COUNTY OF LAKE
COMMUNITY DEVELOPMENT DEPARTMENT
Planning Division
Courthouse - 255 N. Forbes Street
Lakeport, California 95453
Telephone 707/263-2221 FAX 707/263-2225

June 26, 2019

California Environmental Quality Act

INITIAL STUDY 12-24

ENVIRONMENTAL CHECKLIST FORM

1. Project Title:	Cooper Creek Bridge Replacement at Witter Springs Road
2. Permit Number:	IS 12-24; GPC 12-09
3. Lead Agency Name and Address:	County of Lake Community Development Department Planning Division Courthouse – 255 North Forbes Street Lakeport CA 95453
4. Contact Person and Phone Number:	Peggy Barthel, Associate Resource Planner II (707) 263-2221
5. Project Location:	Cooper Creek at Witter Springs Rd, approximately 3.5 miles north of State Highway 20, Upper Lake; County of Lake Road Right-of-Way; APNs 003-011-03, 003-011-05, 003-011-06 Upper Lake USGS Quad Section 4; T15N R10W, M.D.M.
6. Project Sponsor's Name and Address:	County of Lake 255 N Forbes St Lakeport, CA 95453
7. General Plan Designation:	Agriculture; Resource Conservation
8. Zoning:	"A-APZ – WW-FF" Agriculture-Agriculture Preserve – Waterway-Floodway Fringe

9. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary).

The Lake County Public Works Department proposes to replace the functionally obsolete temporary Bailey Bridge that was installed in 2001 on Witter Springs Road over Cooper Creek with a single-span cast-in-place reinforced concrete slab bridge at the same location as the existing bridge. The project need is to provide a safe permanent crossing over Cooper Creek on Witter Springs Road since the existing structure is temporary and has been rated Functionally Obsolete. The road will be closed at the bridge site for the duration of construction and traffic detoured around the site through existing roads. Thirty days prior to construction, the County will place Changeable Message Sign (CMS) boards on Witter Springs Road warning residents of the upcoming road closure. In addition to the CMS boards, a notice will also be placed on the County's website as well as in the local newspaper. Flyers will also be distributed to the nearby residents to warn of the road closure.

The temporary Baily Bridge is approximately 30 feet long and 13 feet wide, and accommodates a single lane of traffic. It is anticipated that the new bridge would be approximately 24 feet long. The most likely replacement alternative would be a single-span cast-in-place reinforced concrete slab.

This project may involve permanent modification or alteration of the streambed. Access to the creek will be required to remove the existing bridge concrete support and construct the new structure. Depending on flows during construction, temporary stream diversion may be required. The new structure will be designed to accommodate 100-year flow without overtopping the new bridge.

It is anticipated that excavators, dozers, cranes, dump trucks, concrete trucks, concrete pumps, pile driving hammers, and pile driving equipment may be required to construct the new bridge. Construction is anticipated to be completed within one construction season. The existing roadway is within 40' of existing deeded County right-of-way. Any additional needs will require right-of-way acquisitions, rights of entry, or temporary construction easements.

10. Surrounding Land Uses and Setting: Briefly describe the project's surroundings:

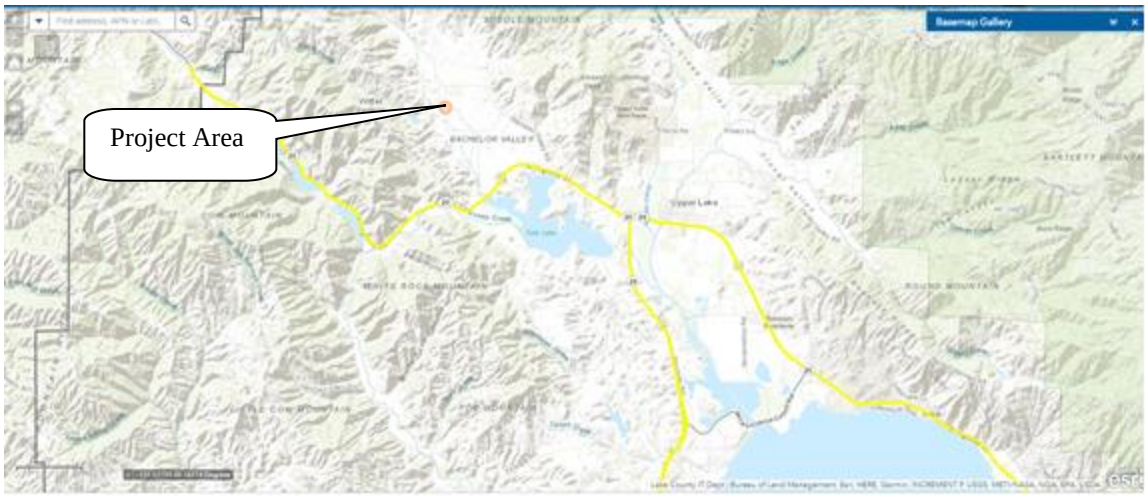
The project is located north of Upper Lake, approximately 1.5 miles north of Highway 20. Surrounding land use is agricultural. Cooper Creek is a seasonal drainage that joins Dayle Creek and flows south into Tule Lake, where it joins Scotts Creek. The site is flat with riparian habitat in the vicinity of the bridge.

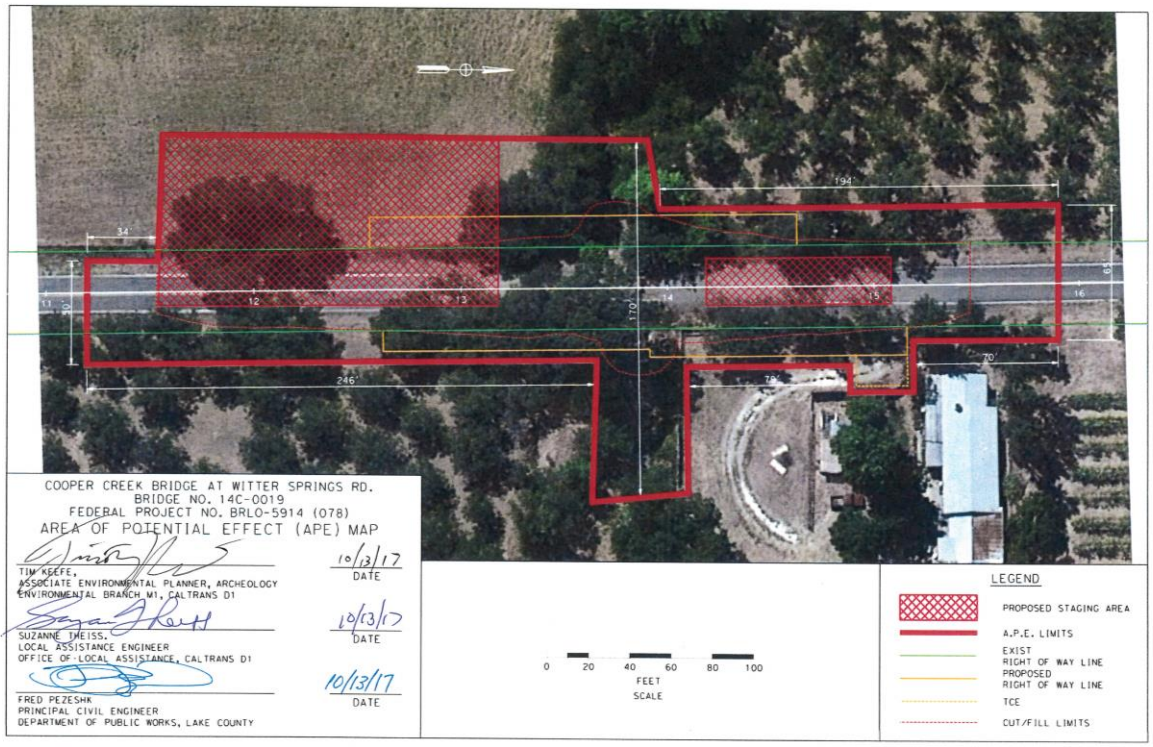
11. Other public agencies whose approval is required (e.g., Permits, financing approval, or participation agreement.)

California Dept of Fish and Wildlife	---	Streambed Alteration Agreement
Army Corps of Engineers	---	Permits for excavation and filling of waters of the US
CVRWQCB	---	Water Quality Certification; Construction General Permit

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3 (c) contains provisions specific to confidentiality.

Requests for review of the project were sent to local tribes. Redwood Valley Pomo and Middletown Rancheria indicated that they had no specific comments.


Project Area
Basemap Gallery
BACHELOR VALLEY
Upper Lake
WHITE ROCK MOUNTAIN
ROUND MOUNTAIN


COOPER CREEK BRIDGE AT WITTER SPRINGS RD.
BRIDGE NO. 14C-0019
FEDERAL PROJECT NO. BRLO-5914 (078)
AREA OF POTENTIAL EFFECT (APE) MAP
TIM KSEFE,
ASSOCIATE ENVIRONMENTAL PLANNER, ARCHEOLOGY
ENVIRONMENTAL BRANCH M1, CALTRANS D1
10/13/17
DATE
SUZANNE THEISS,
LOCAL ASSISTANCE ENGINEER
OFFICE OF LOCAL ASSISTANCE, CALTRANS D1
10/13/17
DATE
FRED PEZESHK
PRINCIPAL CIVIL ENGINEER
DEPARTMENT OF PUBLIC WORKS, LAKE COUNTY
10/13/17
DATE
0 20 40 60 80 100
FEET
SCALE
LEGEND
PROPOSED STAGING AREA
A.P.E. LIMITS
EXIST RIGHT OF WAY LINE
PROPOSED RIGHT OF WAY LINE
TCE
CUT/FILL LIMITS
194'
34'
246'
70'

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

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

Initial Study prepared by:
Peggy Barthel, Associate Resource Planner

_____ Date:_____
SIGNATURE

Michalyn DelValle, Director
Community Development Department

SECTION 1

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 a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, and 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, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) 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

KEY: 1 = Potentially Significant Impact
2 = Less Than Significant with Mitigation Incorporation
3 = Less Than Significant Impact
4 = No Impact

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
I. AESTHETICS *Except as provided in Public Resources Code Section 21099, would the project:*						
a) Have a substantial adverse effect on a scenic vista?			X		The project is not located in view of a scenic vista. The proposed bridge is low profile and the visual impacts of the replacement are anticipated to be negligible. There may be a temporary visual impact to the site during construction related to the presence of equipment, materials and earthmoving activities; however, this would be a temporary impact and is not considered significant.	1, 2, 3, 4, 5, 6, 7
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X		No scenic resources would be disturbed within a state scenic highway. Witter Springs Road is not considered a state scenic highway. The project is anticipated to have only temporary visual impacts during construction and would not significantly impact visual resources in the area.	1, 2, 3, 4, 5, 6, 7, 8
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X		See response to Section I (a).	1, 2, 3, 4, 5, 6, 7
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X	The project is not anticipated to create additional light or glare on the road or in the vicinity of the bridge. There is no proposed nighttime work that would involve lighting.	1, 2 3, 4, 5, 6
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. 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?			X		The project would occur in the County road right-of-way involving mostly existing facilities. Although the surrounding soils are considered "Prime Farmland" no impacts to active agricultural uses is expected to result from the project.	1, 2, 3, 4, 5, 6, 9, 10
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X		The project would occur in the County road right-of-way involving mostly existing facilities. Although APN 003-011-03 is zoned "APZ" Agricultural Preserve, no impacts to active agricultural uses is expected to result from the project.	1, 2, 3, 4, 5, 6, 9, 10

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
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))?				X	Construction would take place mainly within the County road right-of-way. The project would not result in the rezone of forest land, timber land, or Timberland Production lands.	1, 2, 3, 4, 5, 6, 9, 10
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X	The project would not result in the loss or conversion of forest land to a non-forest use.	1, 2, 3, 4, 5, 6, 9, 10
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?				X	The project would not induce changes to existing farmland that would result in its conversion to non-agricultural use. The project would involve impacts to existing County right-of-way.	1, 2, 3, 4, 5, 6, 9, 10
III. AIR QUALITY *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:*						
a) Conflict with or obstruct implementation of the applicable air quality plan?		X			Removed vegetation would be chipped and used for erosion control or compost; burning is not authorized. Fugitive dust and emissions related to construction activities have the potential to result in conflict with local air quality plans. An Asbestos-Containing Materials (ACCM) assessment was reported by Crawford & Associates. Bridge inspection and analytical results indicate that no ACCM is present. **Mitigation Measures:** **AQ-1: Work practices shall implement standard fugitive dust control measures consistent with the rules and regulation of the Lake County Air Quality Management District at all times during construction to reduce the impact of fugitive dust emissions to a less than significant level in staging areas, work areas, and adjoining roads.** **AQ-2: Vehicles and equipment shall be well-maintained and in compliance with State emission requirements. LCAQMD permits are required for any diesel generators or diesel engines installed as operating, support, or emergency backup equipment.**	1, 2, 3, 4, 5, 11, 12, 13
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under and applicable federal or state ambient air quality standard?				X	The Lake County Air Basin is designated as an attainment area. No criteria pollutants for the project region have been exceeded.	1, 2, 3, 4, 5, 13
c) Expose sensitive receptors to substantial pollutant concentrations?		X			The project is located in a rural area where the surrounding parcels contain residences and agricultural uses. Surrounding parcels range in size from approximately 20 to 120 acres. The nearest residence is approximately 200 feet from the project site. The nearest school is approximately four air-mile southeast of the project area. While the project is not expected to result in significant air quality impacts, implementation of Mitigation Measures AQ-1 and AQ-2 would further ensure that sensitive receptors would not be exposed to substantial pollutant concentrations.	1, 2, 3, 4, 5, 11, 13

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
d) Result in other emissions (such as those leading to odors or dust) adversely affecting a substantial number of people?			X		Dust or objectionable odors resulting from road surfacing activities are expected to be temporary and not significant in impact to surrounding properties.	1, 2, 3, 4, 5, 13
IV. BIOLOGICAL RESOURCES *Would the project:*						
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X			A Natural Environment Study was prepared by Northwest Biosurvey. There are no species present with federal sensitive regulatory status. Potential habitat is present for Clear Lake hitch, western pond turtle, yellow-breasted chat, yellow warbler, and pallid bat. Cooper Creek is an ephemeral stream that provides moderate habitat for Clear Lake hitch. If hitch are present in this segment of the creek, they will have returned to Clear Lake by the end of June. Work in the creek channel should occur when the streambed is dry, or between June 15 and October 15. Cooper Creek provides potential habitat for western pond turtle until mid- to late-June, when the creek channel is dry. The species may use this portion of the creek as a movement corridor between streams or nearby ponds but the area lacks suitable nest sites due to the steep vertical banks and bank-to-bank scour zone. The red willow thicket community along the creek within the work area provides excellent potential habitat for yellow warbler and yellow-breasted chat, although stream flows may be too brief to allow the site to provide good nesting habitat. Work should be avoided within 100 feet of the red will thicket habitat from February 15 to August 31 to avoid disruption of nesting and breeding. A large, hollow Oregon white oak adjacent to the northwest corner of the bridge provides potential roosting habitat for pallid bats. Removal of trees containing hollows or peeling bark should be completed between September 15 and October 15 or between February 15 and April 1 to avoid disturbing the breeding season or hibernation of pallid bats. **Mitigation Measures:** **BIO-1: In the event that work is conducted during the Clear Lake hitch breeding season between March 1 and June 15 (sooner if channel is dry), the flowing channel shall be diverted as described in Mitigation Measure BIO-2.** **BIO-2: In the event that work must be conducted within the stream channel during times of active flow, proposed diversion shall be reviewed and approved by a qualified biologist. The flowing portion of the stream shall be diverted through culverts with sandbag and visqueen coffer dams at the upstream and downstream ends of the proposed construction area. The culverts shall be no less than two feet in diameter and inset .into the channel to a depth of half their diameter. The dams shall be constructed of clean, river-run gravel. These structures shall be removed at the end of the project and prior to winter stream flows. Gravel should be removed or leveled and left in place for removal by high winter flows.** **BIO-3: To avoid potential impacts to western pond turtles, work within the channel should occur between August 15 and October 15, or when the channel is dry. Downed trees, stumps, and other basking sites and refuges shall remain undisturbed. Any work within the banks or riparian habitat of the creek at times when the affected segment contains water shall be immediately preceded by a site inspection of the channel by a qualified biologist with a valid CDFW collecting permit for western pond turtle. Any**	1, 2, 3, 4, 5, 6, 14, 15

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
					turtles within the work area should be captured and transferred to another suitable portion of Cooper Creek. Dewatering shall follow the procedure outlined in Mitigation Measure BIO-2. **BIO-4: Work within 100 feet of the red willow thicket between February 15 and August 31 shall be preceded by a pre-construction survey conducted by a qualified biologist. If an active nest is found, construction shall be delayed within 100 feet of the nest until after August 31, or until fledgling is determined by a biologist to be completed. The biologist may determine that a reduced buffer is appropriate based on screening vegetation or topography.** **BIO-5: Removal of trees containing hollows or peeling park shall be completed between September 15 and October 15 or between February 15 and April 1. In the event tree removal must occur outside that period, work shall be preceded by a survey for pallid bat habitat. If habitat is present, surveys for the presence of pallid bats shall be conducted within 3 days prior to tree removal. If bats are present, removal shall be restricted to the above dates.**	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X		No sensitive plant species were identified. Clearing and grading for the bridge replacement will remove a small amount of riparian vegetation from the creek bank. The vegetation is expected to grow back naturally.	1, 2, 3, 4, 5, 6, 14, 15
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X		A delineation of possible waters of the U.S. was included in the Natural Environment Study. The delineation determined that there are 0.37 acres of possible waters of the U.S. located within the biological study area as "other waters of the U.S." There are no wetlands in the area. Prior to commencement of activities within the bed or bank of the creek, a Streambed Alteration Agreement shall be obtained from the California Department of Fish and Wildlife. All the conditions of such permit shall be adhered to throughout the course of the project to reduce the impact to a less than significant level. Prior to commencement of activities within possible waters of the US, the Army Corps of Engineers shall be notified and any necessary permits shall be obtained in conjunction with Section 404 of the Clean Water Act. Additionally, a Water Quality Certification shall be obtained from the Central Valley Regional Water Quality Control Board.	1, 2, 3, 4, 5, 6, 14, 15
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?		X			The project does not propose to place any structures in the creek bed that would interfere with the movement of wildlife in the creek. There is the potential for impacts to wildlife movement in the creek should construction debris or temporary equipment or structures cause obstructions in the creek. **Mitigation Measure BIO-6: The project design shall incorporate appropriate BMPs consistent with County and State storm water drainage regulations to the maximum extent practicable. Typical BMPs include scheduling of activities; erosion and sediment control (placement of straw, mulch, reseeding, straw wattles, silt fencing and planting of native vegetation on all disturbed areas); and operation and maintenance procedures. The site shall be monitored during the rainy season (October 15-April 15) and erosion controls maintained. The BMPs will prevent or reduce discharge of all construction or post-construction pollutants and hazardous materials offsite or into the creek. These measures will reduce the impact to a less than significant level.**	1, 2, 3, 4, 5, 6, 14, 15

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		X			The Lake County General Plan adopted Policy OSC-1.13 (Management of Oak Woodland Communities), which outlines the importance of preservation of oak woodland habitats within the county. This project is anticipated to remove seven Valley Oak trees with diameter at breast height of six inches or greater. **Mitigation Measure BIO-7: Prior to initiation of activities for this project, a revegetation plan shall be submitted to, and approved by, the Community Development Department. The plan shall include replacement of mature oak trees (diameter greater than six inches at breast height) removed during construction with native species that have been recorded along Cooper Creek. Three oak trees shall be planted to replace each mature oak tree removed. Maintenance of the replacement vegetation shall continue until permanent establishment is achieved.**	1, 2, 3, 4, 5, 6, 14, 15
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?				X	The project would not conflict with any established conservation plan.	1, 2, 3, 4, 5, 6
V. CULTURAL RESOURCES *Would the project:*						
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?			X		The scope and location of the project is not expected to impact historical, archaeological, or paleontological resources, geologic features, or human remains. An Archaeological Survey Report and Historic Property Survey Report were prepared by Archaeological Services, Inc. No historic resources were discovered in or adjacent to the Area of Potential Effect (APE). One archaeological site was previously identified 2,800 feet northeast of the APE. Although the general alluvial environment give some indication that buried site potential exists, the type of disturbance and past construction impacts make the possibility of buried sites extremely unlikely. Should any cultural, archaeological or paleontological materials be discovered during replacement activities, it is Caltrans' policy that all activity shall be halted in the vicinity of the find(s), and a qualified archaeologist retained to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director.	1, 2, 3, 4, 5, 6, 16
b) Cause a substantial adverse change in the significance of an archeological resource pursuant to §15064.5?			X		See response to Section V (a).	1, 2, 3, 4, 5, 6, 16
c) Disturb any human remains, including those interred outside of formal cemeteries?			X		See response to Section V (a). The applicant shall halt all work and immediately contact the Lake County Sheriff's Department and the Community Development Department if any human remains are encountered.	1, 2, 3, 4, 5, 6, 16
VI. ENERGY *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?				X	The proposed project would not consume excessive amounts of energy.	1, 2, 3, 4, 5

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X	The proposed project would not conflict with or obstruct an energy plan.	1, 2, 3, 4, 5
VII. GEOLOGY AND SOILS *Would the project:*						
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides?			X		<u>Earthquake Faults</u> An Earthquake Fault Zone map has not been established in the project vicinity by the California Geological Survey under the Alquist-Priolo Earthquake Fault Zoning Act. The proposed bridge structure would be designed to meet current safety and seismic codes. <u>Seismic Ground Shaking and Seismic–Related Ground Failure, including liquefaction.</u> Lake County contains numerous known active faults. Future seismic events in the Northern California region can be expected to produce seismic ground shaking at the site. All construction would be required to be built consistent with Current Seismic Safety construction standards. <u>Landslides</u> According to the Lawrence Livermore landslide map series for Lake County, the area is considered generally stable and not a landslide risk.	1, 2, 3, 4, 5, 6, 8, 17, 18, 19, 20
b) Result in substantial soil erosion or the loss of topsoil?		X			According to the soil survey of Lake County, prepared by the U.S.D.A., the soil in the project area is Still loam, stratified substratum with 0-2% slopes (soil unit 233). The soils consist of loam derived from mixed rock sources. The permeability is moderately slow, runoff is very slow, and the hazard of erosion is slight. Nevertheless, improper earthwork without necessary erosion control measures can cause the potential for substantial soil erosion that could contaminate the creek. **Implementation of Mitigation Measure BIO-6 would reduce potential erosion impacts to less than significant.**	1, 2, 3, 4, 5, 6, 8
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-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X			According to the soil survey of Lake County, prepared by the U.S.D.A., the soils at the site are considered "generally stable" and there is little risk of landslide at the site. The soil unit is considered to have a slight hazard of erosion and very slow rate of surface runoff. Nevertheless, improper earthwork resulting in erosion has the potential to induce localized subsidence or earth movement. **Implementation of Mitigation Measure BIO-6 would reduce potential erosion impacts to less than significant.**	1, 2, 3, 4, 5, 6, 8, 17, 18, 19, 20
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			X		The shrink-swell potential for soil unit 233 is low to moderate. The effects of shrinking and swelling can be reduced by backfilling with material that has a low shrink-swell potential.	1, 2, 3, 4, 5, 6, 8
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 waste water?				X	No septic tanks are proposed or needed for the project.	1, 2, 3, 4, 5
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X	No paleontological resources or unique geologic features were identified in the project area.	1, 2, 3, 4, 5, 16

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
VIII. GREENHOUSE GAS EMISSIONS *Would the project:*						
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X		In general, GHG emissions from construction activities include the use of construction equipment, haul trucks, worker commute vehicles, and stationary equipment (such as generators, if any). Greenhouse gas emissions resulting from the temporary use of standard grading equipment would be negligible and would not result in a significant impact to the environment.	1, 2, 3, 4, 5, 12
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X	This project would not conflict with any adopted plans or policies for the reduction of greenhouse gas emissions.	1, 2, 3, 4, 5, 12
IX. HAZARDS AND HAZARDOUS MATERIALS *Would the project:*						
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		X			The new bridge would not create an increased routine hazard for accidents that could involve the release of hazardous materials into the environment over and above the hazard at the existing bridge at the site. However, there is the potential that construction activities related to the staging areas and installation of the new bridge could involve the accidental spill of hazardous materials as spills from construction equipment. Construction activities would be temporary in nature, and with proper control measures the impact would be less than significant. **Mitigation Measure HAZ-1: Any spills of oils, fluids, fuel, concrete, or other hazardous construction material shall be immediately cleaned up. All equipment and materials shall be stored in the staging areas away from the creek; vehicles and equipment shall receive proper and timely maintenance.**	1, 2, 3, 4, 5, 6, 22, 23
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X			See response to Section VIII (a).	1, 2, 3, 4, 5, 6, 22, 23
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X	The project is not within a quarter-mile of an existing or proposed school.	1, 2, 3, 4, 5, 6
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?				X	The bridge location is not listed as a site containing hazardous materials.	1, 2, 3, 4, 5, 6, 24
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?				X	The project is not located within an airport land use plan or within 2 miles of an airport.	1, 2, 3, 4, 5, 6, 25

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X		The road will be closed at the bridge site for the duration of construction and traffic detoured around the site through existing roads. Thirty days prior to construction, the County will place Changeable Message Sign (CMS) boards on Witter Springs Road warning residents of the upcoming road closure. In addition to the CMS boards, a notice will also be placed on the County's website as well as in the local newspaper. Flyers will also be distributed to the nearby residents to warn of the road closure. Local sheriff, fire districts, and ambulance services shall be notified prior to the commencement of construction with information specifying the date and times of anticipated traffic delays and diversions. All traffic delays shall be minimized whenever possible.	1, 2, 3, 4, 5, 6, 22
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?		X			Fire hazard in the area is moderate. Equipment and vehicles have the potential to ignite wildland fires in the staging areas, and during land clearing and grading activities. **Mitigation Measures:** **HAZ-2: Brush shall be cut and removed and grass shall be mowed in the staging areas.** **HAZ-3: Vehicles and equipment shall be maintained and operated in a manner to prevent hot surfaces, sparks or any other heat sources from igniting grasses, brush or other highly combustible material.**	1, 2, 3, 4, 5, 6, 22, 26
X. HYDROLOGY AND WATER QUALITY *Would the project:*						
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X			The project site is relatively flat and within flood hazard Zone A (100-year flood zone). Vegetation removal and site grading activities have the potential to result in erosion and sediment loss if the site is not properly managed. Additionally, there is the potential for construction debris to enter the creek and cause contamination or blockage of flows. The project would be preceded by a Stormwater and Water Pollution Control Plan in accordance with the approved Caltrans Water Pollution Control Program. **Implementation of mitigation measures BIO-6 and HAZ-1 will reduce potential impacts to less than significant.**	1, 2, 3, 4, 5, 6, 14, 27, 28
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X	The project does not propose to utilize groundwater resources. There is no anticipated impact to ground water levels as a result of the bridge replacement.	1, 2, 3, 4, 5

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i) result in substantial erosion or siltation on-site or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or iv) impede or redirect flood flows?		X			The project site is relatively flat and within flood hazard Zone A (100-year flood zone). Stream channel alteration has the potential to temporarily alter the flow of Cooper Creek or result in erosion to the creek. Prior to commencement of activities within the bed or bank of the creek, a Streambed Alteration Agreement shall be obtained from the California Department of Fish and Wildlife. All the conditions of such permit shall be adhered to throughout the course of the project to reduce the impact to a less than significant level. **Implementation of mitigation measures BIO-6 and HAZ-1 will reduce potential impacts to less than significant.**	1, 2, 3, 4, 5, 6, 14, 27, 28
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X	The project site is not located in an area of potential inundation by seiche or tsunami. The soils at the project site are relatively stable and the site is flat therefore has a minimal potential to induce mudflows.	1, 2, 3, 4, 5, 6, 17
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				X	The project would not conflict with or obstruct water quality or management plans.	1, 2, 3, 4, 5
XI. LAND USE AND PLANNING *Would the project:*						
a) Physically divide an established community?				X	The project would not divide a community.	1, 2, 3, 4, 5, 6
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X	The proposed project would not conflict with any County plan, policy, or regulation.	1, 2, 3, 4, 5
XII. MINERAL RESOURCES *Would the project:*						
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X	Project site is not identified by the Lake County Aggregate Resource Management Plan as a mineral resource site.	1, 2, 3, 4, 5, 6, 29
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?				X	See response to Section XI (a).	1, 2, 3, 4, 5, 6, 29

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
XIII. NOISE *Would the project result in:*						
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X		There is the potential that construction activities could increase temporary ambient noise levels in the vicinity. All construction activities, including engine warm-up, are limited to from 7AM to 7PM to reduce the impact to a less than significant level. Back-up beepers shall be adjusted to the lowest allowable levels.	1, 2, 3, 4, 5
b) Generation of excessive groundborne vibration or groundborne noise levels?			X		Construction activities may result in small scale ground vibrations related to grading and excavation activities. However, this vibration would be short-term and is not anticipated to affect neighboring properties. Impacts are expected to be less than significant.	1, 2, 3, 4, 5
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X	Project is not located within an airport land use plan or within 2 miles of a public airport.	1, 2, 3, 4, 5, 6, 25
XIV. POPULATION AND HOUSING *Would the project:*						
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X	The new bridge would be an improvement to the existing infrastructure; however, it would not increase the traffic capacity over the bridge or on the road. The project would not induce substantial population growth in the area.	1, 2, 3, 4, 5
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X	No housing would be displaced as a result of the project	1, 2, 3, 4, 5, 6

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
XV. PUBLIC SERVICES *Would the project:*						
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: Fire Protection? Police Protection? Schools? Parks? Other Public Facilities?				X	The project would not require new police protection, schools, parks, or other public facilities.	1, 2, 3, 4, 5
XVI. RECREATION *Would the project:*						
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?				X	The project would not impact the use of recreational facilities.	1, 2, 3, 4, 5, 6
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?				X	The project does not include recreational facilities nor require the construction or expansion of recreational facilities.	1, 2, 3, 4, 5, 6
XVII. TRANSPORTATION *Would the project:*						
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X		The road will be closed at the bridge site for the duration of construction and traffic detoured around the site through existing roads. Thirty days prior to construction, the County will place Changeable Message Sign (CMS) boards on Witter Springs Road warning residents of the upcoming road closure. In addition to the CMS boards, a notice will also be placed on the County's website as well as in the local newspaper. Flyers will also be distributed to the nearby residents to warn of the road closure. The new bridge would not affect the capacity of Witter Springs Road and would not result in increased vehicle trips. When complete, the new bridge would have two lanes, as does the remainder of Witter Springs Road. Local sheriff, fire districts, and ambulance services shall be notified prior to the commencement of construction with information specifying the date and times of anticipated traffic delays and diversions. All traffic delays shall be minimized whenever possible. Construction road closures during school bussing hours shall be avoided.	1, 2, 3, 4, 5, 6, 22, 30, 31

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				X	The project has no impact on vehicle miles traveled.	1, 2, 3, 4, 5, 30
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X	The existing road alignment would not be altered by this project. The new bridge would improve the safety of the structure.	1, 2, 3, 4, 5, 6, 22
d) Result in inadequate emergency access?			X		The road will be closed at the bridge site for the duration of construction, as discussed in Section XVI (a). Ultimately, the new bridge would improve the safety of the bridge crossing for emergency vehicles.	1, 2, 3, 4, 5, 6, 22, 30
XVIII. TRIBAL CULTURAL RESOURCES *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*						
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				X	The Archaeological Survey Report and Historic Property Survey Report determined that no historic resources are present in or adjacent to the APE.	1, 2, 3, 4, 5, 6, 16
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 Resources Code 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X		Although the general alluvial environment give some indication that buried site potential exists, the type of disturbance and past construction impacts make the possibility of buried sites extremely unlikely. Should any cultural, archaeological or paleontological materials be discovered during replacement activities, it is Caltrans' policy that all activity shall be halted in the vicinity of the find(s), and a qualified archaeologist retained to evaluate the find(s) and recommend mitigation procedures, if necessary, subject to the approval of the Community Development Director. The applicant shall halt all work and immediately contact the Lake County Sheriff's Department and the Community Development Department if any human remains are encountered.	1, 2, 3, 4, 5, 6, 16
XIX. UTILITIES AND SERVICE SYSTEMS *Would the project:*						
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X	Not applicable. Wastewater treatment facilities are not a part of the proposed project.	1, 2, 3, 4, 5
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?				X	This project is the replacement of a bridge and would not induce the need for other facilities.	1, 2, 3, 4, 5
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?				X	The project would not require the construction of new storm water facilities or the expansion of existing facilities.	1, 2, 3, 4, 5
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X	There is no requirement for water supplies for this project.	1, 2, 3, 4, 5

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
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?				X	There is no need for wastewater treatment for this project.	1, 2, 3, 4, 5
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				X	Lake County Waste Solution is located approximately 15 miles south of the project site. Very little, if any, waste would be disposed at the local landfill. The landfill has the capacity to accommodate the minimal construction-related waste. The proposed project would not significantly impact local or regional landfills.	1, 2, 3, 4, 5, 6, 32, 33
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X	The project would comply with all federal, state, and local statutes and regulations related to solid waste.	1, 2, 3, 4, 5, 6, 32, 33
XX. WILDFIRE *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*						
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X	The project would not impair any emergency plans. The project site is located in a moderate fire hazard severity zone and is in State (CalFire) and Northshore Fire Protection District Responsibility Areas. The applicant will adhere to all Federal, State and local fire requirements/regulations.	1, 2, 3, 4, 5, 22, 26
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?		X			The site is located in a moderate fire hazard area. Equipment and vehicles have the potential to ignite wildland fires during land clearing and grading activities. Implementation of mitigation measures HAZ-2 and HAZ-3 will reduce potential impacts to less than significant.	1, 2, 3, 4, 5, 22, 26
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?				X	No new infrastructure is proposed for this project.	1, 2, 3, 4, 5
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X	The nearest structures are approximately 200 feet from the bridge. The risk of flooding, landslides, slope instability, or drainage changes would not be increased due to this project.	1, 2, 3, 4, 5, 6

IMPACT CATEGORIES*	1	2	3	4	All determinations need explanation. Reference to documentation, sources, notes and correspondence.	Source Number**
XXI. MANDATORY FINDINGS OF SIGNIFICANCE						
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X			The potential impacts to biological resources identified in the project area would be adequately minimized through the implementation of mitigation measures such that the project would have a less than significant impact on biological resources.	1, 2, 3, 4, 5, 6, 14, 15
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		X			Potentially significant impacts have been identified related to Air Quality, Biological Resources, Geology/Soils, Hazards & Hazardous Materials, and Hydrology/Water Quality. Implementation of and compliance with mitigation measures identified in each section as project conditions of approval would avoid or reduce potential impacts to less than significant levels and would not result in cumulatively considerable environmental impacts.	ALL
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X			This project is anticipated to have a positive effect for people living within the area by improving bridge safety. The mitigation measures relating to Air Quality, Biological Resources, Geology/Soils, Hazards & Hazardous Materials, and Hydrology/Water Quality would insure that there would be less than significant impacts to neighboring residents due to the construction.	ALL

* Impact Categories defined by CEQA

****Source List**

1. Lake County General Plan
2. Upper Lake - Nice Area Plan
3. Lake County Zoning Ordinance
4. Site Visit: 04/04/2012
5. Community Development Department Application
6. U.S.G.S. Topographic Maps
7. Visual Impact Assessment
8. California Department of Transportation: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm
9. U.S.D.A. Lake County Soil Survey
10. Farmlands Study for the Witter Springs Road at Cooper Creek Bridge Replacement Project (Gallaway Enterprises) May 7, 2018 updated July 30, 2018
11. Lake County Serpentine Soil mapping
12. Asbestos-Containing Materials Assessment Report (Crawford & Associates, Inc.) February 7, 2019
13. Lake County Air Quality Management District
14. California Natural Diversity Database
15. Natural Environment Study, Cooper Creek Bridge Replacement at Witter Springs Road (Northwest Biosurvey) October 2013
16. Historic Property and Archaeological Survey Report, Cooper Creek Bridge Replacement Project (Gallaway Enterprises, Inc.) March 2018
17. Lake County Natural Hazard database
18. U.S.G.S. Geologic Map and Structure Sections of the Clear Lake Volcanics, Northern California, Miscellaneous Investigation Series, 1995
19. Official Alquist-Priolo Earthquake Fault Zone maps for Lake County
20. Lawrence Livermore landslide map series for Lake County, 1979
21. Lake County Grading Ordinance
22. Lake County Emergency Management Plan
23. Lake County Hazardous Waste Management Plan, adopted 1989
24. Hazardous Waste and Substances Sites List: www.envirostor.dtsc.ca.gov/public
25. Lake County Airport Land Use Compatibility Plan, adopted 1992
26. California Department of Forestry and Fire Protection, fire hazard mapping
27. National Pollution Discharge Elimination System (NPDES)
28. FEMA flood hazard maps
29. Lake County Aggregate Resource Management Plan
30. 2010 Lake County Regional Transportation Plan, Dow & Associates, October 2010
31. Traffic Technical Memorandum dated March 27, 2014
32. CalRecycle Solid Waste Information System http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx
33. Lake County Countywide Integrated Waste Management Plan and Siting Element, 1996