

Spring Garden Bridge and Overhead Rehabilitation Project

PLUMAS COUNTY, CALIFORNIA
02-PLU-70-PM 50.9/51.6
EA#: 02-2C090
EFIS#: 0200000161

Initial Study with Proposed Negative Declaration



Prepared by the
State of California, Department of Transportation
Caltrans District 2
1657 Riverside Drive, MS-30
Redding, CA 96001

May 2015

General Information about this Document

What's in this document?

This Initial Study with proposed Negative Declaration (IS/ND) examines the potential environmental effects of a proposed transportation project on State Route 70, in Plumas County near the town of Quincy. The primary purpose for the project is to provide a reliable highway crossing that meets modern seismic and highway design standards and accommodates interregional transportation needs. The project includes rehabilitation and widening of the existing Spring Garden Bridge and Overhead (Bridge No. 09-0062). This Initial Study was prepared to comply with the California Environmental Quality Act (CEQA). This document describes the purpose and need for the project, project alternatives, existing conditions, and potential effects from the proposed project.

What should you do?

- Please read this Initial Study
- You are invited to review the environmental document and technical studies. A printed copy of the document and technical studies can be found during business hours (Monday-Friday, 8:00 a.m. to 4:30 p.m.) at the Caltrans District Office located at 1657 Riverside Drive in Redding, or a printed copy of the document at the Quincy Post Office (Monday-Friday, 8:30 a.m. to 5:00 p.m.), located at 222 Lawrence Street in Quincy. A copy of the environmental document is also available on Caltrans' website at www.dot.ca.gov/dist3/departments/envinternet/envdoc.htm.
- We welcome your comments. If you have any information or concerns regarding the project, please send your written comments to Caltrans by the deadline. Submit comments via regular mail to:

California Department of Transportation
Attention: Christopher Quiney
North Region Office of Environmental Mgmt., MS-30
1657 Riverside Drive
Redding, CA 96001

- You may also submit comments via e-mail to Chris.Quiney@dot.ca.gov
- Submit comments by the deadline: June 19, 2015.

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) undertake additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could construct all or part of the project.

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Chris Quiney, North Region Environmental Management, 1657 Riverside Drive, Redding, CA 96001; (530) 225-3174 Voice, or use the California Relay Service TTY number, 711 or 1-800-735-2929.

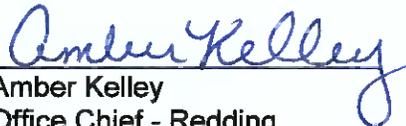
Spring Garden Bridge and Overhead Rehabilitation Project

In Plumas County, California on State Route 70
Post Mile 50.9/51.6

**INITIAL STUDY
WITH PROPOSED NEGATIVE DECLARATION**

Submitted Pursuant to: Division 13, California Public Resources Code

STATE OF CALIFORNIA
Department of Transportation


Amber Kelley
Office Chief - Redding
North Region Environmental Services
California Department of Transportation

5-14-15
Date

Proposed Negative Declaration

Pursuant to: Division 13, California Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate and widen the existing Spring Garden Bridge and Overhead (Bridge No. 09-0062) on SR 70. The primary purpose for the project is to provide a reliable highway crossing that meets modern seismic and highway design standards and accommodates interregional transportation needs. The project would include bridge rehabilitation and widening, road widening, paving, sign replacement, road striping, metal beam guardrail installation/replacement, retaining walls, grading and earthwork, relocation of ice warning system conduit and conductors, vegetation removal and tree clearing, and temporary placement of clean gravel fill in Greenhorn Creek. The new bridge would be approximately the same height and length as the existing bridge, and approximately 12 feet wider than the existing bridge.

Determination

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an ND for this project. This does not mean that Caltrans' decision regarding the project is final. This ND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

- The proposed project would have no effect with regard to aesthetics, agriculture and forest resources, cultural resources, geology and soils, land use and planning, mineral resources, noise, population and housing, public services, recreation, utilities and service systems, energy resources, or mandatory findings of significance.
- The proposed project would have a less-than-significant impact with regard to air quality, biological resources, hazards and hazardous materials, hydrology and water quality, and transportation/traffic.

Amber Kelley
Office Chief - Redding
North Region Environmental Services
California Department of Transportation

Date

Chapter 1. Proposed Project

1.1. Project Title

Spring Garden Bridge and Overhead Rehabilitation Project

1.2. Lead Agency Name and Address

California Department of Transportation, District 2
Office of Environmental Management, MS-30
1657 Riverside Drive
Redding, CA 96001

1.3. Contact Person and Phone Number

Chris Quiney
Caltrans Environmental Branch Chief
Phone: (530) 225-3174

1.4. Project Location

The project is located on SR 70, from PM 50.9 to PM 51.6 (Figure 1).

1.5. Project Sponsor's Name and Address

California Department of Transportation, District 2
Office of Environmental Management, MS-30
1657 Riverside Drive
Redding, CA 96001

1.6. Purpose and Need

The purpose and need of the proposed project is to provide a reliable highway crossing that meets modern highway design standards and accommodates interregional transportation needs. The existing bridge exhibits deck deterioration and deterioration of the paint system. The project would include a seismic retrofit of the bridge and upgrades to meet current design standards.

1.7. Project Description

The California Department of Transportation (Caltrans) is proposing to rehabilitate the existing Spring Garden Bridge and Overhead (Bridge No. 09-0062) (Bridge) on State Route (SR) 70 in Plumas County. The new bridge would be approximately the same height and length as the existing bridge, and approximately 12 feet wider than the existing bridge (Table 1). The rehabilitated bridge would maintain the existing alignment of the existing Bridge. Construction would occur over two years, and utilize the One Way Reversing Traffic Control methodology, as described in Figure 3.

Table 1: Bridge Dimensions

	Existing (ft)	New (ft)	Change (ft)
Height	74	74.5	0.5 (approximate)
Length	426	426	0
Width	28	40	12

The rehabilitated bridge structure would provide a 12-foot-wide lane in each direction, with eight-foot-wide shoulders (Figures 2 and 3). The existing Metal Beam Guard Rail and approach rail would be removed and upgraded to meet Caltrans Standard Plans. Ice warning system conduit and conductors would be relocated within the widened roadway. Existing paint would be removed and existing girders would be repainted. A hazardous materials survey-site investigation to determine the presence/absence of Asbestos Containing Materials/Lead Containing Paint, Naturally Occurring Asbestos, and Aerially Deposited Lead would be completed prior to project construction, in accordance with Caltrans' standard specifications.

Existing bent caps, columns, and footings at Bents 2, 3, and 7 would be widened to support the new, wider Bridge, including concrete infill of the existing columns. Widening of the footings would require excavations in between each footing, as well as around them, to allow for filling the space between footings with concrete. Work on Bents 4, 5, and 6 would consist of the widening of the bent caps. Shoring may be needed for work at Bent 4 to avoid impacts to the railroad tracks and Greenhorn Creek. Construction of a crash barrier and/or third rail may be required by the railroad. Clean gravel pads would be placed temporarily within Greenhorn Creek in order to support falsework for work on Bent 5; the pads would be up to 3 feet wider than the bent footing. Approximately 0.010 acres of perennial stream would be temporarily impacted by the project. All work adjacent to and in Greenhorn Creek would be in accordance with Caltrans' standard specifications and applicable regulatory permits.

Access to the construction area would be via two existing dirt roads to the southeast of the existing bridge, and a new temporary access road that would be constructed to the northwest of the existing bridge, north of the proposed retaining wall. A temporary work trestle would be placed across Greenhorn Creek to access Bents 2, 3, and 4. The trestle would be used for both vehicle crossing and other construction uses. The trestle would likely consist of a timber deck supported by steel round or H-piles. The piles would be installed with a pile driver. Staging would be limited to within the project right-of-way, as well as two existing U.S. Forest Service/Union Pacific Railroad access roads that leave SR 70 from the east side of the Bridge.

Construction would extend approximately 1,150 feet to the west of the Bridge and approximately 750 feet to the east of the Bridge in order to tie back into the existing roadway; the roadway would be approximately 12 feet wider than the existing roadway on either end of the Bridge, and would gradually conform to the existing roadway width over the extent of the project area. The project would require grading and cut/fill from the west side of the bridge in order to accommodate the wider roadway and provide material for the new retaining wall behind Abutment 1. As ground disturbance resulting from the project would be more than one acre in size, a Storm Water Pollution Prevention Plan (SWPPP), including stormwater-related Best Management Practices, would be prepared and implemented in accordance with the National Pollutant Discharge Elimination System (NPDES). Retaining walls to the southwest of the Bridge and northeast of the Bridge may also be necessary in order to support the new cut slope and to avoid sensitive resources, respectively. The project would include the removal of trees on the slope to the southwest of the Bridge in order to allow for road widening, as well as the removal of trees along the road in either direction of the bridge in order to establish a Clear Recovery Zone for errant vehicles. The project would require the removal of approximately 1.6 acres of upland trees and vegetation. Trimming of riparian vegetation under the Bridge within the right-of-way would be necessary for construction activities. Riparian vegetation impacts include 0.020 acres of trimming; riparian vegetation would not be removed. All tree

removal/trimming and vegetation clearing would be in accordance with Caltrans' standard specifications related to nesting migratory birds. A chain link fence and splashboard would be constructed to limit project impacts to the railroad tracks that run underneath the Bridge. As standard practice, Environmentally Sensitive Area (ESA) fencing would be used to protect sensitive resources that should not be impacted by the project.

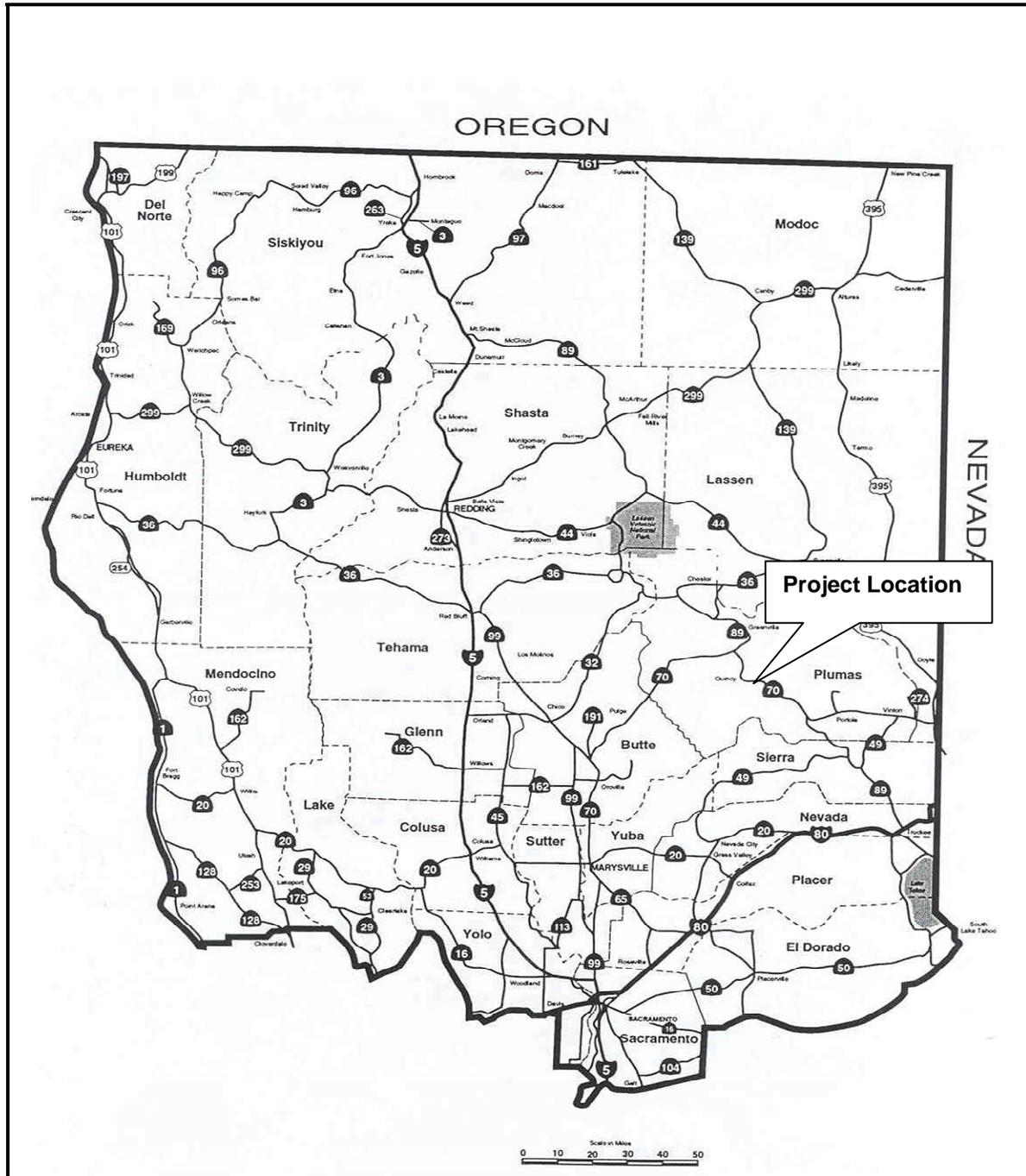


Figure 1: Project Vicinity Map

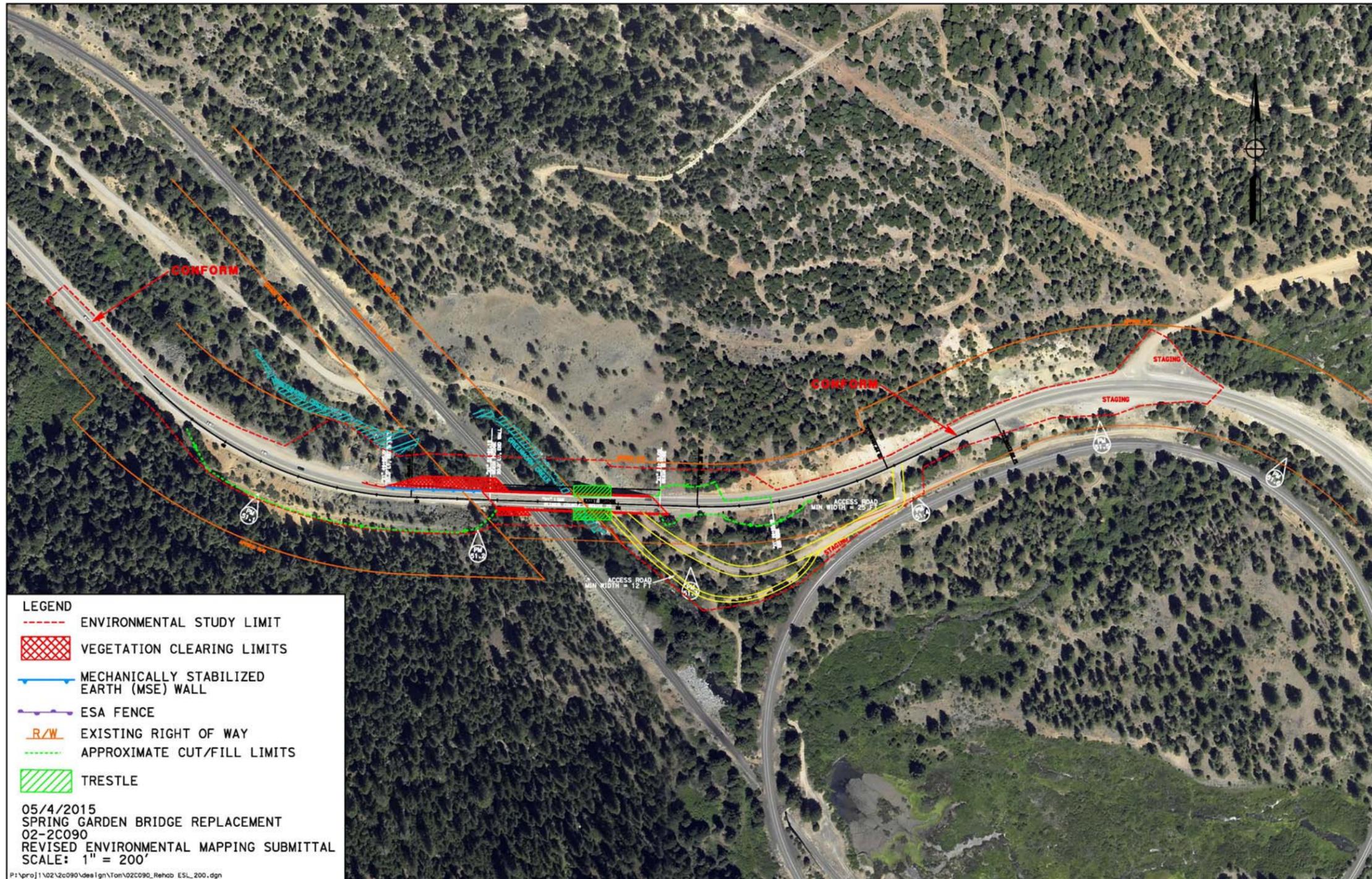


Figure 2: Project Detail Map

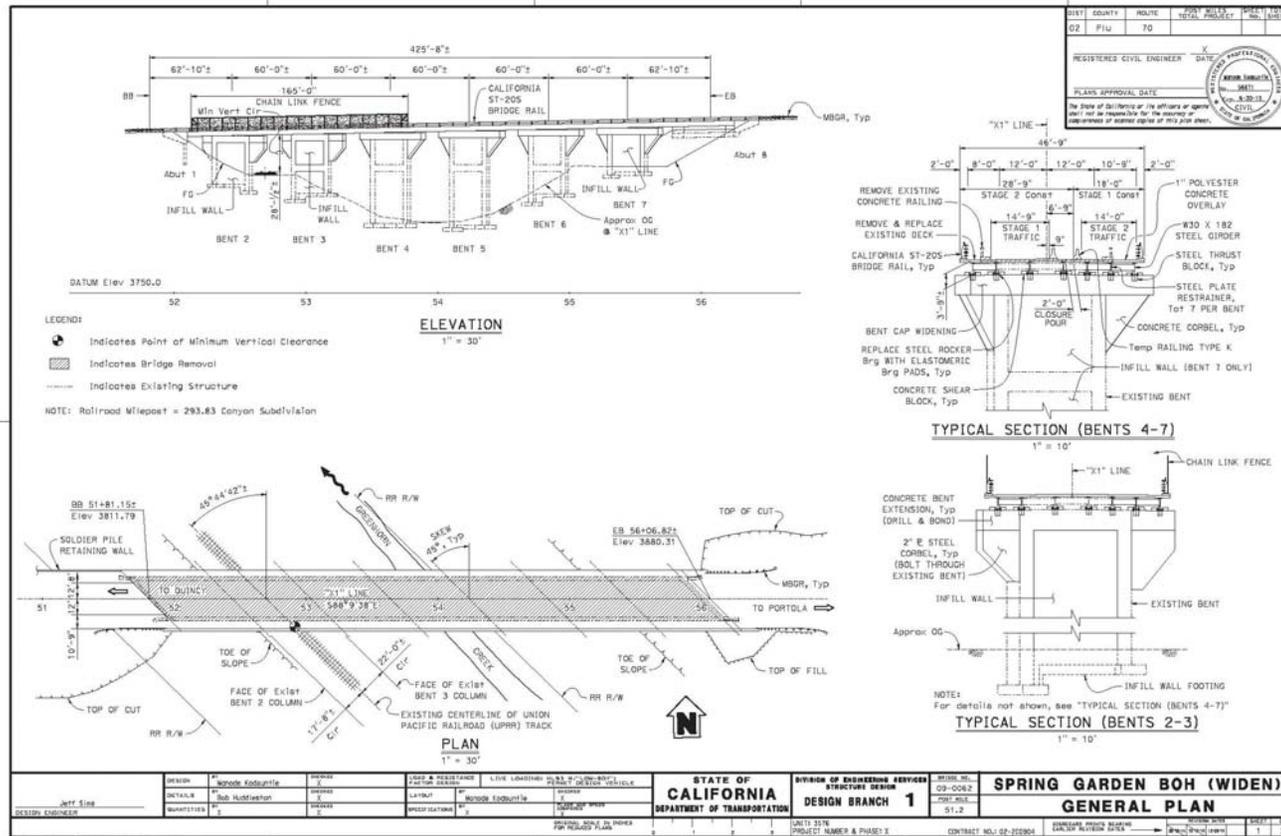


Figure 3: Project General Plan

1.8. Project Alternatives

Two project alternatives, one of which is a “no-build” alternative, were developed as potential solutions to address the purpose and need for the project.

Alternative 1 (proposed bridge rehabilitation) is the preferred alternative as it meets the project purpose and need.

Alternative 2 (no-build) does not meet the purpose and need of this project. Numerous smaller projects and on-going maintenance would be required to maintain the existing structure. This strategy would result in a higher cost to the taxpayer, and greater and prolonged environmental disturbance, while only temporarily delaying replacement of the aging structure.

1.9. Permits and Approvals

Proposed work within Greenhorn Creek would require permits from the California Department of Fish and Wildlife (CDFW), U.S. Army Corps of Engineers (ACOE), and the Regional Water Quality Control Board (RWQCB). In addition, Right of Entry permission would be required for work within the Union Pacific Railroad right-of-way, and a Special Use Permit would be required for work on U.S. Forest Service (USFS) land.

A Storm Water Pollution Prevention Plan (SWPPP) would be prepared and implemented in accordance with the National Pollutant Discharge Elimination System (NPDES).

1.10. Environmental Factors Potentially Affected

The environmental factors checked below may be potentially affected by this project. Please see the checklist beginning on page 15 for additional information.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input checked="" type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Geology/Soils
<input type="checkbox"/>	Greenhouse Gas Emissions	<input checked="" type="checkbox"/>	Hazards and Hazardous Materials	<input checked="" 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 checked="" type="checkbox"/>	Transportation/Traffic	<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Mandatory Findings of Significance

1.11. Environmental Determination

On the basis of this initial evaluation:

<input checked="" type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	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.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	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.
<input type="checkbox"/>	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
Signature: <i>Amber Kelley</i>	
Printed Name: <i>Amber Kelley</i>	
Date: <i>5-14-15</i>	
For:	

Chapter 2. CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included in the section following the checklist. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS: Would the project:				
a) Have a substantial adverse effect on a scenic vista	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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II. AGRICULTURE AND FOREST 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 the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

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

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES: 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS: Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

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

VII. GREENHOUSE GAS EMISSIONS: Would the project:

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

An assessment of the greenhouse gas emissions and climate change is included in the section following the checklist. While Caltrans has included this good faith effort in order to provide the public and decision-makers as much information as possible about the project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the project. These measures are outlined in the section following the checklist.

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

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

VIII. 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?

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

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

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

- | | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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IX. HYDROLOGY AND WATER QUALITY: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Otherwise substantially degrade water quality? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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? | <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"/>
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

X. LAND USE AND PLANNING: 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"/>
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

XI. 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?	<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"/>
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

XII. NOISE: 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 type="checkbox"/>	<input checked="" type="checkbox"/>
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b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 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 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"/>
) 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"/>

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

XIII. POPULATION AND HOUSING: 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 type="checkbox"/>	<input checked="" 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"/>

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

XIV. PUBLIC SERVICES:

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:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

XV. RECREATION:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact

XVI. TRANSPORTATION/TRAFFIC: 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/> |

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XVII. UTILITIES AND SERVICE SYSTEMS: Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" 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 type="checkbox"/> | <input checked="" type="checkbox"/> |
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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XVIII. MANDATORY FINDINGS OF SIGNIFICANCE

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

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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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)?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Chapter 3. **Discussion of Environmental Impacts**

3.1. Air Quality

The proposed project may result in the generation of short-term construction-related air emissions, including fugitive dust and exhaust emissions from construction equipment. Fugitive dust, sometimes referred to as windblown dust or PM10, would be the primary short-term construction impact, which may be generated during excavation, grading, pavement grinding, and hauling activities. Both fugitive dust and construction equipment exhaust emissions would be temporary and transitory in nature, and would not result in long-term adverse conditions. Project-related air quality impacts are less than significant.

3.2. Biological Resources

The project area consists of upland Sierran mixed conifers, as well as Greenhorn Creek and its associated montane riparian vegetation. SR 70 climbs gradually through the project site from approximately 3,600 feet elevation at the western end to approximately 3,800 feet elevation at the eastern end. The Spring Garden Bridge and Overhead spans across the Union Pacific Railroad and Greenhorn Creek, approximately 30 to 70 feet above the Creek. Greenhorn Creek flows from a large wet meadow southeast of the project through the project site and continues to flow northwest. Greenhorn Creek eventually flows into the East Branch North Fork Feather River. The railroad runs underneath the existing Bridge, perpendicular to SR 70 and has a 200 foot easement through USFS land. The land immediately surrounding SR 70 is owned by the USFS and Union Pacific Railroad. Most of the project would occur within the railroad easement.

Literature and record searches of the proposed project area included consultation of numerous databases, lists, and maps, and visits to and/or contacts with a number of relevant agencies (Caltrans, May 2015).

- Species occurrence potential was addressed through background research using the following web-based resources: United States Fish and Wildlife Service (USFWS) Threatened and Endangered Species Database, National Wetlands Inventory, Natural Resources Conservation Service Soil Survey, CDFW California Natural Diversity Database (CNDDDB), California Native Plant Society Inventory of Rare and Endangered Vascular Plants (CNPS), and California Invasive Plant Inventory.
- Biological field surveys were conducted on several occasions in 2014 and 2015 to develop an accurate description of the existing environment, gather information on the presence of special status species, and determine project level impacts with regard to biological resources. Additional field review included a survey of Ordinary High Water Mark (OHWM) / Waters of the U.S., following ACOE criteria.
- Agency consultation included discussions with USFS biologists and botanists, as well as with CDFW.

Results and Findings

Special Status Species

Based on literature searches, surveys, and analysis performed for this report, the proposed project would not have a substantial adverse effect, either directly or indirectly, on a local or regional level, on any species identified as a candidate, sensitive, or special status species. Table 2 outlines special status plant and animal species, and their potential to occur within the project's environmental study limits.

Table 2: Listed, Proposed Species, Natural Communities, and Critical Habitat Potentially Occurring or Known to Occur in the Project Area.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Impact
Plants					
Constance's rockcress	<i>Boechera constancei</i>	1B.1	Perennial herb that occurs in serpentinite, rocky soils within chaparral, lower montane coniferous forest, and upper montane coniferous forest habitats. Blooms May to July. Elevations: 3200–6650 feet.	Present	There is a FS studied population .500 feet north of the project site, just outside the ESL. No impact.
Geyer's sedge	<i>Carex geyeri</i>	4.2	Perennial herb that occurs in great basin scrub and lower montane coniferous forest. Blooms May to August. Elevations 3790-6900 feet.	Present	Coniferous forest occurs within the ESL; however it was not found during botanical surveys. No impact.
Sierra clarkia	<i>Clarkia virgata</i>	4.3	Annual herb that occurs in cismontane woodlands and lower montane coniferous forest. Blooms May to August. Elevations: 1312-5300 feet.	Present	Coniferous forest occurs within the ESL; however it was not found during botanical surveys. No impact.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Impact
mountain lady's slipper	<i>Cypripedium montanum</i>	4.2	Perennial rhizomatous herb that occurs in broad leaved upland forest, cismontane woodland, lower montane coniferous forest, and north coast coniferous forests. Blooms from March to August. Elevations: 605-7300 feet.	Present	Coniferous forest occurs within the ESL; however it was not found during botanical surveys. No impact.
Quincy lupine	<i>Lupinus dalesiae</i>	4.2	Perennial herb that occurs in openings, often in disturbed areas, chaparral, cismontane woodland, lower montane coniferous forest, and upper montane coniferous forests. Blooms May to August. Elevation 2805- 8202 feet.	Present	Found within ESL. Less than significant impact.
closed throated beardtongue	<i>Penstemon personatus</i>	1B.2	Perennial herb that occurs in meta-volcanic soils within chaparral, lower montane coniferous forest, and upper montane coniferous forest habitats. Blooms June to October. Elevations: 3494–6700 feet.	Present	Coniferous forest occurs within the ESL; however it was not found during botanical surveys. No impact.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Impact
alder buckthorn	<i>Rhamnus alnifolia</i>	2B.2	Perennial deciduous shrub that occurs in lower montane coniferous forest, meadows and seeps, riparian scrub, and upper-montane coniferous forest. Blooms May to July. Elevation 4500-7000 feet.	Present	Coniferous forest occurs within the ESL; however it was not found during botanical surveys. No impact.
Webber's ivesia	<i>Ivesia webberi</i>	1B.1, FT	A perennial herb that occurs in sandy or gravelly soils within Great Basin scrub (volcanic ash), lower montane coniferous forest, Pinyon and juniper woodland habitats. Blooms May to July. Elevations: 3280–6810 feet.	Present	Coniferous forest occurs within the ESL; however it was not found during botanical surveys. No impact.
Animals					
northern goshawk	<i>Accipiter gentilis</i>	SSC	Inhabits coniferous forests, but will also inhabit deciduous and mixed forests from sea level to subalpine areas. This species may also be found in urban forested parks.	Present	A Forest Service PAC exists a mile north of the project. No impact.
Sierra Nevada red fox	<i>Vulpes vulpes necator</i>	ST	Restricted to alpine and subalpine meadows and montane boreal forests.	Present	Only 2 populations are known to exist. First near Lassen Peak and Sonora Pass. Closest occurrence to project site is from 1975,

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Impact
					three miles west of the project. No impact.
Willow Flycatcher	<i>Empidonax traillii</i>	SE	Breeds in moist, shrubby areas, often with standing or running water. Winters in shrubby clearings and early successional growth.	No habitat	Closest occurrence is from 1986 ten miles south of the project site. Closest willow stand is 700 feet SE of project site. No impact.
California spotted owl	<i>Strix occidentalis occidentalis</i>	SSC	Inhabits old growth forests in the Sierra Nevada from approximately 3,000 to 7,000 feet in elevation.	Present	A Forest Service PAC exists a mile NW of the project. No impact.
Foothill yellow-legged frog	<i>Rana boylei</i>	SSC	Creeks or rivers in woodlands or forests with rock and gravel substrate and low overhanging vegetation along the edge; usually found near riffles with rocks and sunny banks nearby.	Present	Appropriate aquatic habitat present; however surveys determined that species is not present. No impact.
Sierra Nevada Yellow legged frog	<i>Rana sierra</i>	FE	Lakes, ponds, marshes, meadows, and streams between 3500-12,000 feet elevation.	Present	Closest known occurrence was observed in 1998 10 miles west of the project site. Critical habitat is located 7 miles west of the project site. No impact.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Impact
CA red legged frog	<i>Rana draytonii</i>	FT	Quiet water refugia with emergent vegetation normally under 3,500 feet elevation.	Absent	Critical habitat 32 miles frog project site. Closest known occurrence 33 miles from 2007. The project is outside elevation range. The project is outside of its current and historic range. Abundant surveys have been conducted throughout the Plumas National Forest over the past 15 years, with no new populations found. No impact.
Pacific Fisher	<i>Martes pennanti</i>	FSS/S C	Inhabit upland and lowland forests, including coniferous mixed and deciduous forest.	Present	Low potential to occur within the ESL. Potentially may travel through ESL. Nearest documented is 9 miles away recorded in 1983. No impact.

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] - project footprint is located within a designated critical habitat unit, but does not necessarily mean that appropriate habitat is present. Status: Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); Federal Candidate (FC), Federal Species of Concern (FSC); State Endangered (SE); State Threatened (ST); Fully Protected (FP); State Rare (SR); State Species of Special Concern (SSC); California Native Plant Society (CNPS), etc.

Quincy lupine. Quincy lupine is listed in the California Natural Diversity Database as “California Rare Plant Rank 4.2: Uncommon in California, Fairly Endangered in California”. However, according to a Plumas National Forest monitoring report, the Quincy lupine population is considered stable (USFS, 2010) in the area. Approximately 0.184 acre of Quincy lupine was observed south of SR 70 within Caltrans right-of-way along a dirt road and its adjacent slope. Due to road widening the slope containing Quincy lupine would be cut back. This would result in permanent impacts to 0.121 acre, or 66% of the 0.184 acre of Quincy lupine within the ESL.

Impacts to the Quincy lupine are less than significant as: the proposed project would not have a substantial adverse effect, either directly or indirectly, on a local or regional level; there are 228 documented population occurrences within Plumas County; and according to the Plumas National Forest monitoring report the Quincy lupine population is considered stable.

Although the project impacts to Quincy lupine are less than significant, it is Caltrans’ practice to further reduce impacts where possible. In order to further lessen impacts to Quincy lupine in the project vicinity, seeds would be collected by Caltrans biologists after the plant’s blooming period. These seeds would be dispersed, along with erosion control seeding, to ensure propagation.



Figure 4: Slope on the west end of the bridge that would be cut back to allow for road widening. The population of Quincy lupine is located on the top of the slope.

Sensitive Natural Communities

Riparian Habitat. Riparian habitat within the ESL consists of approximately 0.101 acre on the banks of Greenhorn Creek; the riparian zone is approximately 10 feet thick at its widest point. The riparian habitat through the ESL consists mainly of large grey alders and black willow, is undisturbed, and has an established canopy over Greenhorn Creek.



Figure 5: Riparian area under bridge

Project construction activities would include trimming riparian trees at a point approximately 15' up the trunk. Approximately 0.020 acre of riparian trees would be trimmed by a qualified arborist. No riparian trees would be removed as a result of the project. The trimming would result in a slight decrease in the canopy cover over Greenhorn Creek; however, this change would be insignificant because what remains of the tree after trimming would continue to provide shade to the creek for temperature control purposes, and the original canopy is expected to be quick to reestablish. All other important functions of riparian habitat, including the availability of wildlife habitat and a safe migration corridor, would not be impacted by the proposed project. The project would have a less than significant impact to riparian vegetation. Consistent with Caltrans standard practice, temporary fencing would be installed at strategic locations to create an Environmentally Sensitive Area (ESA) in order to protect upland and riparian vegetation located beyond the work limits from inadvertent impacts during construction.

Sierran Mixed Conifer. Sierran mixed conifer habitats are an assemblage of conifer and hardwood species that form a multilayered forest (CWHRS). In the project area the species include, Ponderosa pine (*Pinus ponderosa*), incense cedar (*Calocedrus decurrens*), Douglas fir (*Pseudotsuga menziesii*), and white fir (*Abies concolor*). There are approximately 15 acres of mixed conifer within the project ESL. The proposed project would result in the permanent impact to approximately 1.2 acres and the temporary impact to approximately 0.4 acre of upland Sierran mixed conifers in order to provide access for construction equipment and to widen SR 70. The proposed project would impact approximately 10% of the mixed conifer habitat within the ESL.

Mixed conifer forest is abundant and the Plumas County General Plan EIR Update (Plumas County, 2012) indicates that approximately 72% of Plumas County comprises conifer/mixed conifer forest habitat. A land use survey completed in 1997 by the California Department of Water Resources (California Department of Water Resources, 1997) states that there are one and a half million acres of native vegetation in Plumas County. Given the local habitat levels, regional habitat levels, and current forestry practices, the project would have no adverse impact on conifer habitat, nor would it have an adverse impact aesthetically.

Jurisdictional Waters of the U.S.

Waters. Greenhorn Creek, a perennial stream, flows northwest through the ESL; approximately 0.144 acre of Greenhorn Creek is within the ESL. Project construction activities would require the placement of a clean gravel pad to support falsework at Bent 5, resulting in the temporary impact to approximately 0.010 acre of perennial waters. All gravel placed into Greenhorn Creek would be washed offsite and free of any particulates prior to placement in Greenhorn Creek. Clean fabric would be placed under the gravel pad to guarantee removal of rocks following construction activities. All work within Greenhorn Creek would be subject to Department of Fish and Wildlife 1600 Permit requirements, and compliance with Sections 401 and 404 of the Clean Water Act would be required. Temporary impacts to perennial waters are minimal in nature, and are considered to be less than significant.

Wetlands. No wetlands are present in the project area.

Migratory Bird Species

The proposed project would remove trees that provide potential nesting habitat for birds, which are protected under the Migratory Bird Treaty Act. Standard special provisions would be included in the construction contract to allow the removal of trees and shrubs during the non-nesting season. The nesting season is defined as February 15 to September 1. If necessary, trees may also be removed during the nesting season after being cleared by a qualified biologist. If a nesting bird is found, the tree would not be removed until the qualified Caltrans biologist confirms that all birds have fledged. Project activities would no impact to nesting migratory birds.

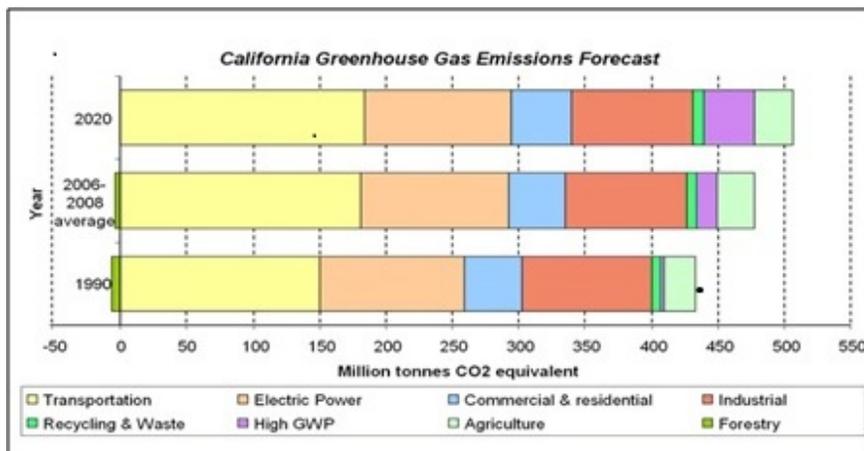
Critical Habitat

Based on Caltrans' review, no designated critical habitats for listed species occur within the proposed project location. The Federal Register and USFWS Critical Habitat Mapper were used to map the critical habitat of listed species and it was confirmed that no known critical habitat exists within the project area, and the proposed project location does not fall within federally designated or proposed critical habitats. Therefore, project activities would have no impact to critical habitat for proposed or listed species.

3.3. Greenhouse Gas Emissions

An individual project does not generate enough greenhouse gas (GHG) emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its *incremental* change in emissions when combined with the contribution of all other sources of GHG.¹ In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines sections 15064(h)(1) and 15130). To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult, if not impossible, task.

The AB 32 Scoping Plan mandated by AB 32 contains the main strategies California will use to reduce GHG emissions. As part of its supporting documentation for the Draft Scoping Plan, ARB released the GHG inventory for California (forecast last updated: May 2014). The forecast is an estimate of the emissions expected to occur in the year 2020 if none of the foreseeable measures included in the Scoping Plan were implemented. The base year used for forecasting emissions is the average of statewide emissions in the GHG inventory for 2006, 2007, and 2008.



Source: <http://www.arb.ca.gov/cc/inventory/data/forecast.htm>

Figure 6: California Greenhouse Gas Forecast

Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all

¹ This approach is supported by the AEP: *Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents* (March 5, 2007), as well as the South Coast Air Quality Management District (Chapter 6: The CEQA Guide, April 2011) and the US Forest Service (Climate Change Considerations in Project Level NEPA Analysis, July 13, 2009).

human-made GHG emissions are from transportation, Caltrans has created and is implementing the Climate Action Program at Caltrans, published in December 2006.²

Project Analysis

The purpose of the proposed project is to provide a reliable highway crossing that meets modern highway design standards and accommodates interregional transportation needs. The proposed project would not increase capacity or vehicle miles travelled, therefore no increases in operational GHG emissions are anticipated.

Construction Emissions

GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications, and by implementing traffic management practices during construction phases. Even though the project is not anticipated to increase operational GHG emissions, the proposed project would generate some GHG emissions during construction.

CEQA Conclusion

While construction would result in a slight increase in GHG emissions during construction, it is anticipated that the project would not result in any increase in operational GHG emissions. It is Caltrans' determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination with regard to the project's direct impact and its contribution on the cumulative scale related to climate change. However, Caltrans is firmly committed to implementing measures to help reduce GHG emissions, as follows:

Project level GHG measures

During construction, the project would utilize a One Way Reversing Traffic Control type of temporary detour, which would eliminate traffic delays and long periods of traffic holding (idling). While construction emissions of greenhouse gases are unavoidable, the proposed project is minor in scope, and construction utilizing mechanized equipment would be of relatively short duration.

AB 32 Compliance

Caltrans continues to be actively involved on the Governor's Climate Action Team as ARB works to implement the Executive Orders S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. Many of the strategies Caltrans is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Former Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a \$222 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including \$100.7 billion in transportation funding during the next decade. The Strategic Growth Plan targets a significant decrease in

² Caltrans Climate Action Program is located at the following web address:
http://www.dot.ca.gov/hq/tpp/offices/ogm/key_reports_files/State_Wide_Strategy/Caltrans_Climate_Action_Program.pdf

traffic congestion below today’s level, and a corresponding reduction in GHG emissions; the Strategic Growth Plan proposes to accomplish these targets while accommodating growth in population and the economy. A suite of investment options has been created that, combined together, are expected to reduce congestion. The Strategic Growth Plan relies on a complete systems approach to attain CO₂ reduction goals: systems monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements, as depicted in Figure 5.



Figure 7: Mobility Pyramid

Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans works closely with local jurisdictions on planning activities, but does not have local land use planning authority. Caltrans assists efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, and light and heavy-duty trucks; Caltrans is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note; however, that the control of the fuel economy standards is held by the U.S.EPA and ARB.

Adaptation Strategies

“Adaptation strategies” refer to how Caltrans and others can plan for the effects of climate change on the state’s transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, storm surges and intensity, and the frequency and intensity of wildfires. These changes may affect the transportation infrastructure in various ways, such as damaging roadbeds by longer periods of intense heat; increasing storm damage from flooding and erosion; and inundation from rising sea

levels. These effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. There may also be economic and strategic ramifications as a result of these types of impacts to the transportation infrastructure.

On November 14, 2008, former Governor Arnold Schwarzenegger signed EO S-13-08 which directed a number of state agencies to address California's vulnerability to sea level rise caused by climate change. This EO set in motion several agencies and actions to address the concern of sea level rise.

Executive Order S-13-08 also directed the Business, Transportation, and Housing Agency to prepare a report to assess vulnerability of transportation systems to sea level rise affecting safety, maintenance, and operational improvements of the system, and economy of the state. The Department continues to work on assessing the transportation system vulnerability to climate change, including the effect of sea level rise.

The proposed project location is outside of the coastal zone and is not in an area expected to experience direct impacts due to sea level rise for the projected 2050 and 2100 years.

Currently, the Department is working to assess which transportation facilities are at greatest risk from climate change effects. However, without statewide planning scenarios for relative sea level rise and other climate change effects, the Department has not been able to determine what change, if any, may be made to its design standards for its transportation facilities. Once statewide planning scenarios become available, the Department will be able review its current design standards to determine what changes, if any, may be warranted in order to protect the transportation system from sea level rise.

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system from increased precipitation and flooding; the increased frequency and intensity of storms and wildfires; rising temperatures; and rising sea levels. The Department is an active participant in the efforts being conducted in response to EO S-13-08 and is mobilizing to be able to respond to the National Academy of Science Sea Level Rise Assessment Report.

3.4. Hazards and Hazardous Materials

An Initial Site Assessment (Caltrans, 2005) and updated Initial Site Assessment (Caltrans, 2011), identified the potential for several minor hazardous waste/material issues within the project site; Lead Containing Paint (LCP) related to thermoplastic and/or paint striping removal, Aerially Deposited Lead (ADL), the potential for Asbestos Containing Material (ACM), and Naturally Occurring Asbestos (NOA).

Portions of the existing steel bridge structure may contain LCP. In addition, soils beneath the bridge could be contaminated with lead from sandblasting operations, which may result in the release of ADL. Based upon visual inspection, review of as-builts, and past history of similar

structures there is some potential that ACM could be present in joint filler material, abutment joints, and/or expansion joints. .

If LCP, ADL and/or NOA are present, construction specifications would be included to address appropriate lead removal (including preparation of a Lead Compliance Plan), and temporary storage, testing, and transportation to an appropriate disposal or recycling facility. In addition, a requirement would be included for the contractor to provide written documentation that recycling or disposal facilities acknowledge the potential for lead on the material received.

If ACM is present it would be treated in accordance with the appropriate construction specifications, including requiring the contractor be notified as to the presence of suspected ACM. ACM removal must be conducted by a licensed and certified asbestos abatement contractor.

Prior to construction activities a Preliminary Site Investigation would be completed in order to identify and, if necessary, quantify the presence of these waste/material issues. Project impacts related to hazards and hazardous materials are less than significant.

3.5. Hydrology and Water Quality

Project construction activities would require the placement of a clean gravel pad to support falsework at Bent 5. Placement of the clean gravel pad would be in accordance with Caltrans' standard specifications for a clear water diversion. All gravel placed into Greenhorn Creek would be washed offsite and free of any particulates prior to placement in Greenhorn Creek. Clean fabric would be placed under the gravel pad to guarantee removal of rocks following construction activities. All work within Greenhorn Creek would be subject to Department of Fish and Wildlife 1600 Permit requirements, and compliance with Sections 401 and 404 of the Clean Water Act would be required.

In accordance with construction specifications, the contractor would be required to submit a SWPPP. The SWPPP would be prepared in accordance with Caltrans' Storm Water Management Program and the Statewide Caltrans NPDES Permit issued by the State Water Resources Control Board. The SWPPP identifies potential sources of pollution and includes Caltrans' Best Management Practices (BMPs) that would be implemented to avoid and/or minimize potential sediment delivery or chemical contamination to Greenhorn Creek (Caltrans, 2015).

Project impacts related to hydrology and water quality are less than significant.

3.6. Transportation and Traffic

Vehicle traffic during construction would be controlled using the One Way Reversing Traffic Control method. Signals would be placed at both ends of the bridge, and traffic would be able to proceed one direction at a time. Idling time for vehicles would be limited to the amount of time it takes for traffic from one direction to pass through the construction site. Construction would occur in two stages, with approximately half of the bridge being constructed at a time, and traffic would proceed on the bridge in accordance with these construction stages. Project-related impacts to transportation and traffic are less than significant.

Chapter 4. List of Preparers

This Initial Study was prepared by the California Department of Transportation, North Region Office of Environmental Management, with input from the following staff:

Thomas Graves, Associate Engineering Geologist
Contribution: Initial Site Assessment for Hazardous Waste

Blossom Hamusek, Project Archaeologist
Contribution: Cultural resource surveys and reports

Hanna Harrell, Project Biologist
Contribution: Natural Environment Study

Mark Loader, Hydraulics Project Engineer
Contribution: Floodplain Evaluation Report Summary and Location Hydraulic Study

Julie McFall, Environmental Coordinator
Contribution: Document writer

Darrell Naruto, NPDES Coordinator
Contribution: Water Quality Assessment Report

Tom Penick, Project Engineer
Contribution: Project design

Chris Quiney, Environmental Branch Chief
Contribution: Document preparation oversight

Mike Feakes, Senior Project Engineer
Contribution: Project design oversight

Rob Burnett, Jr., Project Manager
Contribution: Project management

Chapter 5. **References**

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Appendix A. List of Technical Studies

The following technical studies were prepared with regard to the proposed project and are available for public review upon request.

California Department of Transportation. 2015. *Water Quality Assessment Report, Spring Garden Bridge and Overhead Rehabilitation Project.*

California Department of Transportation, North Region Office of Hydraulic Design - Redding. 2015. *Floodplain Evaluation Report Summary and Location Hydraulic Study.*

California Department of Transportation, Office of Environmental Analysis, North Region. May 2015. *Historic Property Survey Report/Archaeological Survey Report.*³

California Department of Transportation, Office of Environmental Analysis, North Region. May 2015. *Natural Environment Study, Spring Garden Bridge Rehabilitation.*

California Department of Transportation, Office of Environmental Engineering, South. March 23, 2005. *Initial Site Assessment.*

California Department of Transportation, Office of Environmental Engineering, South. November 2, 2011. *Initial Site Assessment- Spring Garden Bridge, State Highway 70 in Plumas County.*

³ Technical studies containing cultural resources information are confidential and are not available for public review.