West Branch Cherokee Creek Bridge Replacement

Five miles northeast of Copperopolis
10-CAL-4-PM 16.15

10-1H500/10 1700 0154

Initial Study
with Proposed Negative Declaration

Prepared by the
State of California Department of Transportation

August 2019

Caltrans

General Information About This Document

Please read this Initial Study. Additional copies of this document are available for review at the Caltrans district office at 1976 East Dr. Martin Luther King, Jr. Boulevard, Stockton, CA 95205 and Calaveras County Public Library, Angels Camp Branch at 426 North Main Street, Angels Camp, CA 95222, and Copperopolis Branch, Lake Tulloch Plaza, 3505 Spangler Lane in Copperopolis.

The document can also be accessed electronically at the following website: http://www.dot.ca.gov/caltrans-near-me/district-10

- If you have any concerns about the project, please send your written comments to Caltrans by the deadline. Submit comments via U.S. mail to Caltrans at the following address:
  Jaycee Azevedo, Branch Chief
  Northern San Joaquin Valley Environmental Analysis Branch 3
  California Department of Transportation
  1976 East Dr. Martin Luther King, Jr. Boulevard
  Stockton, CA 95205
- Submit comments via email to: jaycee.azevedo@dot.ca.gov.
- Submit comments by the deadline: November 8, 2019.

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

For individuals with sensory disabilities, this document is available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Jaycee Azevedo, Chief, Northern San Joaquin Valley Environmental Management Branch 3, 1976 East Dr. Martin Luther King, Jr. Boulevard, Stockton, CA 95205; (209) 941-1919 or use the California Relay Service 1 (800) 735-2929 (TTY), 1 (800) 735-2929 (Voice), or 711.

10-CAL-4-PM 16.15
10-1H500/10-1700-0154

Demolish and replace the West Branch Cherokee Creek Bridge over Nassau Creek on State Route 4 at post mile 16.15 in Calaveras County

INITIAL STUDY
with Proposed Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation
CEQA Lead Agency

8-26-19
Date

DRAFT
Proposed Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to demolish and replace the West Branch Cherokee Creek Bridge (Bridge #30-0036) on State Route 4 at post mile 16.15 in Calaveras County.

Determination

This proposed Negative Declaration is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a Negative Declaration for this project. This does not mean that Caltrans' decision on the project is final. This Negative Declaration 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 project would not have a significant effect on the environment for the following reasons.

The project would have no effect on: aesthetics; agriculture and forest resources; air quality; cultural resources; energy; geology and soils; hazards and hazardous materials; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation; tribal cultural resources; utilities and service systems; wildfire; and mandatory findings of significance.

The project would have less than significant effects on: biological resources and greenhouse gas emissions.

_____

Philip Vallejo
Environmental Office Chief, North
California Department of Transportation
CEQA Lead Agency

_____

Date

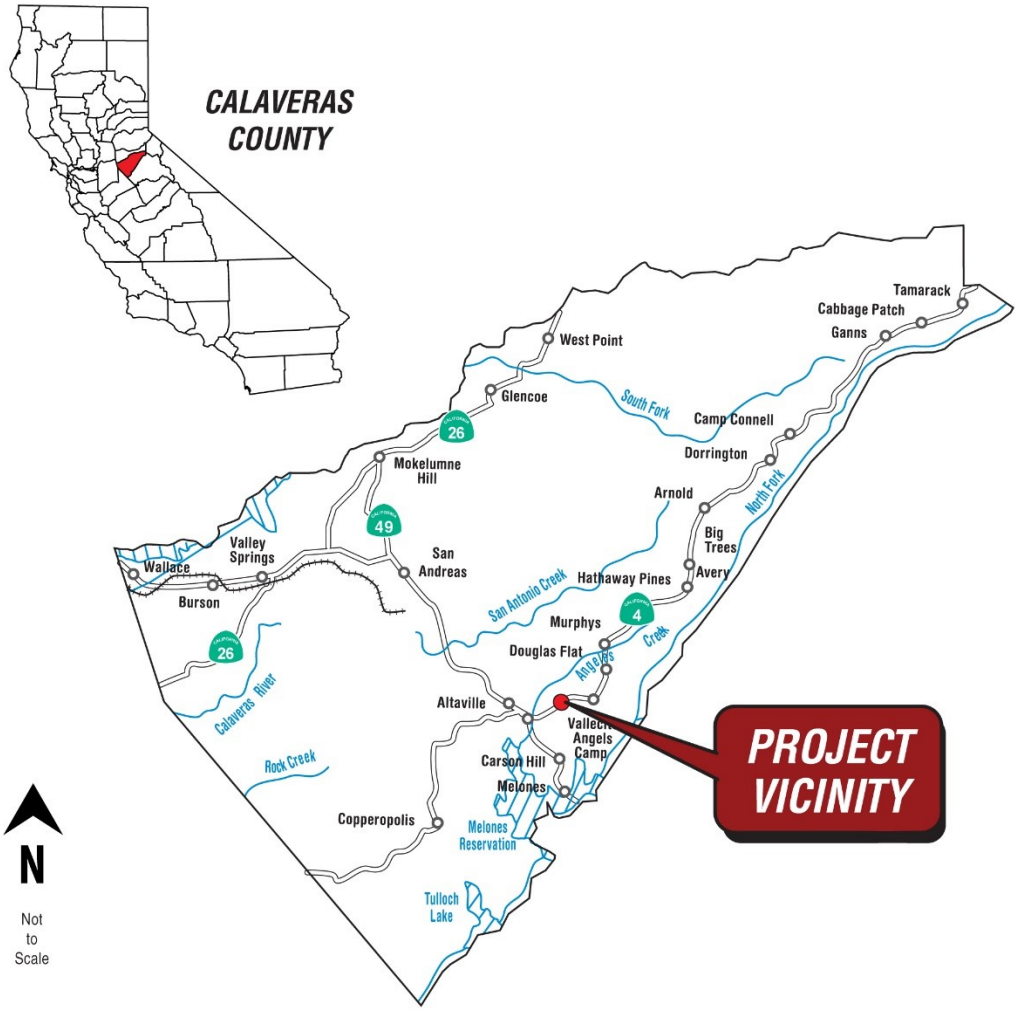
Section 1 Project Description and Background

1.1 Project Title

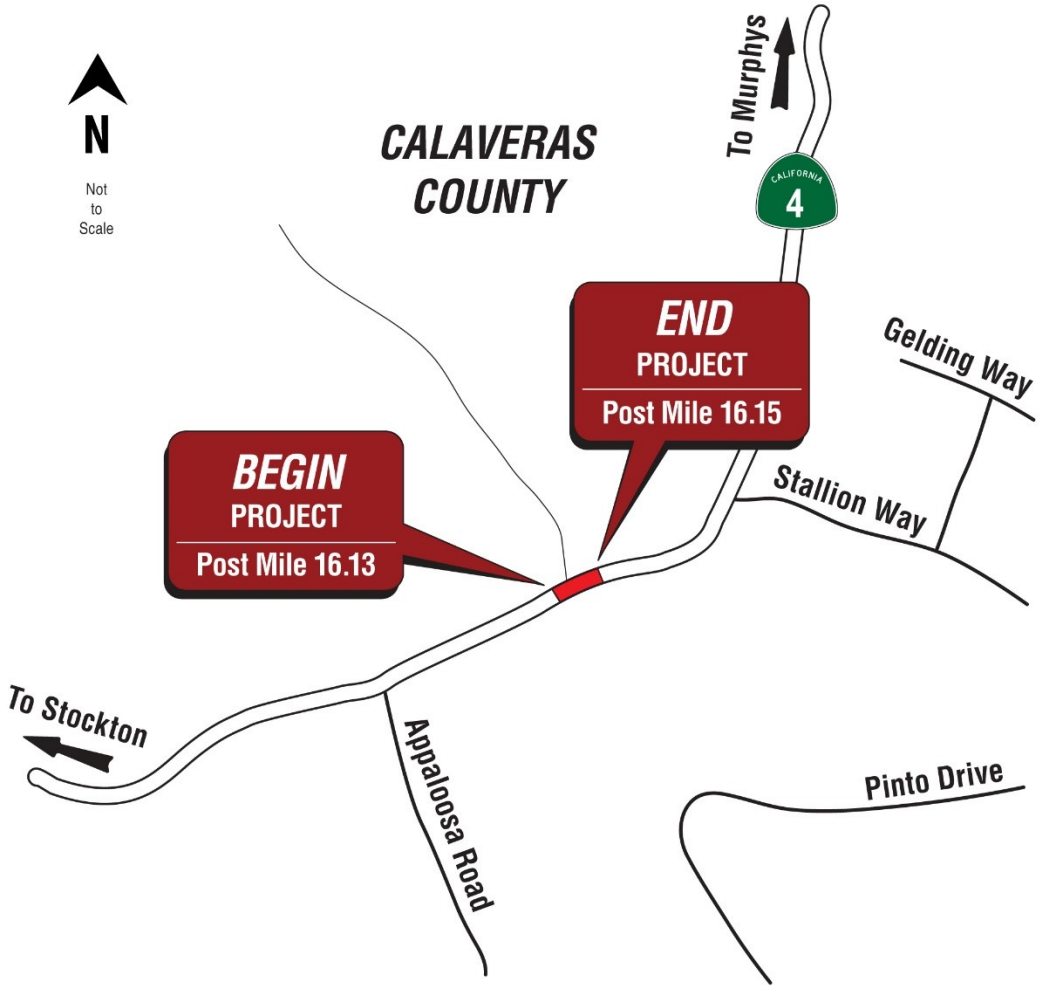
West Branch Cherokee Creek Bridge Replacement

1.2 Project Location

The project site sits on the widely used transportation corridor of State Route 4 in Calaveras County, between Angels Camp and Copperopolis.



Project Vicinity Map



Project Location Map

1.3 Description of Project

The proposed project would demolish the current West Branch Cherokee Creek bridge (Bridge #30-0036, Cherokee Bridge) and replace it with a new structure. The existing bridge is more than 80 years old, with a soffit elevation of 1,422.7 feet above mean sea level. The bridge structure is currently capable of accommodating 800 cubic feet per second (cfs) of water flow. The guardrails do not meet current Caltrans standards and, although the structure currently has 12-foot-wide lanes, there are no shoulders along this area.

The proposed bridge design would increase the soffit elevation by 4 feet (to 1,426.7 feet above mean sea level). This would require that the bridge span (length) increase to 31 feet and that the roadway on either end be elevated to match the bridge elevation. The new structure would pass 1,800 cubic feet per second of water flow and provide 2 feet of freeboard (distance from water surface to bottom of bridge soffit), allowing water-borne debris to pass through and prevent the bridge from failing.

Most scientists and meteorologists predict increasing frequency and intensity of extreme storm events as the pace of global climate change increases, though there is uncertainty and disagreement about how much and how fast the change will occur. However, the proposed design offers a 125% increase to flow capacity under the bridge and is considered adequate to pass floodwaters resulting from a 50-year or 100-year storm under historical conditions.

The bridge replacement will include new piers and substructure, with a deck that is 44 feet wide. In addition to 12-foot-wide lanes, the new bridge will also have standard 8-foot-wide shoulders on either side of the traveled way, and new guardrails that meet current standards.

This will require the acquisition of some new right-of-way and temporary construction easements—from both the parcel to the north and the parcel to the south of the existing bridge structure—to accommodate the slopes needed to adjust for the new road elevation and for staging areas during dewatering activities.

The project would involve work in the riparian area of Nassau Creek, the intermittent stream that is spanned by the Cherokee Creek Bridge. Note that the bridge is misnamed: the body of water that is called Cherokee Creek is about a mile up the road from this bridge.

Construction of the new piers would require pile-driving in the stream bed. Before beginning construction, the stream would be dewatered. During construction, the contractor would demolish and rebuild one side of the bridge at a time, temporarily diverting traffic to the remaining side of the structure using one-way traffic control. The contractor is likely to create a temporary disposal site for the debris from bridge demolition.

Caltrans has identified a series of best management practices that are included by reference in every construction contract. The contractor for the construction of this project will be liable to use Caltrans best management practices during all work. In addition, specific avoidance measures will be used when work occurs near potential California red-legged frog and foothill yellow-legged frog habitat, including minimizing habitat disturbance to the maximum extent practicable and restoring and revegetating the project site

following construction. These will be included in the bid package and the contract. Required construction site practices include:

- **Equipment Inspection.** All construction pipes, culverts, or similar structures that are stored on the construction site for one or more overnight periods will be thoroughly inspected for wildlife before burying, capping, or otherwise using the structures. If wildlife is discovered during this inspection, the structure will not be disturbed until the individual leaves of its own accord.
- **Trash Abatement.** All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed daily from the project site to reduce the potential for attracting wildlife onto the construction site.
- **Pets/Firearms Prohibition.** To eliminate the potential for harassment, injury, or death of any species resulting from their presence, pets and firearms (with the exception of firearms carried by authorized law enforcement officials) will not be allowed on the project site.
- **Chemicals Avoidance.** Use of herbicides and rodenticides, including fumigation and poison bait, will be prohibited.
- **Mono-filaments.** To avoid entangling any wildlife, erosion control methods will not use plastic, monofilament, jute, or similarly tightly woven fiber netting or other such materials. Acceptable substitutes include coconut coir matting, tackified hydro-seeding compounds, or other similar materials.
- **Construction Traffic.** Project-related vehicle traffic will be restricted to established roads and construction areas. All project-related vehicles will observe a daytime speed limit of no more than 20 miles per hour and a nighttime speed limit of no more than 10 miles per hour in all project areas, except on the highway.
- **Dust Control.** Dust control measures would be done according to the Caltrans 2015 Standard specification under Section 14 for Dust Control.
- **Weed Washing.** All equipment and vehicles will be thoroughly cleaned to remove dirt and weed seeds prior to being transported or driven to or from the project site for weed containment.
- **Weed Inspection.** Any borrow site or stockpile will be inspected for the presence of noxious weeds or invasive plants.
- **Lighting Avoidance.** The use of temporary artificial lighting onsite will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction, particularly at night, will be confined to areas within the construction footprint and directed away from surrounding habitat.

- **Storm Water Pollution Prevention Plan.** Ensure that a storm water pollution prevention plan is in place to prevent runoff into the aquatic habitats within the action area during construction.
- **Asphalt Waste.** All grindings and asphaltic-concrete waste would be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any aquatic habitat, culvert, or drainage feature.
- **Special-Status Species Reporting.** Any new sightings of the special-status species will be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location of the observation also will be provided to the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife.
- **Minimize Removal/Habitat Disturbance.** The project will minimize the projects effects to the adjacent open water habitat (Nassau Creek) and riparian habitat outside the action area. Also, to control erosion and restore habitat value, vegetation removal in all areas within the project footprint that are disturbed during construction would be minimized to the maximum extent practicable. Vegetation would be cut above the soil level except in areas that would be excavated. This would allow plants to re-sprout after construction.
- **Restoration and Revegetation.** All areas that are temporarily affected during construction would be recontoured and revegetated via hydro-seeding with a native riparian seed mix to restore habitat values back to pre-construction conditions following the completion of construction. Spread of invasive, exotic plants would be limited within the action area to the maximum extent practicable, pursuant to Executive Order 13112 (Invasive Species). A Special Standard Provision may be needed.
- **Greenhouse Gas Emissions Reduction Strategies.** While the replacement bridge would not create increased emissions of greenhouse gas during operation, there would be emissions associated with construction activity. Such emissions are effectively permanent additions to the atmosphere, not temporary effects, such as noise or dust, that dissipate once construction is complete. The contractor would commit to measures that minimize or offset construction-related emissions, such as ensuring that onsite equipment is both the right size for the job and is operated in a manner consistent with achieving peak fuel efficiency, including being maintained in good operating condition and avoiding extended periods of idling wherever possible. Materials recycling will be incorporated into construction activities wherever practicable. In addition, Environmental will add information on the importance of avoiding greenhouse gases emissions and strategies to accomplish that to the usual environmental training provided to the contractor workforce.

1.3.1 Surrounding Land Uses and Setting

The project site is in the Sierra Nevada foothills, at an elevation of approximately 1,500 feet. The climate is Mediterranean, with hot, dry summers and mild, rainy winters. The area is rural, with land used mostly for livestock grazing. An intermittent stream, Nassau Creek, flows through the action area. A roadside ditch flows from the property to the south into the eastbound roadway and into the creek. The creek is part of the Upper Calaveras Watershed (HUC 18040011) and a tributary to the Calaveras River.

The distribution, representative vegetation, and typical wildlife species found in land cover types within the action area consist of upland habitats that include non-native annual grassland, existing paved, and upland riparian.

Table 1 Other Public Agencies Whose Approval is Required

Agency	Permit/Approval	Status
California Department of Fish and Wildlife	Lake and Streambed Alteration Agreement	Application to be made during design phase
U.S. Fish and Wildlife Service	Section 7 Informal Consultation	Biological Assessment was submitted in January 2019
U.S. Army Corp of Engineers	Section 404 Clean Water Act, Nationwide Permit	Application to be made during design phase
Regional Water Quality Control Board	401 Water Quality Certification and Waste Discharge Permit	Application to be made during design phase

Section 2 CEQA Environmental Checklist

2.1 CEQA Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. Potential impact determinations include Significant and Unavoidable Impact, Less Than Significant With Mitigation Incorporated, Less Than Significant Impact, and No Impact. In many cases, background studies performed in connection with a project will indicate that there are no impacts to a particular resource. A No Impact answer reflects this determination. The words “significant” and “significance” used throughout the following checklist are related to CEQA, not National Environmental Policy Act, impacts. The questions in this checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as best management practices and measures included in the Standard Plans and Specifications or as Standard Special Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below.

2.1.1 Aesthetics

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact—Scenic Resource Evaluation, May 7, 2019

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact—Scenic Resource Evaluation, May 7, 2019

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 a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact—Scenic Resource Evaluation, May 7, 2019

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact—Scenic Resource Evaluation, May 7, 2019

2.1.2 Agriculture and Forest Resources

CEQA Significance Determinations for 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 Department 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?

No Impact—According to the Calaveras County website, there is no prime, unique, or farmland of statewide importance in the immediate project vicinity.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact—Surrounding land is used mostly for livestock grazing. According to the latest mapping on the Calaveras County website, the project area does not include land under Williamson Act contract.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact—There is no forestland in the project area.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact—There is no forestland in the project area.

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?

No Impact—The project would replace an existing bridge.

2.1.3 Air Quality

CEQA Significance Determinations for 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?

No Impact—Air Quality Memo, March 19, 2018

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

No Impact—Air Quality Memo, March 19, 2018

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact—Air Quality Memo, March 19, 2018

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

No Impact—Air Quality Memo, March 19, 2018

2.1.4 Biological Resources

CEQA Significance Determinations for 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?

Less Than Significant Impact—Revised Natural Environment Study (NES), May 2019. Discussion follows in next section.

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 U.S. Fish and Wildlife Service?

Less Than Significant Impact—Revised Natural Environment Study (NES), May 2019. Discussion follows in next section.

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?

No Impact—Revised Natural Environment Study (NES), May 2019.

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?

No Impact—Revised Natural Environment Study (NES), May 2019.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact—Revised Natural Environment Study (NES), May 2019.

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?

No Impact—Revised Natural Environment Study (NES), May 2019.

2.1.5 Cultural Resources

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact—Section 106 Screening Memo, February 2019, and addendum June 2019.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

No Impact—Section 106 Screening Memo, February 2019, and addendum June 2019.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact—Section 106 Screening Memo, February 2019, and addendum June 2019.

2.1.6 Energy

CEQA Significance Determinations for 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?

No Impact—The project would replace an existing bridge.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact—The project would replace an existing bridge.

2.1.7 Geology and Soils

CEQA Significance Determinations for 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?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018

ii) Strong seismic ground shaking?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

iii) Seismic-related ground failure, including liquefaction?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

iv) Landslides?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

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?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

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?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

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?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact—West Branch Cherokee Creek Substructure Investigation Report, November 29, 2018.

2.1.8 Greenhouse Gas Emissions

CEQA Significance Determinations for Greenhouse Gas Emissions

Would the project:

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

Less Than Significant Impact—Climate Change Analysis, Section 2.

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

Less Than Significant Impact—Climate Change Analysis, Section 2.

2.1.9 Hazards and Hazardous Materials

CEQA Significance Determinations for 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?

No Impact—Hazardous Waste Initial Site Assessment (ISA), January 2019.

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?

No Impact—Initial Site Assessment (ISA), January 2019.

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

No Impact—Initial Site Assessment (ISA), January 2019.

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?

No Impact—Initial Site Assessment (ISA), January 2019.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact—The project site is not near an airport.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact—The project would not close the highway to traffic.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact—The project is not in a very high fire hazard severity zone (California Department of Forestry and Fire Protection, 2007).

2.1.10 Hydrology and Water Quality

CEQA Significance Determinations for 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?

No Impact—Water Quality Compliance Study, September 2018.

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

No Impact—Water Quality Compliance Study, September 2018.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial erosion or siltation on- or off-site;

No Impact—Water Quality Compliance Study, September 2018.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

No Impact—Water Quality Compliance Study, September 2018.

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

No Impact—Water Quality Compliance Study, September 2018.

iv) Impede or redirect flood flows?

No Impact—Water Quality Compliance Study, September 2018.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact—Water Quality Compliance Study, September 2018.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact—Water Quality Compliance Study, September 2018.

2.1.11 Land Use and Planning

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact—The project would replace an existing bridge.

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?

No Impact—The project would replace an existing bridge.

2.1.12 Mineral Resources

CEQA Significance Determinations for 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?

No Impact—The project would replace an existing bridge.

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?

No Impact—The project would replace an existing bridge.

2.1.13 Noise

CEQA Significance Determinations for 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?

No Impact—Noise and Water Study Report, September 21, 2018.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Impact—Noise and Water Study Report, September 21, 2018.

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

No Impact—The project site is not near an airport.

2.1.14 Population and Housing

CEQA Significance Determinations for 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)?

No Impact—The project would replace an existing bridge.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact—The project would replace an existing bridge.

2.1.15 Public Services

CEQA Significance Determinations for 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:

Fire protection?

No Impact—The project would replace an existing bridge.

Police protection?

No Impact—The project would replace an existing bridge.

Schools?

No Impact—The project would replace an existing bridge.

Parks?

No Impact—The project would replace an existing bridge.

Other public facilities?

No Impact—The project would replace an existing bridge.

2.1.16 Recreation

CEQA Significance Determinations for 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?

No Impact—The project would replace an existing bridge.

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

No Impact—The project would replace an existing bridge.

2.1.17 Transportation

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact—The project would replace an existing bridge.

b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact—The project would replace an existing bridge.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact—The project would replace an existing bridge.

d) Result in inadequate emergency access?

No Impact—The project would replace an existing bridge.

2.1.18 Tribal Cultural Resources

CEQA Significance Determinations for 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:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

No Impact—Section 106 Screening Memo, February 2019, and addendum June 2019.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

No Impact—Section 106 Screening Memo, February 2019, and addendum June 2019.

2.1.19 Utilities and Service Systems

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact—The project would replace an existing bridge.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact—The project would replace an existing bridge.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact—The project would replace an existing bridge.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact—The project would replace an existing bridge.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact—The project would replace an existing bridge.

2.1.20 Wildfire

CEQA Significance Determinations for 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?

No Impact—According to the Calaveras County website, the project site is not in an area considered at very high fire risk.

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?

No Impact—According to the Calaveras County website, the project site is not in an area considered at very high fire risk.

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?

No Impact—According to the Calaveras County website, the project site is not in an area considered at very high fire risk.

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?

No Impact—According to the Calaveras County website, the project site is not in an area considered at very high fire risk.

2.1.21 Mandatory Findings of Significance

CEQA Significance Determinations for 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?

No Impact—The project would replace an existing bridge.

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.)

No Impact—The project would replace an existing bridge.

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

No Impact—The project would replace an existing bridge.

Additional Explanations for Questions in the Impacts Checklist

IV. Biological Resources (checklist questions a and b)

a) Special-Status Species and b) Riparian Habitat and Sensitive Communities

Affected Environment

The entire list of species evaluated for presence and impact is included as Table A.2 in Appendix A of this document. Special-status species are plants, wildlife, and fish legally protected under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing.

The two special-status wildlife species listed below were determined to have the potential to occur in the project region (Table A.2 in Appendix A) based on a review of the California Natural Diversity Database search results; the U.S. Fish and Wildlife Service list of endangered, threatened, and proposed species within the project region; the species distribution and habitat data, and the assessment of the habitats available within the action area.

- California red-legged frog (*Rana draytonii*) – Federally threatened (FT), State species of special concern (SSC)
- Foothill yellow-legged frog (*Rana boylii*) – State candidate for listing, State species of special concern (SSC)

Discussion of California Red-legged Frog

The California red-legged frog has been federally listed as threatened for more than two decades and is also a State species of special concern. Historically, its range extended along the coast from Marin County and inland from Redding south to northwestern Baja California and encompassed 46 counties. The California red-legged frog now exists within isolated and fragmented populations and is mostly restricted to the central and coastal areas of California.

California red-legged frogs use a variety of habitat types, including various aquatic, riparian, and upland habitats. Among the variety of habitats where California red-legged frogs have been found, the only common factor is association with a permanent water source. It appears they can use most any aquatic system, if a permanent water source, ideally free of predators, is nearby. Known predators include bullfrogs and non-native fishes.

The breeding period, which may be as brief as 2 weeks, occurs from November to April depending on local conditions. Juveniles typically disperse outward from the breeding pond, while older California red-legged frogs may be found around ponds or deep pools during summer taking shelter amid emergent vegetation, semi-submerged rootballs, or in undercut banks. Adults that disperse to summer habitat

return to breeding ponds at the first rains, and most adults spend most of their time within 200-300 feet of a pond.

The action area is within the current California red-legged frog range. The nearest reliable California Natural Diversity Database occurrence was reported in 1950, 13.3 miles east of the action area in Woods Creek. California red-legged frogs may no longer be present in Woods Creek; even if they are, there are major physical barriers between Woods Creek and the action area. A more recent credible occurrence (2003) was about 14.4 miles northwest of the action area in Young's Creek. Like Woods Creek, there are physical barriers preventing California red-legged frogs from dispersing to the action area from Young's Creek. There is no known occurrence of the California red-legged frog within the action area or its vicinity. Following U.S. Fish and Wildlife Service guidance, this assessment considered 1 mile as the maximum range of dispersal for the California red-legged frog, which means the action area is out of the species' dispersal range from known locations.

Reconnaissance and visual surveys were conducted on May 4, 2017 and May 30, 2018. While the shading, vegetation in channel, and slow-moving water are ideal for the California red-legged frog, other environmental factors, specifically the presence of known California red-legged frog predators in the creek, suggest that the California red-legged frog may not be present in the action area. During the May 2018 survey, crayfish, bullfrog, and mosquito fish were observed in the water of the channel or next to it; all are known predators of the species.

Discussion of Foothill Yellow-legged Frog

The foothill yellow-legged frog is a State species of special concern and is currently a candidate for designation as threatened in California. Its historic range extended along northern Oregon west of the Cascades, south along the coast ranges to the San Gabriel Mountains, and south along the foothills of the western side of the Sierra Nevada to the edge of the Tehachapi mountain range.

The foothill yellow-legged frog uses a variety of habitat types, including rocky streams and rivers and open, sunny banks, in forests, chaparral, and woodlands. In addition, this frog can sometimes be found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools.

The breeding period occurs between April and July, depending on local conditions, in streams and rivers when the water flow has slowed from the winter runoff. Known predators to the foothill yellow-legged frog include garter snakes, small mammals, aquatic invertebrates, rough-skinned newts, and fishes.

The action area is within the current range of the species. The California Natural Diversity Database reports a 2005 occurrence of a foothill yellow-legged frog at Natural Bridge along Coyote Creek, 8 miles east of the action area. Coyote Creek is not in the same watershed as Nassau Creek, and there are major physical barriers preventing individuals from moving from Coyote Creek to the action area. There is

no known occurrence of the foothill yellow-legged frog within the action area or its vicinity.

Reconnaissance and visual surveys were conducted on May 4, 2017 and May 30, 2018. While the shading, rocky creek bed, and slow-moving water are suitable for the foothill yellow-legged frog, other environmental factors, most notably the presence of predators, suggest the species may not be present. During the May 2018 survey, crayfish, bullfrog, and mosquito fish, all known predators of the foothill yellow-legged frog, were observed in the water of the channel or next to it.

Discussion of Riparian Habitat and Sensitive Communities

The action area supports both common natural communities and natural communities of special concern. Common natural communities are habitats that are widespread, reestablish naturally after disturbance, or support primarily nonnative species. Such communities generally are not protected by agencies unless the specific site is habitat for, or supports, special-status species (e.g., raptor foraging or nesting habitat, upland habitat in a watershed).

The California Natural Diversity Database contains a current list of rare natural communities throughout the state. Natural communities of special concern feature high species diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important. The habitats in the action area that meet the criteria for natural communities of special concern are foothill riparian forest (riparian) and riverine.

The natural communities in the action area are interspersed with roadway, grazing grassland, ditch, and riparian areas. Land cover types can be natural communities as well as developed or disturbed areas. A breakdown of habitat types within the action area is in Table 2. Photographs of land cover types within the action area are provided as Figures B-5 through B-8 in Appendix B.

Table 2 Habitat Types within the Action Area

Habitat Types	Existing Area (acres)
Non-native Annual Grassland	17.42
Agricultural Field	1.20
Oak Woodland	1.80
Riparian	0.06
Existing Paved (roadway and shoulder) (overlaps with Creek)	2.49
Total Upland Habitat	22.97
Riverine (overlaps with bridge)	0.58
Ditch	0.063
Total Aquatic Habitat	0.64

The total acreage of habitat types in the action area of the project is 23.6, of which 22.97 acres are classified as upland and 0.64 acre is classified as aquatic. Nassau Creek provides aquatic riverine habitat within the action area, though no wetlands were identified. However, the roadside ditch may also qualify as Waters of the U.S. The most common plant species within the riverine habitat is spike rush (*Eleocharis macrostachya*), which covers no more than 10 percent of the habitat.

A photograph of the riverine habitat in the action area is provided as Figure B-5 in Appendix B, and a photograph of the ditch habitat in the action area is provided as Figure B-6.

Foothill riparian habitat occurs along streams with low-velocity flows, on floodplains, and in deep alluvial soils with high water tables. The riparian habitat in this location is immediately south of the bridge structure and consists of oak woodland, including valley oaks and red willow, suitable for nesting birds.

A photograph of the foothill riparian in the action area is provided as Figure B-7.

Environmental Consequences

A “no impact” and “no effect” determination has been made for all California Natural Diversity Database and U.S. Fish and Wildlife Service listed species not discussed in this section. See Appendix A for the complete list of species.

The project has been designed to avoid permanent impacts to California red-legged frog/foothill yellow-legged frog habitat to the maximum extent possible. In-channel work associated with the bridge construction will include rock slope protection (RSP) placement and water diversion. The project will result in direct impacts to the riparian habitat not considered significant in light of the quality of the habitat and the inventory of riparian habitat in Calaveras County generally.

There will be 0.013 acre of permanent impacts and 0.036 acre of temporary impacts to riparian habitat. The permanent impacts to riparian habitat will be the clearing and grading related to the bridge widening and shoulder tapering work, the placement of rock slope protection, and the possible removal of no more than 7 trees for work clearance. Vehicle access and staging will result in temporary impacts to the riparian habitat. The rock slope protection placement will cause permanent impacts to 0.029 acre of riverine habitat through the amount of space taken by the new rock slope protection. The water diversion will cause temporary impacts to 0.055 acre of riverine habitat.

Upland work associated with the bridge construction and shoulder expansion will include the rock slope protection placement, the bridge abutment work, and the shoulder tapering. The rock slope protection placement and shoulder tapering will cause permanent impacts to 0.001 acre and temporary impacts to 0.005 acre of ditch habitat. The new, larger bridge abutment, the rock slope protection placement, and the shoulder tapering will cause permanent impacts to 0.061 acre and temporary impacts to 0.273 acre of annual grassland habitat.

A limited amount of Waters of the U.S. areas under Clean Water Act (CWA) jurisdiction within the action area would be permanently and temporarily impacted. However, implementation of the proposed project is not expected to add substantially to the incremental contribution to cumulative loss of Waters of the U.S. habitat. Numerous acres of similar habitat border the project area and are also along the creek.

The resulting acreages of California red-legged frog/foothill yellow-legged frog habitat expected to be directly and indirectly affected by project implementation are listed in Table 3.

Table 3 Temporary and Permanent Impacts to Potential California Red-Legged Frog/Foothill Yellow-Legged Frog Habitat

Habitat Types	Existing Area (acre)	Temporary Impacts (acre)	Permanent Impacts (acre)
Non-native Annual Grassland	17.42	0.98	1.84
Oak Woodland	1.80	0	0.11
Agricultural Field	1.20	0	0.05
Riparian	0.06	0.018	0.04
Ditch	0.063	0.019	0.0086
Riverine	0.058	0.028	0.095
Total	21.1	1.05	2.14

Two potential indirect effects on the California red-legged frog and its habitat were considered but were determined to have no potential to occur from replacing this bridge. Specifically, the following determinations were made:

- There will be no increases in human presence or off-road vehicle use in the area from implementation of the project. The bridge replacement will not result in development or increased human access to the California red-legged frog habitat.
- The proposed project will not affect habitat suitability through changes in river/ditch inundation or cause other habitat modifications that will make the habitat less suitable for California red-legged frogs.

Disturbance or degradation of additional suitable aquatic habitat for California red-legged frogs and foothill yellow-legged frogs in the action area could occur if soil or other materials are side-cast or fall into waterways beyond the gravel bag dams. In addition, fuel or oil leaks or spills adjacent to aquatic habitat could also cause degradation of the surrounding habitat. Construction activity, vibration, and noise may harass either species of frog, if nearby, or prompt them to move into unfamiliar or less suitable habitat for foraging, dry-season inactivity, or shelter from predation.

Light during nighttime construction may impact California red-legged frog/foothill yellow-legged frog and interfere with dispersal patterns or allow for increased risk of predation. No adverse effects resulting from the various construction activities are anticipated to affect the California red-legged frog/foothill yellow-legged frog.

Federal Endangered Species Act Consultation Summary

The riparian, riverine, ditch, and annual grassland provides habitat for the federally threatened California red-legged frog. Project activities will directly impact the California red-legged frog habitat. Permanent impacts to the California red-legged frog habitat are estimated to be 0.10 acre. Temporary impacts are estimated to be 0.38 acre. Based on the results of the field surveys, habitat assessment, and California Natural Diversity Database records, the California red-legged frog is not likely to be present in the action area.

Project activities are not expected to result in adverse impacts to the California red-legged frog. Therefore, the project **may affect, but is not likely to adversely affect** the California red-legged frog, and informal consultation with the U.S. Fish and Wildlife Service is required.

California Endangered Species Act Consultation Summary

Both the foothill yellow-legged frog and California red-legged frog have low potential to occur within the action area. With avoidance measures in place, Caltrans anticipates that project activities will not result in take of the California red-legged frog or foothill yellow-legged frog, as defined in Section 86 of Fish and Game Code.

Riverine

Due to construction work occurring in the riverine area, there will be permanent impacts affecting Waters of the U.S. and compensatory mitigation is proposed. Caltrans proposes mitigation to permanent impacts at a ratio of 1-acre impact to 3-acre credit of restored Waters of the U.S. habitat credit. As the project is currently proposed, 0.032 credit of Waters of the U.S. habitat restoration will be purchased from a California Department of Fish and Wildlife-approved mitigation bank.

Avoidance, Minimization, and/or Mitigation Measures

1. Establish and observe Environmentally Sensitive Area (ESA) designation as called for by biologists.

2. Offer, and require workers to participate in, environmental awareness training provided by an approved biologist.

3. Notify Caltrans biologist at least two weeks before construction activities begin so pre-construction surveys for California red-legged frog/foothill yellow-legged frog and for active nesting birds and raptors can be conducted.

4. Avoid construction activities during the active nesting season if practicable.

5. If construction activities must be pursued during the migratory bird nesting season (generally February 1–September 30), implement active bird and nest avoidance guidelines.

6. Provide construction monitoring by an approved biologist during sensitive activities (vegetation clearing, dewatering, silt fence installation, and ground disturbance).

7. Install and maintain appropriate species exclusionary fences.

8. Screen the intakes on all pumps used in dewatering.

9. Provide wildlife escape ramps in any excavation.

10. Avoid nighttime lighting.

11. Report any sighting of special-status species on the project site.

More complete descriptions of these measures appear in Appendix A, Table A.1.

Compensatory Mitigation

Foothill Riparian

Due to construction work occurring in the riparian area, there will be impacts affecting the habitat and compensatory mitigation is proposed. Caltrans proposes mitigation to permanent impacts at a ratio of 1-acre impact to 1.1 credit of riparian restoration credit. As the project is currently proposed, 0.014 credit of riparian restoration and 0.040 credit of riparian enhancement will be purchased from a California Department of Fish and Wildlife-approved mitigation bank.

Appendix A Supporting Tables

Table A.1 Description of Avoidance and Minimization Measures

1. **Environmentally Sensitive Area (ESA) Designation.** Prior to the start of construction, high visibility temporary fencing (of a type/design that will not entangle the species) will be installed around the perimeter of Environmentally Sensitive Area in the action area to ensure construction equipment and personnel do not enter these locations. Environmentally Sensitive Areas will be implemented as a first order of work and will remain in place until the end of construction activities.

2. **Environmental Awareness Training.** All construction personnel would attend a mandatory environmental education program delivered by a qualified biologist prior to working in the action area. This training focuses on conservation measures relevant to each employee's responsibility and includes explanations of how to best avoid take of biological resources and sensitive habitats. Participants are provided with a pamphlet including close-up photographs of sensitive species, and descriptions of their habitat requirements, compliance reminders, and relevant contact information. Documentation of the training, including sign-in sheets, would be kept on file and would be available on request.

3. **Pre-construction California Red-Legged Frog Survey.** Prior to any ground disturbance, a pre-construction California red-legged frog survey would be conducted on foot by a qualified biologist. If California red-legged frog is found in the action area, all planned work would be stopped, and a protective radius established around the animal until it leaves the action area on its own. Caltrans will notify and consult with the U.S. Fish and Wildlife Service.

4. **Pre-construction Foothill Yellow-Legged Frog Survey.** Prior to any ground disturbance, a pre-construction foothill yellow-legged frog survey would be conducted on foot by a qualified biologist. If a foothill yellow-legged frog is found in the action area, all planned work would be stopped, and a protective radius established around the animal until it leaves the action area on its own. Caltrans will notify and consult with California Department of Fish and Wildlife.

5. **Pre-construction Bird Surveys.** If construction, grading or other project-related activities are scheduled during the nesting season (February 1 to September 30), pre-construction surveys for migratory bird species would take place no more than 15 days prior to the beginning of construction within 300 feet of suitable nesting habitat.

a. If the pre-construction surveys do not identify any nesting migratory bird species within areas potentially affected by construction activities, no further avoidance measures would be required. If the pre-construction surveys do identify nesting bird species within areas that may be affected by site construction, the avoidance measures would be implemented.

6. **Migratory Bird Treaty Act (MBTA) Nesting Season Avoidance.** To avoid and minimize impacts to tree and shrub nesting species, the following measures would be implemented:

    a. If feasible, conduct all tree and shrub removal and grading activities during the non-breeding season (generally October 1 through January 31).

    b. If grading and tree removal activities are scheduled to occur during the breeding and nesting season (February 1 through September 30), pre-construction surveys would be performed prior to the start of project activities.

7. **Active Bird Nest Avoidance.** If active nest sites are discovered within areas that may be affected by construction activities, additional measures would be implemented.

    a. If active nests are found, project-related construction impacts would be avoided by establishment of appropriate no-work buffers to limit project-related construction activities near the nest site. The size of the no-work buffer zone would be determined in consultation with the California Department of Fish and Wildlife, although a 300-foot buffer would be used when possible for raptors and 100 feet for perching birds. The no-work buffer zone would be delineated by highly visible markers.

        In consultation with California Department of Fish and Wildlife, monitoring of nest activity by a qualified biologist may be required if the project-related construction activity has potential to cause take. No project-related construction activity would commence within the no-work buffer area until a qualified biologist and California Department of Fish and Wildlife confirms the nest is no longer active or take is no longer a concern.

8. **Construction Monitoring.** A U.S. Fish and Wildlife Service/California Department of Fish and Wildlife-approved biological monitor will be onsite for the duration of construction activities involving breaking new ground and disturbing California red-legged frog/foothill yellow-legged frog habitat. Activities the biologist will monitor include silt fence installation, the water diversion, activities involving disturbance to California red-legged frog/foothill yellow-legged frog habitat, and the removal of the silt fence. The monitor will also inspect the silt fence weekly to ensure its structural integrity.

9. **Species Exclusionary Fencing.** Prior to commencing construction work, exclusion fence (silt fence) will be installed as specified on the project plans. The fence will deter California red-legged frogs, foothill yellow-legged frogs, and other wildlife from entering the project area and also prevent runoff from the project area from entering the action area. Fencing will also exclude construction workers, vehicles, and equipment from areas outside the action area. The fence will need to be at least 3 feet tall above the ground, buried 6 inches underground, and have signs posted on it. The fencing must be maintained in good condition throughout the duration of construction.

10. **Water Pumping.** The pump intakes will be completely screened with wire mesh not larger than 0.125 inch to prevent larval amphibians from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction activities and eliminate the possibility of ponded water in the dewatered area.

11. **Wildlife Escape Ramps.** To prevent the inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches measuring more than 6 inches deep will either be covered at the close of each working day using plywood or similar materials without openings or will be provided with one or more escape ramps constructed of earth fill or wooden planks in the event the holes/trenches cannot be fully covered. All holes or trenches will be checked daily for trapped wildlife. Before such holes or trenches are filled, they will be thoroughly inspected for trapped wildlife.

12. **Lighting Avoidance.** The use of temporary artificial lighting onsite will be limited, except when necessary for construction, or for driver and pedestrian safety. Any artificial lighting used during construction, particularly at night, will be confined to areas within the construction footprint and directed away from surrounding habitat.

13. **Asphalt Waste.** All grindings and asphaltic-concrete waste would be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any aquatic habitat, culvert, or drainage feature.

14. **Special-Status Species Reporting.** Any new sightings of the special-status species will be reported to the California Natural Diversity Database. A copy of the reporting form and a topographic map clearly marked with the location of the observation also will be provided to the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife.

Table A.2 Listed, Proposed Plant Species Potentially or Known in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Likelihood of Occurrence Rationale
Congdon's lomatium	*Lomatium congdonii*	Rare, Threatened, or Endangered	Usually found on serpentine soil in chaparral or cismontane woodland.	Absent	None; no suitable habitat present in the area. Not detected during focused botanical surveys.
Delta button-celery	*Eryngium racemosum*	Rare, Threatened, or Endangered	Usually found in riparian scrub in vernally mesic clay depressions.	Absent	None; no suitable habitat present in the area. Not detected during focused botanical surveys.
Mariposa cryptantha	*Cryptantha mariposae*	Rare, Threatened, or Endangered	Usually found in serpentine and rocky soil in chaparral.	Absent	None; no suitable habitat present in the area. Not detected during focused botanical surveys.
Patterson's navarretia	*Navarretia paradoxiclara*	Rare, Threatened, or Endangered	Usually found in vernally mesic openings among serpentine soil in meadows of seeps.	Absent	Low; no suitable serpentine habitat present in the area. Not detected during focused botanical surveys.
Red Hills cryptantha	*Cryptantha spithamaea*	Rare, Threatened, or Endangered	Usually found in serpentine soil in chaparral or cismontane woodland.	Absent	None; no suitable habitat present in the area. Not detected during focused botanical surveys.
Red Hills soaproot	*Chlorogalum grandiflorum*	Rare, Threatened, or Endangered	Usually found in serpentine, gabbroic, and other soils in chaparral, cismontane woodland, and lower montane coniferous forest.	Absent	None; no suitable habitat present in the area. Not detected during focused botanical surveys.
Tuolumne button-celery	*Eryngium pinnatisectum*	Rare, Threatened, or Endangered	Usually found in mesic area in cismontane woodland, lower montane coniferous forest, and vernal pools.	Absent	Low; Not detected during focused botanical surveys.
Yellow-lip pansy monkeyflower	*Diplacus pulchellus*	Rare, Threatened, or Endangered	Usually found in vernally mesic area that is often disturbed and contain clay.	Absent	Low; no clay habitat present in the area. Not detected during focused botanical surveys.

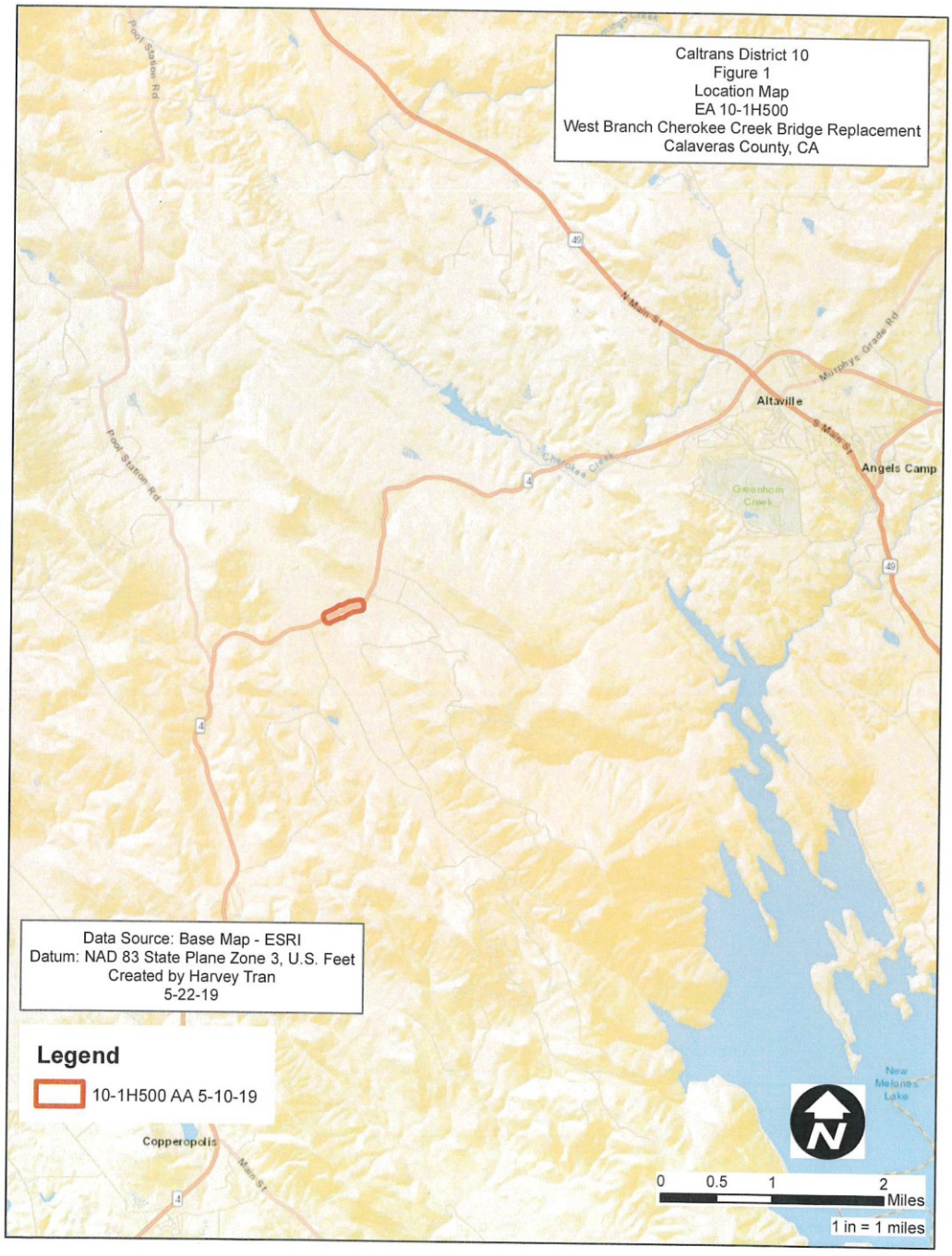
Table A.3 Listed, Proposed Animal Species Potentially or Known in the Project Area

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Likelihood of Occurrence Rationale
California Red-legged Frog	*Rana draytonii*	Federally Threatened	Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehema County to Fresno County; occurs in permanent and semipermanent aquatic habitats, such as creeks and coldwater ponds, with emergent and submergent vegetation; may estivate in rodent burrows or cracks during dry periods.	Habitat present	Low; Suitable habitat present onsite. Known predators present onsite. No recent recorded occurrences within 10 miles of the area.
Foothill Yellow-legged Frog	*Rana boylii*	State Candidate	Found in rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools. Species range from northern Oregon west of the Cascades south along the coast ranges to the San Gabriel Mountains, and south along the foothills of the western side of the Sierra Nevada Mountains to the edge of the Tehachapis.	Habitat present	Low; Suitable habitat present onsite. Known predators present onsite. No recent recorded occurrences within 7 miles of the area.
California Tiger Salamander	*Ambystoma californiense*	Federally and State Threatened	Vernal pools or other seasonal wet area with upland refugia	Absent	None; Elevation of action area makes it uncommon to find CTS. No occurrence within 12 miles of the area, over their recorded maximum migration range. Predators are also present onsite.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Likelihood of Occurrence Rationale
Delta smelt	*Hypomesus transpacificus*	Federally Threatened, State Endangered	The species is endemic to the Sacramento–San Joaquin River Delta in California, where it is distributed from Suisun Bay up through the Delta. They live in the open water column tolerant of a wide salinity range.	Absent	None; no suitable habitat present in the area. Outside of range of the species.
Steelhead – Central Valley DPS	*Oncorhynchus mykiss irideus*	Federally Threatened	Found below dams in the Sacramento River Basin also in the lower Tuolumne River in the San Joaquin River Basin. Can survive in a wide range of water temperatures.	Absent	None; Species cannot reach area due to the migration barrier of the New Hogan Dam of the Calaveras River.
Pallid bat	*Antrozous pallidus*	State Species of Special Concern	Can be found over open, sparsely vegetated grasslands. During the day time, pallid bats roost in cracks and crevices, including tile roofs, exfoliating bark of trees, or rocky outcrops. At night, they will often use a night roost that is closer to their foraging grounds. In winter, this species may go into torpor in buildings, caves, or cracks.	Absent	None; no suitable roosting habitat present in the area. No recent California Natural Diversity Database occurrences recorded within 5 miles of the area.
Tricolored blackbird	*Agelaius tricolor*	State Candidate, State Species of Special Concern	Found in wetlands with cattails, bulrushes, and willows which are used for nesting. Foraging habitats include cultivated fields, feedlots associated with dairy farms, and wetlands.	Absent	None; no suitable habitat present in the area. Vegetation cover too low to support a nesting colony.

Appendix B Maps and Photos

Figure B-1 Project Location



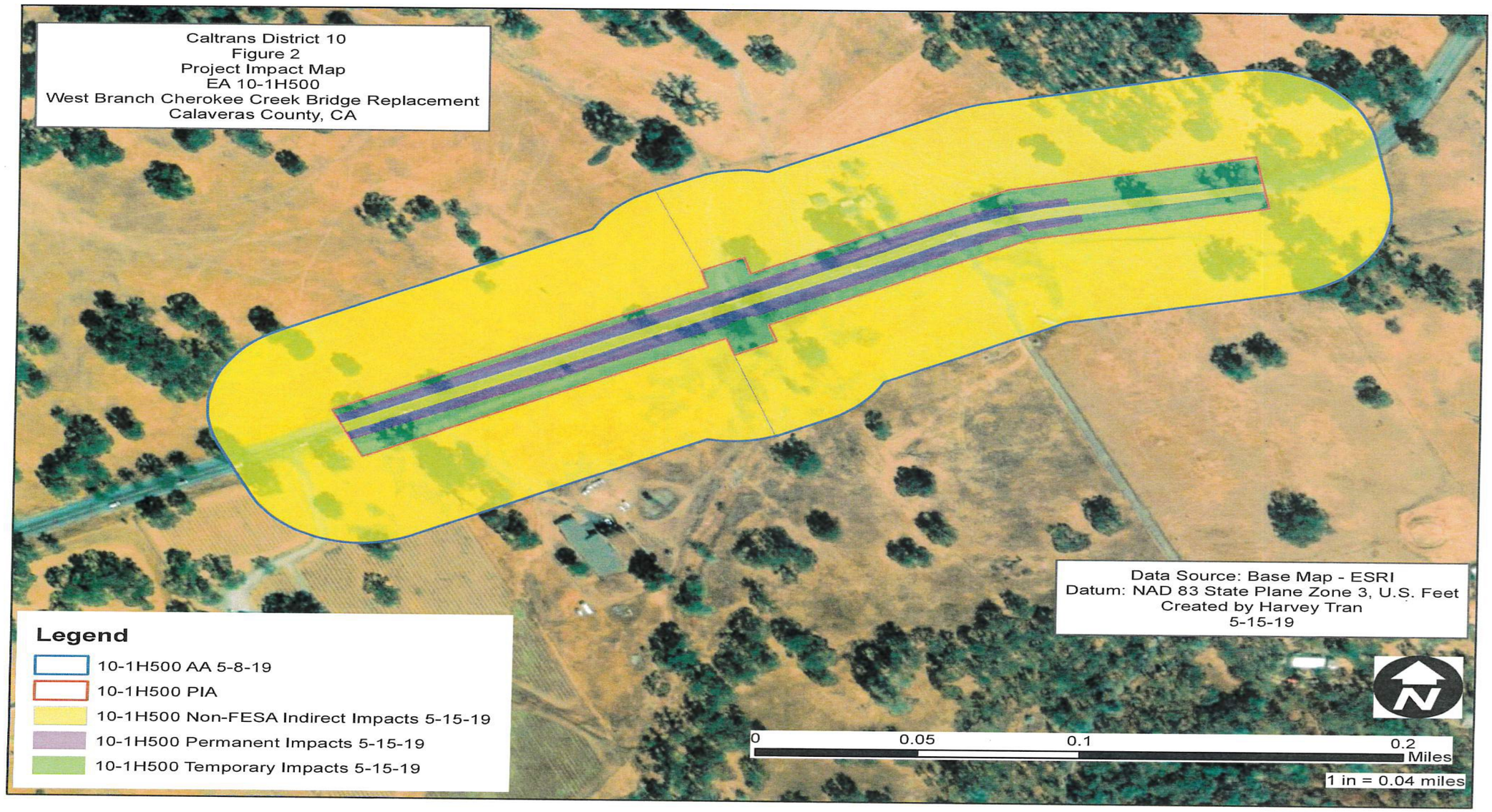


Figure B-2 Project Impacts, Including Indirect, Permanent and Temporary Impacts

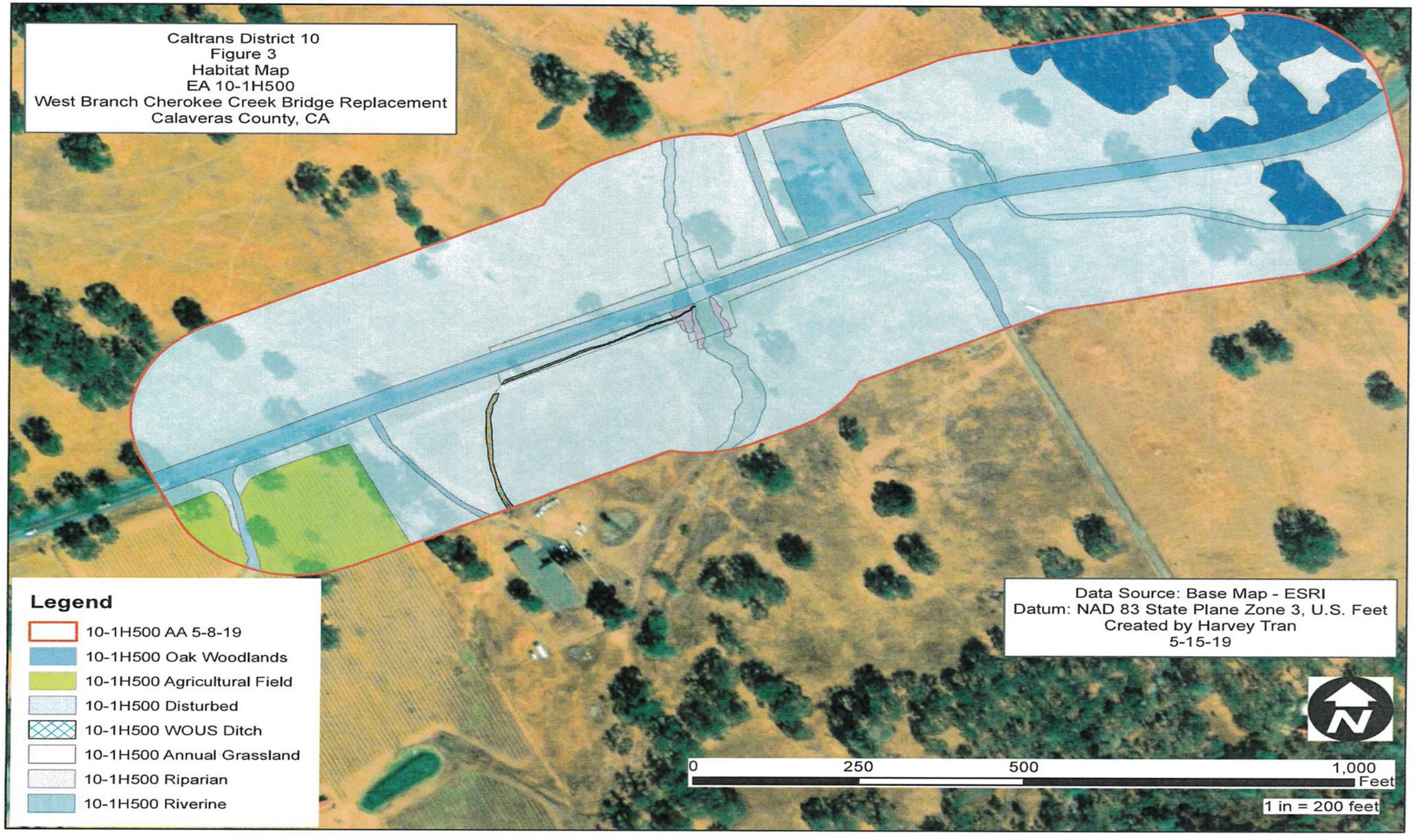


Figure B-3 Different Habitat Types Present in the Project Area

Figure B-4 California Natural Diversity Database Species Map

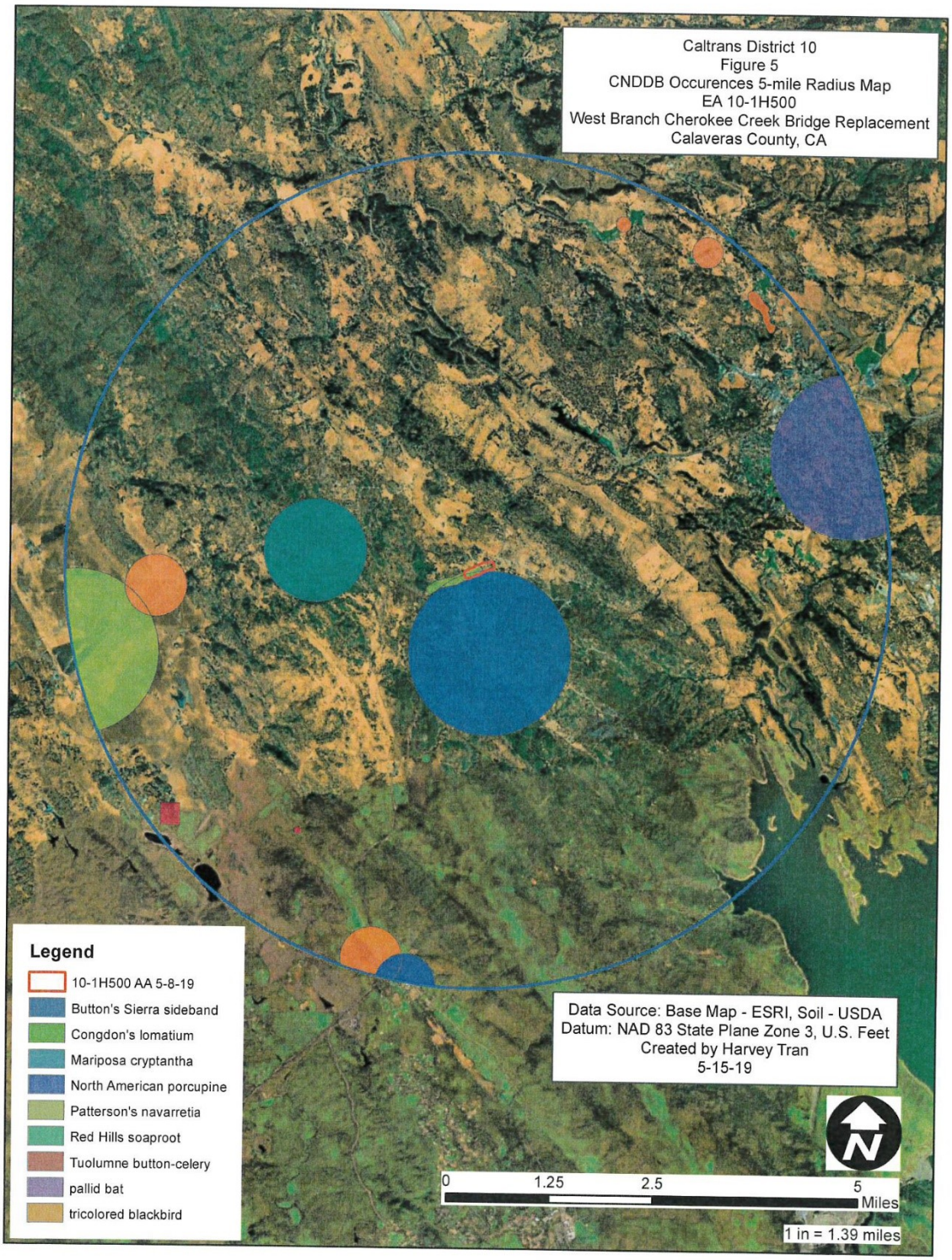


Figure B-5 Riverine Habitat

Figure B-6 Roadside Ditch

Figure B-7 Foothill Riparian Habitat

Figure B-8 Annual Grassland Habitat