or greater than one acre in size and would then be within the jurisdiction of the Central Valley Regional Water Quality Control

Board (RWQCB), which develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. Prior to construction of a project greater than one acre, the RWQCB requires a project applicant to file for a National Pollution Discharge Elimination System (NPDES) General Permit. The General Permit process requires the project applicant to 1) notify the State, 2) prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), and 3) to monitor the effectiveness of the plan.

The following mitigation shall be incorporated into the project's construction activities and stormwater runoff design to offset the potential for siltation (erosion) and other potential water quality impacts.

MM 9.1 Prior to the County's approval of a grading plan or site improvement plans, the project applicant shall obtain from the Central Valley Regional Water Quality Control Board a National Pollution Discharge Elimination (NPDES) Permit for the disturbance of over one acre. Further, approval of a General Construction Storm Water Permit (Order No. 99-08-DWQ) is required along with a Small Construction Storm Water Permit. The permitting process also requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared prior to construction activities. The SWPPP is used to identify potential construction pollutants that may be generated at the site including sediment, earthen material, chemicals, and building materials. The SWPPP also describes best management practices that will be employed to eliminate or reduce such pollutants from entering surface waters.

- a) *No Impact*- The project will not affect groundwater supplies or interfere with any groundwater recharge. There is not a development component to the project.
- c) *Less than Significant* –The proposed construction plan would not substantially alter the existing drainage pattern of the site or area. The natural drainage pattern of the area will be enhanced, but not altered in terms of changing drainage channels/paths.

The project sponsor is also required to file a NPDES General Construction Storm Water Permit. The NPDES General Construction Permit process requires the project sponsor to 1) notify the State, 2) prepare and implement a SWPPP, and 3) monitor the effectiveness of the plan. The SWPPP identifies pollutants that may be generated at the construction site, including sediment, earthen material, chemicals, and building materials. The SWPPP also describes best management practices that a project will employ to eliminate or reduce contamination of surface waters. Implementation of the conditions of the NPDES General Construction Permit, if required, would control potential erosion problems.

- d) *No Impact* – As stated above, the proposed project would not substantially alter the existing drainage pattern of the site. No future development such as the construction or structures or houses is proposed; however a small increase in impervious surfaces would occur. Therefore, flooding is unlikely to be generated by the additional impervious surfaces.

- e) *No Impact* – As noted in d) above, the proposed project would not generate higher runoff rates.

f) *No Impact* – The project would not have any effect on water quality other than those impacts discussed above.

g-h) *No Impact* – The project is not located within a 100-year flood plain, as mapped by the Federal Emergency management Agency (FEMA).

i) *No Impact* – The project site is located outside of the floodplain.

j) *No Impact* – Seiche and tsunami hazards occur only in areas adjacent to a large body of water. The project site is not located in such an area. There are no steep slopes in the project area; the landslide potential of the project site is minimal and the mudflow hazard is minimal.

XI. LAND USE AND PLANNING	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation

a) *No Impact* – The project site consists of a bridge replacements and is located in a rural area and there would be no change in land use. The project would not physically divide an established community.

b) *No Impact* – The Yuba County General Plan designates the project site as Rural Community. The project site is surrounded by properties zoned “RR” Rural Residential and meets all the requirements and intents for this zone. No rezoning to accommodate the project is required. The project is consistent with the current General Plan policies and zoning designations.

c) *No Impact* – As discussed in the Biological Resources section, no habitat conservation plans, natural community conservation plans or similar plans currently apply to the project site. Both Yuba and Sutter Counties are in the process of preparing a joint Yuba-Sutter Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). While the project site is located within the proposed boundaries of the plan, no conservation strategies have been proposed to date which would be in conflict with the project.

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

XII. MINERAL RESOURCES	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) and b) *No Impact*- Exhibit GS-5, Mineral Resource Locations, of the Yuba County 2030 General Plan Geology and Soils Background Report, identify known and expected mineral resources within Yuba County, respectively. The project site is not located with an active mining area or a mineral resource zone in Exhibit GS-5. The project is expected to have no impact on mineral resources.

XIII. NOISE			Less Than		
	Potentially Significant Impact	Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Discussion/Conclusion/Mitigation:

a) *Less Than Significant Impact* – The Yuba County 2030 General Plan contains recommended ambient allowable noise level objectives. The plan recommends a maximum allowable ambient noise level of 50 dB in both daytime and evening hours. Temporary construction noise associated with project construction would be minimal and be conducted solely during daylight hours. During construction, noise levels are expected to remain well below these thresholds of significance. After construction is complete, noise levels will drop to existing levels.

b) *No Impact* – Primary sources of groundborne vibrations include heavy vehicle traffic on roadways and railroad traffic. There are no railroad tracks near the project site. Traffic on roadways in the area would include very few heavy vehicles, as no land uses that may require them are in the vicinity.

c) *No Impact* – The only noise generated by the project would be during the construction phase; there would be no permanent increase in ambient noise levels in the project vicinity.

d) *Less Than Significant Impact* – Construction activities associated with the project may cause a temporary increase in noise levels in the vicinity. However, these noise levels would be

temporary and would cease once construction activities end. In addition, the temporary construction noise associated with grading activities would be similar to noise generated by other rural residential activities. There are few residences on the surrounding parcels and construction noise is expected to have little impact on these parcels. The County noise ordinance requires that both agriculture and low- density residential zones not exceed an ambient noise level of 50 decibels from 10:00 pm to 7:00 am. This would further reduce construction noise impacts on the few residences adjacent to the project site, particularly at nighttime when residents are most sensitive to noise.

e) *No Impact* – The nearest airport to the project site is the BAFB Airport. The existing and future land use will not change as a result of this project and the project would not expose people residing or working in the project area to excessive noise levels.

f) *No Impact* – The project site is not located within the vicinity of a private airstrip.

XIV. POPULATION AND HOUSING		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *No Impact* – The project does not include the construction of homes or any infrastructure that would be required to foster population growth near the project area; therefore, there would be no increase in population.

b-c) *No Impact* – The project does not include the demolition of any housing; therefore it would not displace any housing or people and would not require the construction of replacement housing.

XV. PUBLIC SERVICES

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *No Impact* – The proposed project does not include the construction of any housing or land uses that would require a change or increase in fire protection. There would be no impact on fire protection services.

b) *No Impact* – The Yuba County Sheriff's Department would continue to provide law enforcement services to the project site and the California Highway Patrol will respond in the event of a vehicle accident. The proposed project does not include the construction of any housing or land uses that would result in a change or increase in the demand for law enforcement.

c) *No Impact* – The proposed project does not include the construction of any housing and would not generate any students. The project would not increase the demand on school districts.

d) *No Impact* – The proposed project does not include the construction of housing and would not generate an increased demand for parks.

e) *No Impact* – Other public facilities that are typically affected by development projects include the Yuba County Library and County roads. However, since there is no development proposed by the project, there would be no increased demand for these services. The temporary traffic generated by construction activities would not generate any additional roadway maintenance.

XVI. RECREATION

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a-b) *No Impact* – The proposed project does not include the construction of any housing and therefore would not increase the demand for parks or recreational facilities. The project also does not include the construction of any new recreational facilities.

XVII. TRANSPORTATION/TRAFFIC	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less Than Significant Impact* – The proposed project would generate a temporary increase in traffic during construction. It is expected that the roadway can accommodate the temporary increase in traffic during construction. The project would not significantly increase traffic in the area. However, there could be upwards to a fifteen-minute traffic delay during construction activities.

b) *Less Than Significant Impact* – Level of service (LOS) is a qualitative measure of traffic conditions on a given road segment or intersection. LOS ratings are from A to F, with A being the best condition. According to the Yuba County General Plan, the minimum acceptable LOS for County roads is D. According to the Yuba County 2030 General Plan, Spring Valley Road is classified as having a Level of Service “A” that is an acceptable level of service for a Yuba County Road. Spring Valley Road is able to accommodate the additional temporary increase in traffic during construction while maintaining a Level of Service “B”. Temporary traffic

associated with project construction will only be temporary and will not result in any permanent change to the current "A" LOS rating for Spring Valley Road.

c) *No Impact* – As noted in the Hazards and Hazardous Materials section, the project site is not located within a safety or over-flight zone of any public or public-use airport. Therefore, the project would have no influence on flight patterns.

d) *Less Than Significant Impact* – Spring Valley Road is an existing road that currently provides access to the project site. Spring Valley Road is used by the surrounding rural community and for traffic traveling through the community of Oregon House. Spring Valley Road would be used by construction equipment accessing the project site; however, there would be no substantial increase in hazards due to this temporary use of the road.

e) *No Impact* – Emergency access to the project site would be via Spring Valley Road. There would be no change in emergency access as a result of the project.

f) *No Impact* – The County has not adopted alternative transportation plans for this area of Yuba County.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) 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	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

- a) (i-ii) The County was contacted by the United Auburn Indian Community (UAIC) on November 23, 2015 requesting formal notification and information on proposed projects for which the County will serve as the lead agency under the California Environmental Quality Act (CEQA) in accordance with Public Resources Code Section 21080.3.1 subd. (b), otherwise known as Assembly Bill 52 (AB 52). Before receiving the UAIC request, the County had previously started the formal consultation process on July 30, 2014 as formal notification was provided to the UAIC, including all project information documents. The County received a response from UAIC requesting copies of any cultural resource surveys and/or cultural resource assessments performed as part of the project and a copy of the environmental document. On October 8, 2014, UAIC requested a field visit to address potential concerns related to cultural sensitivities for this project. NSR Cultural Resource Specialist Amy MacKinnon and Yuba County Associate Engineer Kenneth Godleski met with Jason Camp, UAIC THPO, and Marcos Guerrero, UAIC, at Spring Valley Road Bridge (16C-0091) at Little Dry Creek on October 21, 2014. Mr. Godleski described the Project in detail. Mr. Guerrero inspected the banks and streambed of Little Dry Creek for cultural resources. Mr. Guerrero identified a possible cultural resource site on a hill, north and outside of the APE on private property. As a result of the field review, Mr. Guerrero and Mr. Camp determined that the project was unlikely to disturb cultural resources. With mitigation measure **MM 5.1 and MM 5.2**, in the event of the accidental discovery or recognition of tribal cultural resources in the project area the impact upon tribal cultural resources would be ***less than significant impact with mitigation incorporated.***

XIX. UTILITIES AND SERVICE SYSTEMS		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:					
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *No Impact* – The project does not propose the construction of any structures that would generate wastewater.

b) *No Impact* – The project does not require the use of water or wastewater treatment facilities.

c) *Less Than Significant Impact* – As discussed in the Hydrology and Water Quality section, there would be little increase in impervious surfaces as a result of the project; therefore, the project would minimally increase runoff.

d) *Less Than Significant* – As discussed earlier, there is no need for a water supply at the proposed project site.

e) *No Impact* – The project does not require the use of water or wastewater treatment facilities.

f-g) *No Impact* – The project is not anticipated to result in the generation of any solid waste.

XX. WILDFIRE	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including down slope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

DISCUSSION/CONCLUSION/MITIGATION:

a,b,c,d) The project is a bridge replacement project that is intended to replace a structurally deficient bridge that will ultimately improve emergency access and wildfire safety to the area. During project construction, local residents and construction employees would still be able to utilize nearby Marysville Road and/or Spring Valley Road to reach Highway 20. Project related impacts to the adopted emergency response plan and emergency evacuation plan would be *less than significant*.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Yuba County Planning Department
May 2019

EA2016-0002 (Spring Valley Road Bridge Replacement Project)

NOTE: If there are significant environmental impacts which cannot be mitigated and no feasible project alternatives are available, then complete the mandatory findings of significance and attach to this initial study as an appendix. This is the first step for starting the environmental impact report (EIR) process.

Does the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion/Conclusion/Mitigation:

a) *Less Than Significant With Mitigation Incorporated* – As discussed in the Biological and Cultural Resources sections, construction associated with the project could potentially have impacts on cultural resources, and to small animal and bird species as discussed in both sections. Proposed mitigation measures would lessen the impact this project would have on both biological and cultural resources.

b) *Less Than Significant Impact with Mitigation Incorporated* – Construction of the project, in combination with other proposed projects in the adjacent area, may contribute to air quality impacts that are cumulatively considerable. However, when compared with the thresholds in the Air Quality section, the project would not have a cumulatively significant impact on air quality.

The project is consistent with the Yuba County 2030 General Plan land use designation for the project site and the zoning for the project site. With the identified Mitigation Measures MM 3.1 and MM 3.2 in place, cumulative impacts would be less than significant. No other cumulative impacts associated with this project have been identified.

c) *Less Than Significant Impact with Mitigation Incorporated* – Due to the nature and size of the proposed project, no substantial adverse effects on humans are expected. The project would not emit substantial amounts of air pollutants, including hazardous materials. The project would not expose residents to flooding. The one potential human health effects identified as a result of project implementation were minor construction-related impacts, mainly dust that could affect the few scattered residences near the project site. These effects are temporary in nature and subject to Feather River Air Quality Management District's Standard Mitigation Measures that would reduce these emissions to a level that would not be considered a significant impact.

REFERENCES

1. Yuba County 2030 General Plan. AECOM. June 2011
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3. Yuba County. County of Yuba Title XII Zoning Ordinance. 2006.
4. Yuba County Important Farmland Map 2010. California Department of Conservation.
5. Yuba County Improvement Standards.
6. State of California Hazardous Waste and Substance site "Cortese" list
7. Yuba County 2008-2013 Housing Element. AECOM. Dec. 2010
8. Spring Valley Road Bridge Replacement Project NES. February 2018. Stantec
9. Spring Valley Road Bridge Replacement Project Delineation of Waters of the US. July 2015. North State Resources, Inc
10. Spring Valley Road Bridge Replacement Project HPSR. January 2016. North State Resources, Inc
11. Spring Valley Road Bridge Replacement Project ASR. January 2016. North State Resources, Inc
12. Spring Valley Bridge Replacement Project CalEEMod Air Quality Project Analysis. May 2019. Yuba County Planning Department.