
MITIGATED
NEGATIVE DECLARATION / INITIAL STUDY

PREPARED FOR:

SONOMA COUNTY
DEPARTMENT OF PUBLIC INFRASTRUCTURE

Asti Permanent Bridge Construction Project

June 2024



**Sonoma County Permit and Resource Management Department
Environmental Review Division
2550 Ventura Avenue
Santa Rosa, California 95403**



MITIGATED NEGATIVE DECLARATION

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-1103

Publication Date: May 29, 2024

Public Review Period: May 29, 2024 – June 28, 2024

State Clearinghouse Number: 2024051224

Pursuant to Section 15071 of the State California Environmental Quality Act (CEQA) Guidelines, this proposed Mitigated Negative Declaration and the attached Initial Study, constitute the environmental review conducted by the County of Sonoma as lead agency for the project described below:

Project Title: Asti Permanent Bridge Construction Project

Lead Agency: Sonoma County

Project Applicant/Operator: County of Sonoma (County) Public Infrastructure Department

Project Location/Address: Washington School Road between Asti Road and River Road over the Russian River near the community of Asti in Sonoma County

Decision Making Body: County of Sonoma Board of Supervisors

Project Description: The County proposes to construct a new, 2-lane bridge across the Russian River on Washington School Road near the community of Asti in Sonoma County. The new bridge would replace the current, seasonal low water crossing, also known as the Asti Summer Crossing (ASC). The purpose of this project is to enhance safety and connectivity in Sonoma County and to eliminate the financial cost and environmental consequences of the ASC.

Environmental Finding: The Sonoma County Environmental Review Committee has determined, on the basis of the attached Initial Study, that the project described above would not have a substantial adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included in the project.

Initial Study: See attached. For more information please contact Jackson Ford, Senior Environmental Specialist, at (707) 565-8356, or Yoash Tilles, Project Engineer, at (707) 565-1205.

Mitigation Measures: Included in attached Initial Study. The County has agreed to implement all mitigation measures.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” or “Less than Significant with Mitigation” as indicated in the attached Initial Study.

Table 1. Summary of Topic Areas

Topic Area	Abbreviation	Yes	No
Aesthetics	VIS	X	
Agriculture and Forestry Resources	AG		X
Air Quality	AIR	X	
Biological Resources	BIO	X	
Cultural Resources	CUL	X	
Energy	ENERGY		X
Geology and Soils	GEO	X	
Greenhouse Gas Emissions	GHG		X
Hazards and Hazardous Materials	HAZ	X	
Hydrology and Water Quality	HYDRO	X	
Land Use and Planning	LU		X
Mineral Resources	MIN		X
Noise	NOISE	X	
Population and Housing	POP		X
Public Services	PS		X
Recreation	REC		X
Transportation	TRANS		X
Tribal Cultural Resources	TCR	X	
Utilities and Service Systems	UTL		X
Wildfire	FIRE		X
Mandatory Findings of Significance	MFS	X	

RESPONSIBLE AND TRUSTEE AGENCIES

Table 2 lists other public agencies whose approval is required for the project, or who have jurisdiction over resources potentially affected by the project.

Table 2. Agency Approvals and Jurisdiction

Agency	Activity	Authorization
United States Army Corps of Engineers	Dredge and Fill in Navigable waters	Clean Water Act Section 404
Regional Water Quality Control Board (North Coast)	Discharge to Waters of the State	California Clean Water Act Section 401 Water Quality Certification
State Water Resources Control Board	Construction Stormwater Discharges	Clean Water Act Section 402 (National Pollutant Discharge Elimination System) Permit Notice of Intent
California Department of Fish and Wildlife	Streambed Alteration	California Fish and Game Code Section 1062
National Oceanic and Atmospheric Administration	Incidental Take of Federally Listed Species	Federal Endangered Species Act
United States Fish and Wildlife Service	Incidental Take of Federally Listed Species	Federal Endangered Species Act
Native American Heritage Commission	Coordination Regarding Cultural and Tribal Resources	
State Historic Preservation Office	Coordination Regarding Cultural and Tribal Resources	

ENVIRONMENTAL FINDING

Based on the evaluation in the attached Initial Study, I find that the project described above will not have a significant adverse impact on the environment, provided that the mitigation measures identified in the Initial Study are included as conditions of approval for the project and a Mitigated Negative Declaration is proposed.

Signature

Date

Printed Name



INITIAL STUDY

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-1103

1.0 INTRODUCTION

The County is proposing to construct a new, 2-lane bridge across the Russian River on Washington School Road near the unincorporated community of Asti in Sonoma County (see **Figure 1**, Regional Location and **Figure 2**, Project Location). The new bridge would replace the current, temporary seasonal crossing, known as the ASC. Washington School Road is classified as a major collector route (design speed 30 mph) located in northern Sonoma County. The road connects Asti Road on the west with River Road on the east, using the ASC to cross the Russian River.

The County has installed and removed summer crossings over the Russian River annually since the 1800s, including the ASC. The current crossing is typically installed in May and remains in place until October, depending on river flows and fire weather conditions. It consists of a small 2-span temporary (removable) structure near the east bank of the river and a gravel berm road extending from the structure, across the channel and connecting again to Washington School Road on the west bank near the Gallo Winery drainage ponds. The temporary bridge consists of three permanent supports in the channel and removable deck elements that are stored on the east bank of the river and set with a crane each season when the crossing is constructed.

Recent traffic counts indicate that Washington School Road has an average daily traffic (ADT) count of 1,700 vehicles, and the available detour is long and would not provide reliable ingress/egress in the event of fire or another emergency. Therefore, the ASC would be maintained throughout construction on its current alignment, tying back into the existing roadway at River Road to the east and near the railroad crossing to the west. Construction traffic and the public would be allowed to use the seasonal bridge crossing during the summer months.

1.1 Purpose and Need

The primary purpose of the project is to enhance safety. The ASC is the only crossing in the vicinity other than the Crocker Road Bridge approximately 4.25 miles upstream and is a critical evacuation route in the event of fire or other emergencies. The most recent major fire, the Pocket Fire in 2017, burned to within 1.5 miles of River Road and nearly cut off evacuation routes to a number of county residents. Because the ASC is only seasonal, a fire closing access to Crocker Bridge when the ASC is not in place could result in substantial negative health and safety impacts to the community.

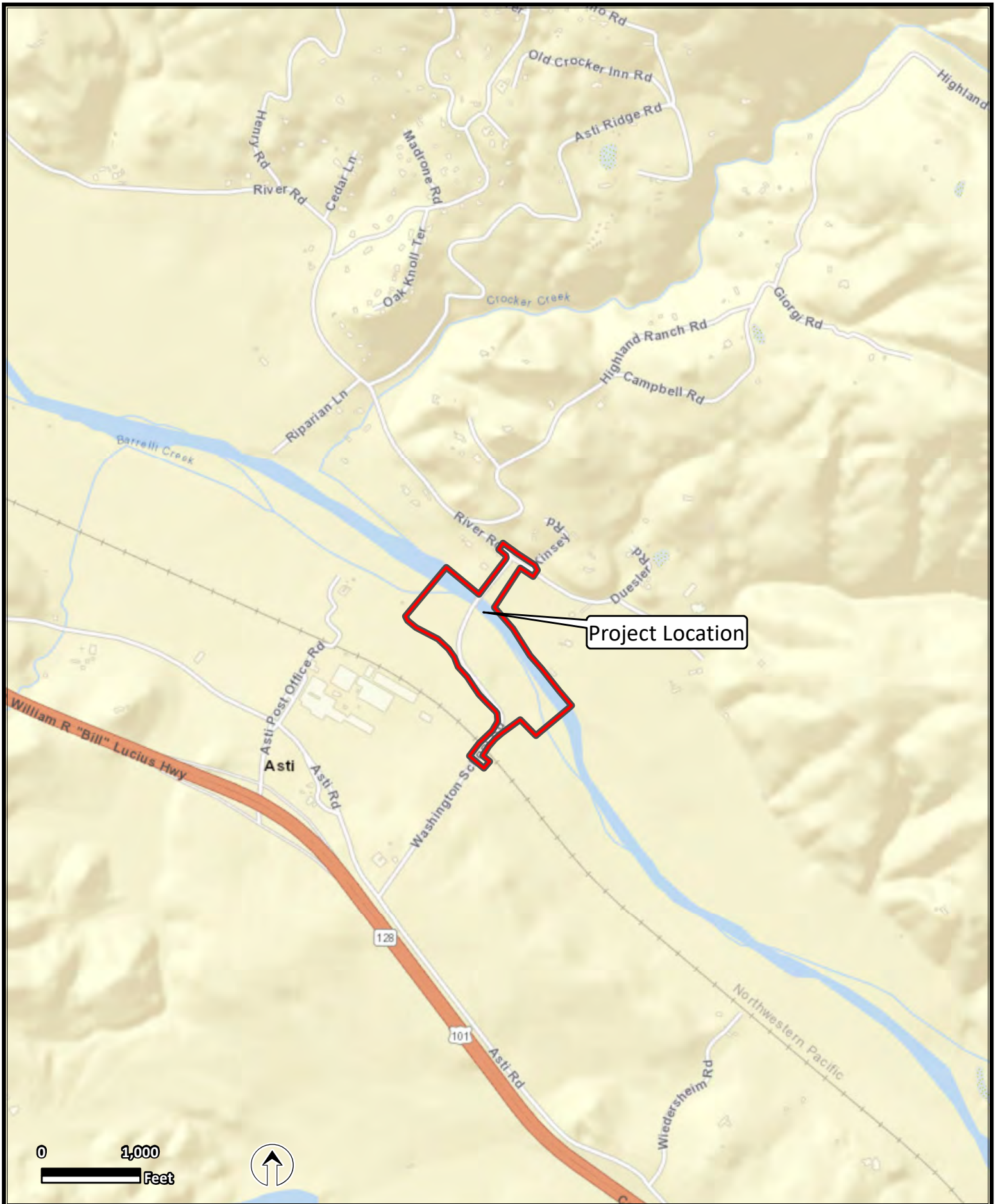
Another purpose of a permanent bridge is to eliminate the financial cost and environmental consequences of installing and removing the seasonal crossing. The cost of the seasonal crossing has increased every year since inception, with the cost in 2023 being more than \$550,000. In addition, the project must be re-permitted every 10 years with the regulatory agencies to allow fill within the river channel. Repeated installation of the seasonal crossing each year results in impacts on river flow, aquatic species and habitats, and sedimentation downstream, which degrades water quality.



Sources: ESRI 2022



**FIGURE 1. REGIONAL LOCATION
Asti Permanent Bridge Construction Project**



Source: ESRI 2023



**FIGURE 2. PROJECT LOCATION
Asti Permanent Bridge Construction Project**

2.0 PROJECT DESCRIPTION

2.1 No Project Alternative

The No Project Alternative would not include any changes to the existing setting and conditions aside from regular maintenance activities. The County would continue to install and remove the ASC each year to provide seasonal access across the river. The No Project Alternative would not result in any new impacts; however, it would not meet the project purpose and need to provide enhanced safety through a year-round bridge and to eliminate the substantial costs associated with the yearly installation of the ASC. In addition, the impacts resulting from the yearly installation of the ASC would continue under the No Project Alternative.

2.2 Project Alternative

The project alignment would provide for a 30 mph design speed throughout. From west to east, the proposed alignment consists of approximately 574 feet of approach roadway beginning just east of the railroad right of way (Washington School Road Postmile (PM) 10.36) and continuing along Washington School Road, passing around the first bend to the left, and running just east of the existing road alignment (this is to maintain traffic on the existing Washington School Road during construction)(see **Figure 3**, Project Alignment).

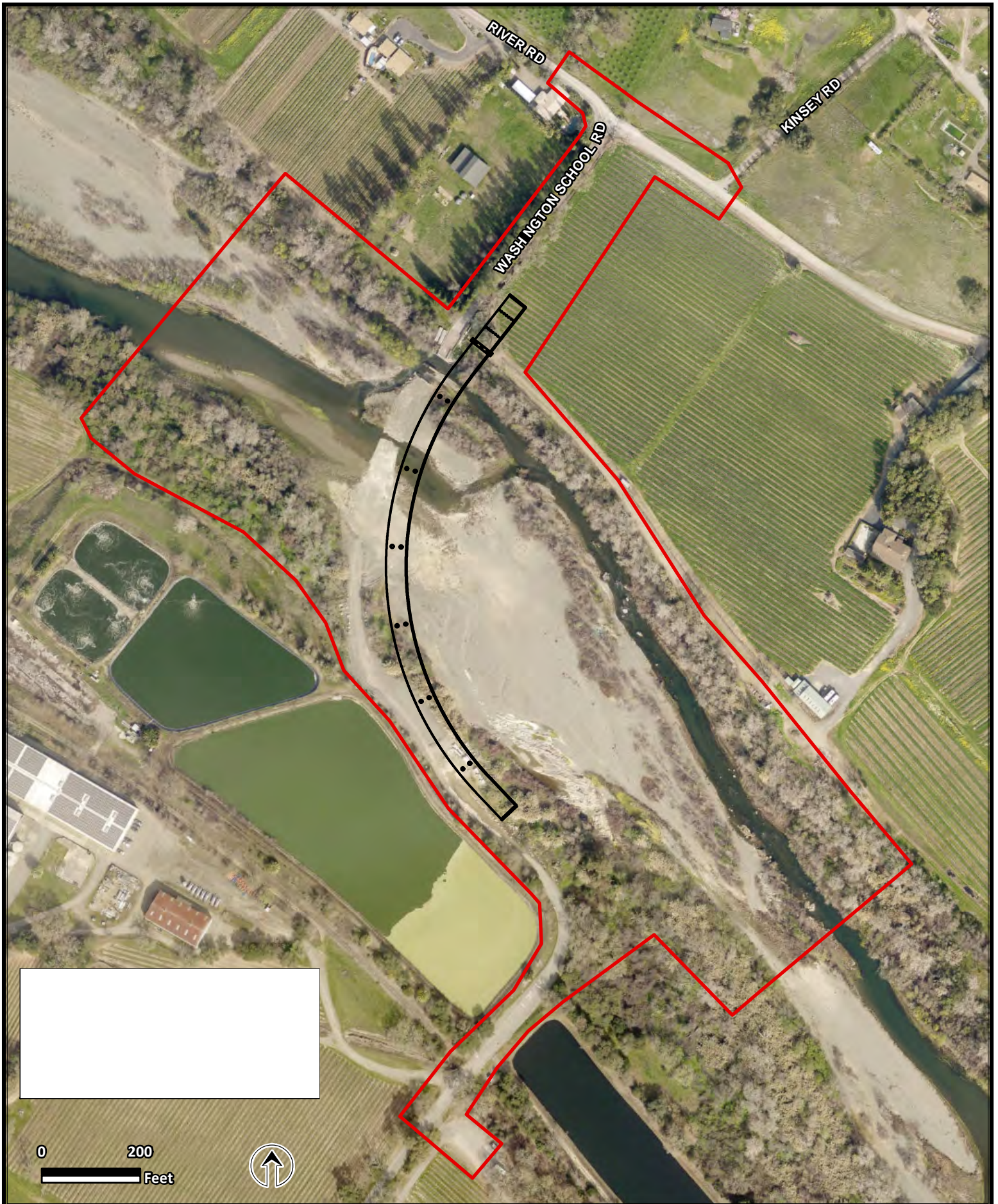
Bridge Abutment 1 would be constructed approximately 250 feet beyond the bend. The bridge would be approximately 1,180 feet in length and consist of a curved structure along Washington School Road and the Gallo ponds, curving to the right and crossing over the Russian River to Bridge Abutment 11, and then proceed along approximately 400 feet of approach roadway and terminates at a realigned intersection at River Road and Washington School Road (Washington School Road PM 10.78).

The project would also include two retaining walls, one going west from the west abutment around the curve for approximately 349 feet retaining the approach fill and one approximately 180 feet long on the east approach along the south side of existing Washington School road to protect existing oak trees.

The proposed roadway alignment would include two 11-foot lanes, two 5-foot Class 2 Bicycle Lanes, and one 6-foot 2-inch wide concrete sidewalk on one side of the alignment. The alignment would also include a minimum of two Low Impact Development (LID) best management practices (BMP), possibly bioretention and/or infiltration trench facilities, located on the bridge approaches, 4:1 side slopes for the cut/fill limits, erosion control BMPs would be applied, and new roadside ditches on the east side of River Road to accommodate the re-aligned intersection at Washington School Road.

On the eastern approach, the proposed alignment alternatives would be parallel to the existing Washington School Road. A new "T" intersection would be constructed on the eastern terminus of the project intersecting River Road, approximately 70 feet south of the existing intersection of Washington School Road and River Road.

Minor grading (see Channel Bar Grading below) to a maximum depth of six feet would be conducted on an existing dry gravel bar of the river channel would be required in order to maintain flood neutrality in the channel. The grading location is about 1,000 feet downstream from the proposed bridge location. The project would also require removal and replacement of existing drainage pipes/culverts to accommodate the widened roadway at the River Road and Washington School Road intersection and at the western Washington School Road curve outfalling to the existing ditches.



Source: Sonoma County 2020; ESRI 2023



FIGURE 3. PROJECT FOOTPRINT
Asti Permanent Bridge Construction Project

Following construction, the existing Washington School Road from River Road to the Russian River would remain in place and would serve as a maintenance access road for the County and driveway access for Assessor’s Parcel Number (APN) 117-080-012.

Bridge Design

The new bridge would consist of seven main spans from Abutment 1 to Pier 8 and three approach spans from Pier 8 to Abutment 11. The bridge as measured from the outside barriers would be 42 feet and two inches wide. The bridge type would be a combination of post-tensioned cast-in-place (CIP) Concrete Box Girders and precast/prestressed voided concrete slabs. The main spans for each alignment alternative would consist of the post-tensioned, CIP concrete box girders, each being approximately 145 to 165 feet long and six feet to 6.5 feet deep. The approach spans would be precast/prestressed voided slabs 36 feet to 44 feet in length and 2.4 feet in depth. The shallower approach spans would minimize the structure depth at the abutment, therefore minimizing the height of fill required and the length of bridge approach roadway required to touch down and conform to the existing roadway.

Piers at the main spans would consist of two column bents with an integral cap. Foundations are anticipated to be 6-foot to 6.5-foot diameter drilled shafts, Cast-in-Drilled Hole (CIDH) or Cast-in-Steel-Shell (CISS). Depth of the drilled shaft would be determined by the scour depths, depth to rock, and depth of the required rock socket. Piers at the approach spans would consist of six 18-inch diameter shaft with pile extensions. At the transition from CIP box girder to slab spans, a modified pier on 5-foot diameter CIDH or CISS piles and columns would be constructed with an L-shaped cap to accommodate the CIP box on one side and the slab span on the other. The west abutment (Abutment 1) supporting the CIP box would consist of a concrete seat-type abutment supported on 24-inch CIDH piles. The east abutment supporting the approach slab would consist of a single row of 24-inch CIDH piles and grade beam supporting the slab.

The concrete superstructure would be built on temporary falsework that would be removed once the concrete has cured, and the bridge has been prestressed. Two concrete pours would be required to construct this type of bridge, consisting first of a stem and soffit pour, followed by a deck pour. The bridge rails would be 42 inches tall, Type ST-80 (on non-sidewalk side) and ST-80SW (on sidewalk side) barriers. This barrier would consist of three horizontal steel rails on steel posts and a top bicycle rail. 10-foot reinforced concrete approach slabs would be formed and cast-in-place. After the concrete cures, metal beam guard rails would be installed along both edges of the new approaches. Exposed side slopes of the new approach embankments would be stabilized and erosion control BMPs applied as required by regulatory agencies.

2.2 Right of Way and Temporary Construction Easements

The project would require right of way impacts as shown in **Table 3**.

Table 3. Right of Way Acquisitions and Temporary Construction Easements

Owner	Assessor’s Parcel Number	Right of Way Acquisition (Square Feet)	Prescriptive Right of Way ¹ Acquisition (Square Feet)	Temporary Construction Easement (Square Feet)
E. & J. Gallo Winery, Inc.	118-020-014 and 118-040-001	85,756	31,642	359,931
Sciaini	117-080-037	82,197	4,968	0
Rankin & Mone	117-080-031	1,671	1,606	0

Owner	Assessor's Parcel Number	Right of Way Acquisition (Square Feet)	Prescriptive Right of Way ¹ Acquisition (Square Feet)	Temporary Construction Easement (Square Feet)
Peters Trust	117-080-022	656	--	0
E. & J. Gallo Winery, Inc. (potential staging area)	118-040-004	--	--	3,400

¹A prescriptive easement occurs when a piece of private property has been used frequently, for an extended period of time (at least five years), and for a specific purpose without express permission. To establish a prescriptive easement, the land and its specific use must be open, notorious, and uninterrupted for five years or more (Stone and Sallus, 2023).

2.3 Construction Activities

Construction of the project is expected to take two construction seasons, with work in the wetted channel occurring between June 15 and October 15. It is anticipated that the Contractor would be able to coordinate with County maintenance staff to allow the ASC to be constructed while work is ongoing.

Staging Areas and Construction Access

Because traffic would be maintained on the existing alignment during the initial bridge construction, the proposed right of way acquired for the road would be used for staging. For example, on the east side of the bridge, approximately 82,000 square feet would be purchased as permanent right of way and would be used for the proposed eastern approach roadway segment. During the first stage of construction, this area could be used for staging and access, including equipment and materials storage. There is also a vacant parcel (APN 118-040-004) near the railroad tracks that might be available as a staging area. The Contractor could use approximately 3,400 square feet of this as a potential staging area. After the bridge is constructed and traffic is moved over to the new alignment, the existing roadway could be used for staging the remaining work.

Construction Phasing and Methods

As noted above, construction of the project is expected to take two construction seasons, with work in the wetted channel occurring between June 15 and October 15. Vegetation removal would occur during the winter preceding construction, to avoid the bird-nesting season. Vegetation removal would include removal and pruning of shrubby riparian vegetation along the bridge alignment, and approximately 22 trees of various species. Tree removal has been minimized to the extent feasible while maximizing the amount of out of river space used for construction, staging, and debris removal.

Temporary River Diversion System

Construction would be conducted during the spring, summer, and fall when surface flows in the Russian River are at a minimum; however, flows in the river are perennial and surface water is expected within the project area during construction. The Russian River would not be dewatered during construction. It is anticipated that the river would be channelized during construction to direct flows away from pier construction. Typical summer flows pass under the seasonal bridge which would be constructed to span over the low flow channel, as it does every year. This would divert the river away from all but one pier, which would be constructed just south of the channel. However, this pier can be constructed from the south side with casings if necessary to address water in the drilled holes. Water pumped from casings would be collected and sediment allowed

to settle out before being released to the channel. This would leave most of the piers to be constructed in the floodplain well away from the low flow channel. If flows are higher than normal during the summer construction season, it is possible that more extensive channelization would be required. This can be accomplished in several ways depending on the flow to be channeled, including, in order of increasing flow capacity:

- Construction of clean gravel berms covered with plastic sheeting
- Stacked K-rail with plastic sheeting
- Inflatable cofferdams

If flows are particularly high during the construction season, more extensive means of directing flows through the construction site would be required. This would most likely involve the use of large pipes laid in the channel similar to the pipes the County often places beneath their gravel berm when constructing the annual ASC. Because flows in the Russian River vary greatly from year to year, the specifics of the channelization would be determined by water levels at the time of construction.

Channel Bar Grading

The project would result in fill at the piers and the southwest abutments. The grading of the channel gravel bar downstream of the proposed bridge would offset the additional fill from the bridge construction. Minor grading to a maximum depth of six feet of the gravel bar conducted outside of the summer flow area of the river would be required to maintain flood neutrality in the channel. The grading location is approximately 1,000 feet downstream from the proposed bridge location. Grading would be sloped toward the low flow channel and be free of holes or depressions that may trap fish. The grading would include river fisheries habitat enhancement methods that maintain gravel bars with intact head and edge of water buffers that creates a condition where the bar and alcove initially become inundated through a backwater effect as higher flows occur during and after seasonal storm events.

This backwater effect would be generated by the head and edge of bar buffers directing the river flow around the graded surfaces to the downstream end of the bar and/or enhancement feature (e.g., alcove). Low-flow velocity backwater would originate at the downstream end of the bar and slowly inundate the disturbed area and eventually the floodplain as the river rises.

The edge of bar buffer widths on the riverside of the area would be maintained a linear distance equal to a minimum of 20 percent of the ordinary high channel width. The invert of the alcove excavation area would be maintained a minimum one foot above the summer low flow water levels, and the excavation invert would be sloped continuously from the head of the excavation down to the one foot above summer water level elevation at the excavated alcove's downstream opening to the river.

Construction Completion

Signage, barriers, and temporary striping would be added in preparation of moving traffic to the new bridge. Flagmen would be used as needed to close the existing approach roadways and switch traffic onto the new 2-lane bridge. After construction of the final approach work and new bridge construction, the temporary bridge and temporary road west of the river would be removed and the slopes re-graded with placement of permanent erosion control to re-establish the side slopes.

The new bridge approaches would be asphalt with paved shoulders and a 3-foot section of shoulder backing to the fill slope. New roadside ditches would be graded to replace the existing ditches and LID features would be installed. A gate would be installed at the entrance to the

existing Washington School Road from River Road to provide limited access for local property owners and the County. Fences would be provided along property lines to prevent access to local farmlands, irrigation ponds and properties.

2.4 Utilities

There is one utility pole at the existing intersection of Washington School Road and River Road. The proposed alignment would parallel the existing road and intersect at a new “T” intersection. The existing utility pole would be avoided and protected in place. There are existing AT&T fiberoptic utilities along the east side of River Road. These fiberoptic utilities may need to be relocated, depending on the exact depth of the facilities, for relocation of roadside ditches along the east side of River Road. Coordination would be required during the final design phase to locate and possibly relocate these facilities that conflict with the project. The new bridge would also accommodate rural broadband expansion.

3.0 SETTING

3.1 Regional Setting

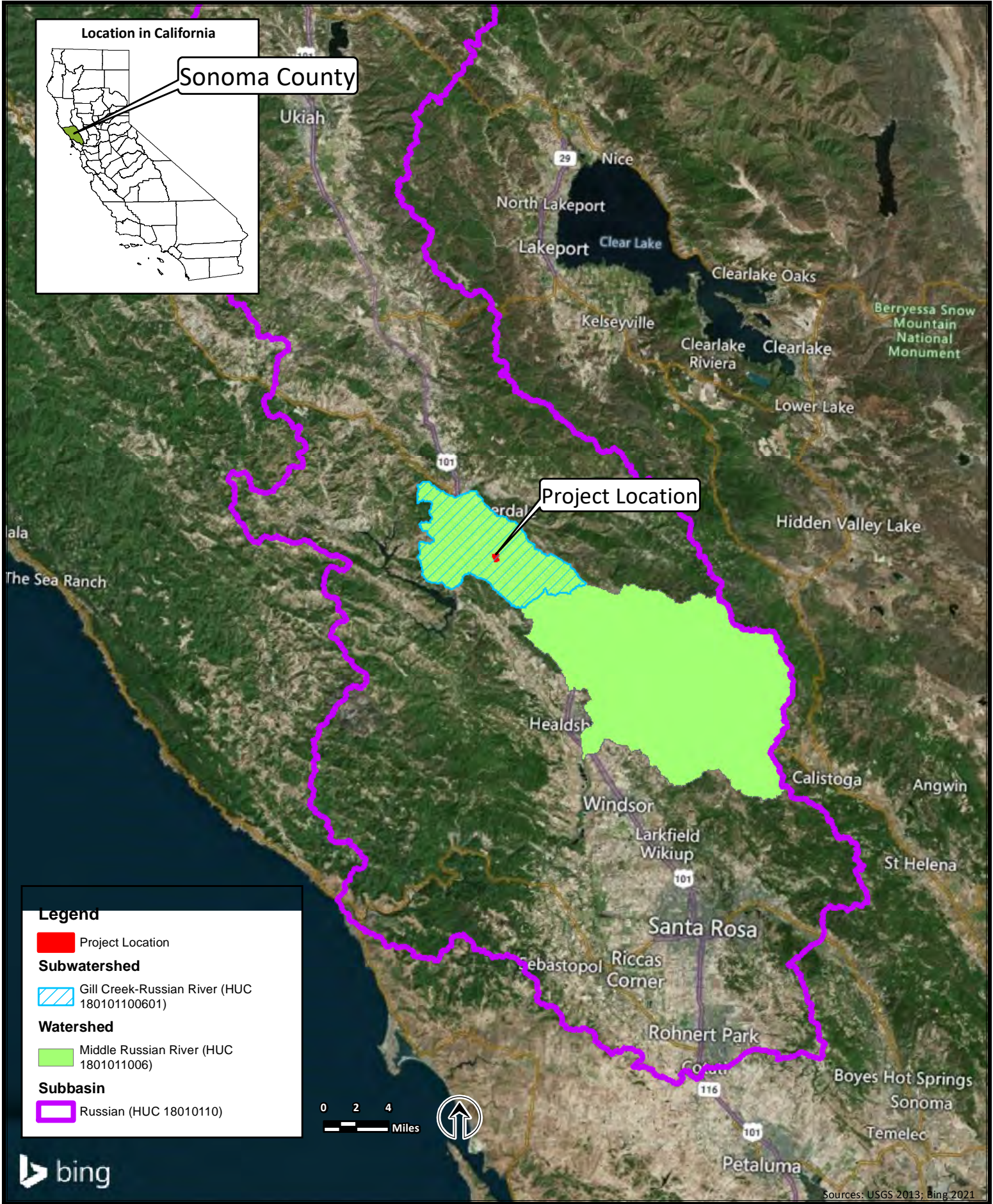
The project area is in the Gill Creek-Russian River Subwatershed (Hydrologic Unit (HUC) 180101100601) within the larger Russian River Watershed (HUC 18010110) (see **Figure 4**, Watersheds). The Russian River Watershed spreads across approximately 950,365 acres, from the Russian River headwaters in the north to the mouth of the Russian River at the Pacific Ocean in the south (United States Geological Survey, 2023).

According to the Pacific Energy Center, Sonoma County is within the Climate Zone 2 (Pacific Gas and Electric, 2006). This climate zone is influenced by the ocean and inland air and dominated by cool days with high daytime temperatures limited to the summer months. According to the Natural Resources Conservation Service Agricultural Applied Climate Information System, the average annual low temperature for the area is approximately 37.7 degrees Fahrenheit (F) and the average annual high temperature is approximately 94.4 degrees F (Natural Resource Conservation Service, 2023a). The average annual precipitation is approximately 41 inches. The highest rainfall is between the months of December and February.

3.2 Physical Setting

Land use designations in the project area include Land Intensive Agriculture, Diverse Agriculture, and Resources and Rural Development (see **Figure 5**, Land Use and **Figure 6**, Zoning) (County of Sonoma, 2022). The project area is zoned as Land Intensive Agriculture, Resources and Rural Development, and Diverse Agriculture (County of Sonoma, 2022). The project area is also within the following combining districts, as specified in County Code Zoning Regulations Chapter 26: Floodway Combining District, Riparian Corridor Combining Zone, Scenic Resources Combining District, and Valley Oak Habitat Combining District. The properties surrounding the project area include a rural residence, a winery, and a vineyard. The topography in the project area is relatively flat or gently sloping down towards the Russian River, with an elevation ranging from approximately 240 to 290 feet above mean sea level.

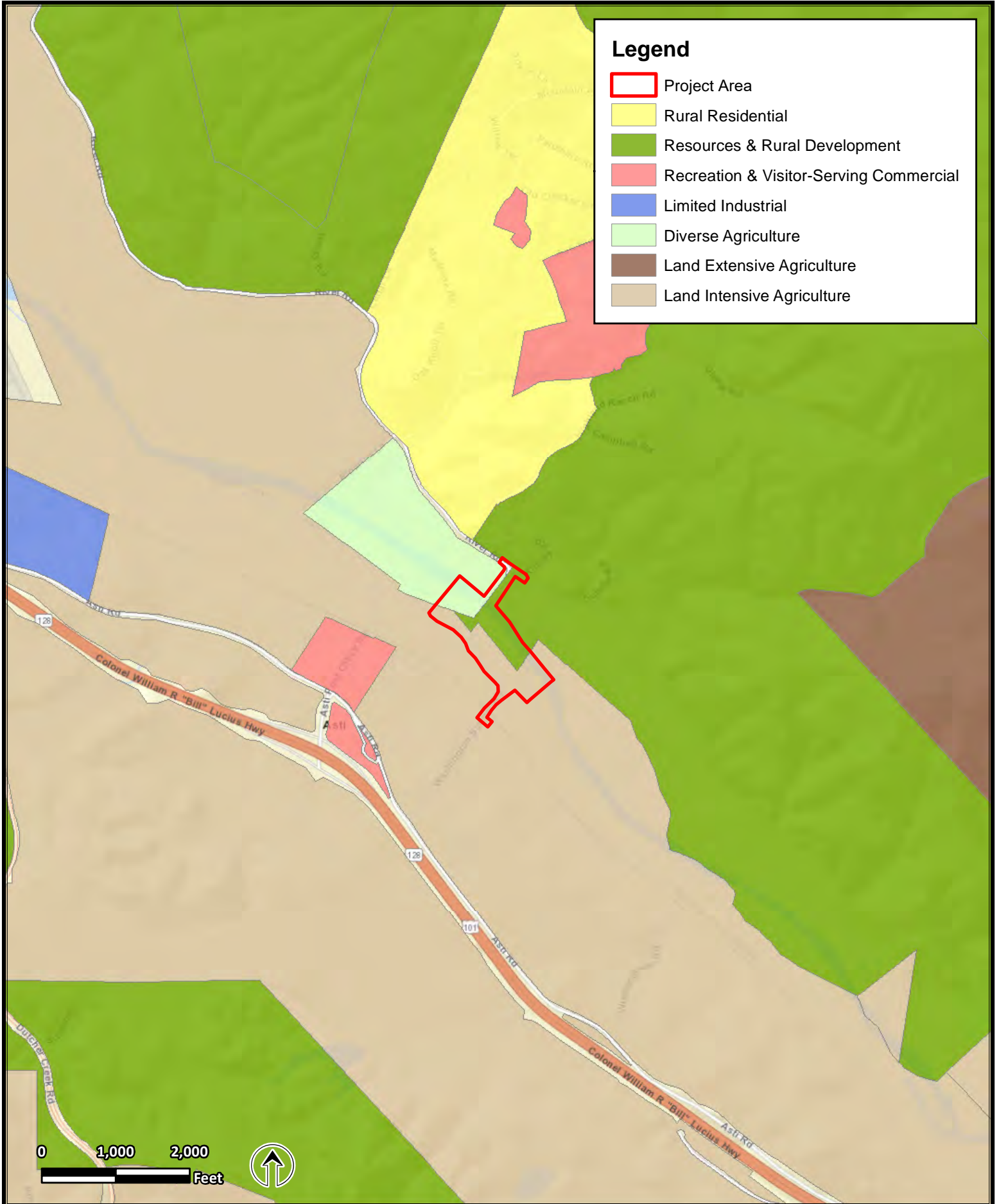
The soil types within the project area include Alluvial Land Sandy, Riverwash, Yolo Sandy Loam 0 to 2 Percent Slopes, and Yolo Sandy Loam Overwash 0 to 5 Percent Slopes (Natural Resource Conservation Service, 2023b).



Sources: USGS 2012; Bing 2023



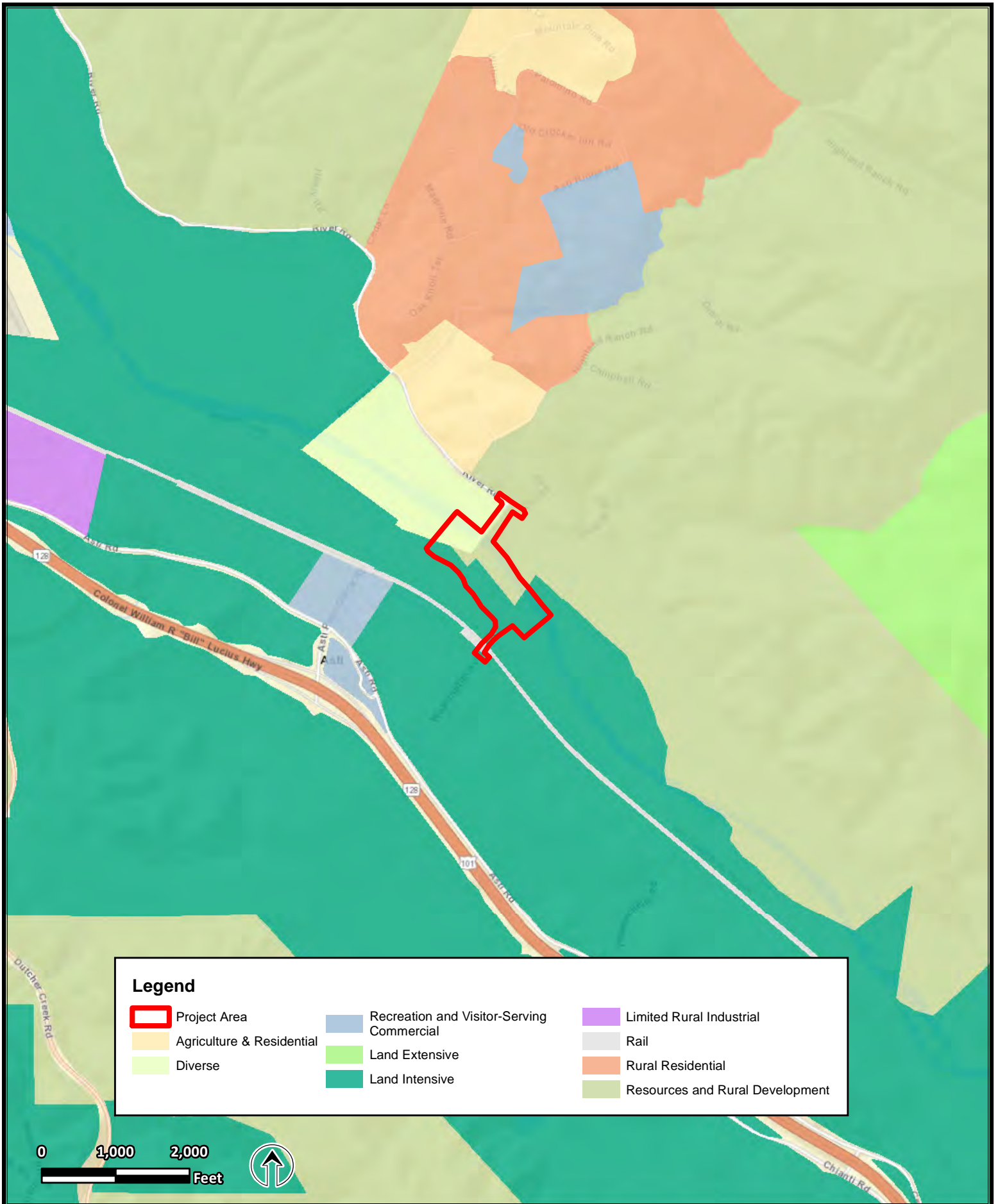
FIGURE 4. WATERSHEDS
Asti Permanent Bridge Construction Project













Source: Sonoma County 2020; ESRI 2023



FIGURE 5. LAND USE
Asti Permanent Bridge Construction Project



Legend

 Project Area	 Recreation and Visitor-Serving Commercial	 Limited Rural Industrial
 Agriculture & Residential	 Land Extensive	 Rail
 Diverse	 Land Intensive	 Rural Residential
		 Resources and Rural Development

Source: Sonoma County 2023; ESRI 2023



FIGURE 6. ZONING
Asti Permanent Bridge Construction Project

Hydrology

There are three water features within the project area including the Russian River, Unnamed Drainage 1, and Unnamed Drainage 2 (see **Figure 11**, Potential United States Army Corps of Engineers and Regional Water Quality Control Board Jurisdiction, **Figure 12**, Potential California Department of Fish and Wildlife Jurisdiction and **Figure 13**, Impacts on Potential United States Army Corps of Engineers, and Regional Water Quality Control Board Jurisdiction). These features are discussed in more detail in *Section 6.4, Biological Resources*.

Russian River

The Russian River is a natural, earthen bottom waterway and has natural flows that pass north to south through the project area. Within the project area the Russian River has a cobble and bedrock bottom with high and low flow channels. There are several seasonal summer dams along the Russian River downstream of the project area. The Russian River receives water from Lake Mendocino and the foothills to the north (both during and outside of the wet season) and connects to the Pacific Ocean approximately 40 miles downstream of the project area. Flows within the project area are perennial.

Unnamed Drainage 1

Unnamed Drainage 1 is an earthen bottom feature. Unnamed Drainage 1 is channelized and passes under the road and railroad tracks. Unnamed Drainage 1 appears to receive water from the surrounding agricultural fields and roadside drainage. There is unrestricted flow between Unnamed Drainage 1 and the Russian River.

Unnamed Drainage 2

Unnamed Drainage 2 is a shallow drainage swale that joins Unnamed Drainage 1 just west of the railroad tracks adjacent to the roadway. Unnamed Drainage 2 appears to receive water from adjacent settlement ponds. There is unrestricted flow between Unnamed Drainage 2 and the Russian River.

4.0 ISSUES RAISED BY THE PUBLIC OR AGENCIES

A referral packet was drafted and circulated to inform and solicit comments from selected relevant local, state, and federal agencies; and to special interest groups that were anticipated to take interest in the project.

The Sonoma County Department of Public Infrastructure (SPI) (formally known as the Sonoma County Department of Transportation and Public Works) has held public meetings on two occasions, April 15, 2022, and October 8, 2023 to discuss the project. Both of these meetings were held at the Old Crocker Inn in Cloverdale, CA. These meetings allowed Sonoma Public Infrastructure (SPI) to educate the community about the project history, available and future funding opportunities, and feasibility of building a permanent bridge at the ASC location. The community helped SPI understand local priorities such as how the current structure is utilized, the need for a permanent bridge for increased public safety and wildfire concerns, favorable alignment locations for the permanent structure, and desired design features. There is a project webpage on the SPI website that allows for the public to review recorded meetings, project documents, and submit email comments on the project.

On May 18, 2023, a meeting was held on site with the United States Army Corps of Engineers (USACE), National Oceanic and Atmospheric Administration (NOAA Fisheries), and Regional Water Quality Control Board (RWQCB) to discuss the regulatory requirements related to water quality and special-status fish species. The agencies recommended that impacts on an existing

drainage (Drainage 1) flowing into the river be minimized and requested that the project be designed to avoid a natural rock outcropping in the river channel near the western bank and south of the existing ASC and the existing ASC structures be removed.

On August 7, 2023, a meeting was held on site with the California Department of Fish and Wildlife (CDFW) to discuss the regulatory requirements related to work within the river channel. The CDFW commented that the permanent bridge is preferred over the temporary ASC. On August 8, 2023, a meeting was held on site with the Cloverdale Rancheria to discuss the project. A representative identified that the entire project area (and beyond) is a sensitive resource and requested that the Cloverdale Rancheria Tribe be involved at every step moving forward.

On December 19, 2023, a meeting was held with the Environmental Review Committee (ERC) and public comments were accepted for the project. Public comments received included support for the project, request to include a no build alternative in the environmental documentation, a request to expand the public outreach beyond the Cloverdale area, and a request to expand the Initial Study discussion on potential growth related impacts. On May 7, 2024, a follow-up meeting with the ERC was held, and the committee made the recommendation to move forward with circulation of the Initial Study with a Mitigated Negative Declaration as the appropriate level of CEQA documentation. Comments received from the public included support for a year-round crossing to enhance fire safety, a question regarding whether there would be tree removal along Washington School Road, and a question regarding whether bicycle use along adjacent roadways would increase following construction of a new bridge.

5.0 OTHER RELATED PROJECTS

There are no other planned projects within five miles of the project area. The County is considering the formation of a special district in accordance with the Municipal Improvement Act of 1913 (Cal. Streets & Highways Code §§ 10000, et seq.) (the “1913 Act”) to fund a portion of the project cost. Formation of this district is a mechanism for equitably distributing the costs of public improvements to the specially benefitted parcels of real property and providing owners of benefitted properties with the means for paying, over time, their share of the costs of financing public improvements. Formation of an assessment district would require multiple future Board actions, including a regular calendar item to review the draft Engineer’s Report and consider adopting a resolution declaring the intention to form the assessment district, followed by a public hearing to consider whether to adopt a resolution to form the assessment district. Proposition 218 also imposes specific notice, majority protest and public hearing requirements. The County will also continue to explore other funding options for the project.

6.0 EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the CEQA Guidelines and the County’s implementing ordinances and guidelines. For each item, one of four responses is given:

No Impact: The project would not have the impact described. The project may have a beneficial effect, but there is no potential for the project to create or add increment to the impact described.

Less Than Significant Impact: The project would have the impact described, but the impact would not be significant. Mitigation is not required, although the project applicant may choose to modify the project to avoid the impacts.

Potentially Significant Unless Mitigated: The project would have the impact described, and the impact could be significant. One or more mitigation measures have been identified that will reduce the impact to a less than significant level.

Potentially Significant Impact: The project would have the impact described, and the impact could be significant. The impact cannot be reduced to less than significant by incorporating mitigation measures. An environmental impact report must be prepared for this project.

Each question was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The Initial Study includes a discussion of the potential impacts and identifies mitigation measures to substantially reduce those impacts to a level of insignificance where feasible. All references and sources used in this Initial Study are listed in the Reference section at the end of this report and are incorporated herein by reference.

The County has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the project, and to obtain all necessary permits, notify all contractors, agents and employees involved in project implementation and any new owners should the property be transferred to ensure compliance with the mitigation measures.

6.1 Aesthetics

The County's Visual Assessment Guidelines are typically used as an administrative procedure for the assessment of visual impacts of community development projects from public viewing points on properties with assigned land use and zoning designations. Washington School Road is a public road right-of-way that does not have an assigned land use and zoning designation. The County's Visual Assessment Guidelines were not developed for the purpose of assessing improvements to existing roadways, however, for informational purposes, a review using concepts outlined in the Visual Assessment Guidelines is being provided for the project. In keeping with the County's Guidelines, project impacts have been analyzed by considering public viewing points, which include public roads, and recreational river users. Viewing points from private properties are not used when applying the County's Guidelines, and also are not considered in CEQA analyses.

The land within and surrounding the project area is comprised of vineyards, foothills, and valley topography in combination with riverside vegetation, water, and developed land covers. According to the Sonoma County General Plan (General Plan), the parcels adjacent to Washington School Road are in a designated Community Separator, a subset of the Scenic Resources designation (County of Sonoma, 2020a). The Open Space Resource Conservation Element of the County's General Plan, Policy 2.1, outline the policies for Community Separators:

"A characteristic that distinguishes Sonoma County from many parts of the San Francisco Bay Area is the continued existence of separate, identifiable cities and communities. Some land areas need to remain open or retain a rural character in order to avoid corridor-style urbanization. Community Separators are rural open space and agricultural and resource lands that separate cities and other communities, prevent sprawl, protect natural resources, and provide city and community identity by providing visual relief from continuous urbanization. Community Separators enhance the identities of individual cities and communities. As Community Separators are rural areas that have open space characteristics, many of these areas are also scenic. The lands within Community Separators are frequently subject to pressure for development because they are close to developed areas and major roads. The Community Separator designation does not affect underlying land use designations or allowable land uses. Lands within Community Separators generally meet the following designation criteria:

- 1) Lands shall be located outside an Urban Service Area designated in the General Plan.
 - 2) Lands shall have a General Plan land use designation of Timber Production, Resources and Rural Development, Land Intensive Agriculture, Land Extensive Agriculture, Diverse Agriculture, Rural Residential, or Agricultural Residential.
-

- 3) Lands should logically separate cities or unincorporated communities or extend or complete an existing Community Separator to provide continuity.”

Washington School Road is a public road right of way that does not have an assigned land use or zoning designation. According to the General Plan, public roadways are considered to be public services; therefore, land use designations are not applicable to public roadways (County of Sonoma, 2018). In addition, Section 26-02-070 of the County’s Municipal Code states that the “applicability of zoning districts to land use designations shall not apply to public projects of the county” (County of Sonoma, 2022). However, preservation of these scenic resources is important to the quality of life of County residents, tourists, and agricultural economy. The project would generally conform to the Sonoma County General Plan Policies for design within a community separator.

The following is a list of the goals, objectives, and policies of the Sonoma County General Plan that apply to Community Separators.

- Goal OSRC-1: Preserve the visual identities of communities by maintaining open space areas between cities and communities:
- Objective OSRC 1.1: Preserve important open space area in the Community Separators shown on figure OSRC-5b of the Open Space and Resource Conservation Element.
- Objective OSRC-1.2: Retain a rural character and promote low intensities of development in Community Separators. Avoid their inclusion in City Urban Growth Boundaries or Spheres of Influence. Avoid their inclusion within Urbans Service Areas for unincorporated communities.
- Objective OSRC-1.3: Preserve existing groundwater recharge and stormwater detention areas within Community Separators.
- Objective OSRC-1.4: Preserve existing specimen trees and tree stands within Community Separators.
- Policy OSRC-1f: Unless there are existing design guidelines that have been adopted for the affected area, require that new structures within Community Separators meet the following criteria:
 - 1) Site and design structures to take maximum advantage of existing topography and vegetation in order to substantially screen them from view from public roads.
 - 2) Minimize cuts and fills on hills and ridges.
 - 3) Minimize the removal of trees and other mature vegetation; avoid removal of specimen trees, tree groupings, and windbreaks.
 - 4) Where existing topography and vegetation would not screen structures from view from public roads, install landscaping consisting of native vegetation in natural groupings that fits with the character of the area in order to substantially screen structures from view. Screening with native, fire retardant plants may be required.
 - 5) Design structures to use building materials and color schemes that blend with the natural landscape and vegetation.
 - 6) To the extent feasible, cluster structures on each parcel within existing built areas, and near existing natural features such as tree groupings.
 - 7) Utilities are underground where economically practical.
 - 8) On hills and ridges, avoid structures that project above the silhouette of the hill or ridge against the sky as viewed from public roads, and substantially screen driveways from view where practical.
 - 9) Minimize impervious surfaces and encourage groundwater recharge with effective design features and materials that allow stormwater infiltration and detention.

This policy does not apply to farmworker housing or agricultural accessory structures, such

as barns, proposed on parcels in the Diverse Agriculture, Land Extensive Agriculture, Land Intensive Agriculture, and Resources and Rural Development land use categories, and on parcels in the Rural Residential land use category with Agriculture and Residential (AR) Zoning, if their use does not require a use permit in the Zoning Code. If compliance with these standards would make a parcel unbuildable, site structures where minimum visual impacts would result.

- GOAL OSRC-8: Protect and enhance Riparian Corridors and functions along streams, balancing the need for agricultural production, urban development, timber and mining operations, and other land uses with the preservation of riparian vegetation, protection of water resources, flood control, bank stabilization, and other riparian functions and values.
 - OSRC-8d: Allow or consider allowing the following uses within any streamside conservation area:
 - (2) Streamside maintenance and restoration.
 - (4) Road crossings, street crossings, utility line crossings.
 - OSRC-8e: Prohibit, except as otherwise allowed by Policy OSRC-8d, grading, vegetation removal, agricultural cultivation, structures, roads, utility lines, and parking lots within any streamside conservation area. Consider an exception to this prohibition if:
 - (5) A conservation plan is approved that provides for the appropriate protection of the biotic resources, water quality, flood management, bank stability, groundwater recharge, and other applicable riparian functions. Until the County adopts mitigation standards and procedures for specific uses and riparian functions, prior to approving the conservation plan, consult on areas of concern with the Resource Conservation District, Agricultural Commissioner, and resource agencies that are applicable to the proposed plan.

While the project would result in changes to the scenic landscape, it would not impact existing open space between urban areas and surrounding communities. The project would not change existing land use so low intensities of development would remain at existing conditions. The project would incorporate stilling basin(s) and vegetated ditches to treat stormwater and allow for ground infiltration. Tree removals have been minimized for the project and onsite revegetation would be completed following project construction. In addition, once construction is complete the project area would no longer require the ASC to be built every year which would allow for natural vegetation recruitment and enhancement of visual landscape of the riparian corridor.

The project would be built in compliance with a Mitigation Monitoring and Reporting Plan (MMRP) to ensure impacts would be minimized to the greatest extent feasible. This plan would be submitted to the Sonoma County Board of Supervisors as part of the board package for project approval which is equivalent of the "Conservation Plan" aimed at avoidance, minimization, and mitigations for environmental impacts of the project. Therefore, the project would be consistent with the General Plan policies listed above.

The project area is located in a low valley within the river corridor, and due to existing topography, vegetation and other physical barriers along the roadway, the project area is not expected to be visible from identified scenic corridors within the project vicinity (U.S. 101 and Asti Road) and other nearby roadways. There are three existing public corridors within the project area, including the Washington School Road corridor, the River Road corridor, and the Russian River corridor (see **Photo 1** through **Photo 7**). Within these corridors, there are views of the roadway, the existing ASC structure, surrounding vegetation, and the Russian River.



Photo 1. Viewpoint 1 – Washington School Road Looking East at Roadway Curve

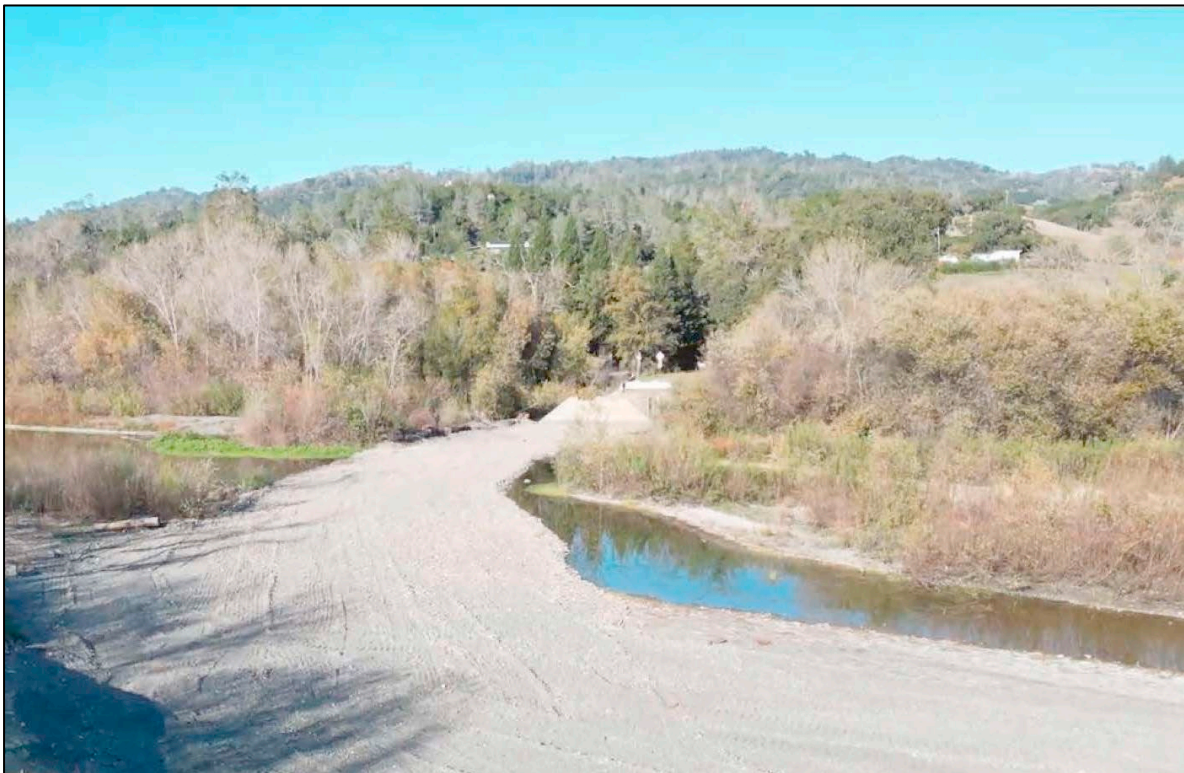


Photo 2. Viewpoint 2 – Washington School Road Looking East at ASC



Photo 3. Viewpoint 2 – Washington School Road Looking East at ASC



Photo 4. Viewpoint 3 – Washington School Road/River Road Intersection Looking South



Photo 5. Viewpoint 4 – River Road Looking West



Photo 6. Viewpoint 5 – Russian River Channel Looking Northwest



Photo 7. Viewpoint 5 – Russian River Channel Looking Northwest

The visual sensitivity of the project area was given a rating of moderate using the criteria in Table 2 of the Sonoma County Visual Assessment Guidelines. There is rural development in the study area, as well as natural features (e.g. the river corridor) that provide aesthetic value. However, the project area is highly disturbed from the yearly construction of the ASC and does not represent a natural setting within a scenic corridor. The project area is not on prominent hilltops or ridgelines and existing vegetation and topography screen the project site of views from the nearest scenic corridors of State Highway 101 and Asti Road. Although portions of the project area are within a Community Separator overlay area, in light of these considerations, the appropriate level of sensitivity for the site is moderate.

Each of the three existing corridors within the project area are lined with trees and other vegetation. Topography in the project area limits view of the project to users of Washington School Road as they approach the bridge and recreational users of the river either floating the river or using the river for swimming. Currently there is no formal access points to the river for recreational use from the roadway at the site. Nighttime lighting is currently limited to lights outside of rural residences and occasional vehicle headlights.

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

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

Comment

Visual impacts are determined by assessing the sensitivity of a site and the visual dominance of a project. As discussed above, the visual sensitivity of the site was identified as moderate. The visual dominance of the project was assessed by comparing the contrast of the following elements or characteristics of the project with its surroundings and giving a rating of inevent, subordinate, co-dominant, or dominant based on Table 3 of the Sonoma County Visual Assessment

Guidelines:

- Form: shape, geometry, complexity
- Line: the edge of the shape, boldness, complexity of silhouette, orientation
- Color: reflectivity, hue (actual color), value (dark or light)
- Texture: surface characteristics, randomness, grain (fine or coarse)
- Night Lighting

The project was determined to be subordinate or co-dominant with the existing surroundings based on five different viewpoints selected. The baseline condition is that of an existing roadway and the ASC present when the roadway is open to public use. The project would be constructed using materials similar to those already used on the existing roadways and hardscape elements would not be constructed of highly reflective materials, and the bridge design would include design elements to better harmonize the bridge with its surroundings. Tree and vegetation removal adjacent to the footprint of the new bridge could result in temporary impacts on existing light and shadow; however, vegetation in the area around the bridge would largely be left in place, which would minimize this effect over time. In addition, vegetation removed would be replaced at appropriate numbers to mitigate the impacts. There would be no lighting or other features that would result in a substantial increase in light or glare in the landscape.

The determination of visual impact significance was made by:

- Establishing the level of visual sensitivity of the site using the criteria discussed.
- Characterizing the visual dominance of the project by comparing the project’s form, line, color, texture, and lighting against that of the surrounding area.
- Determining significance of the visual impact by comparing site sensitivity with visual dominance of the project in accordance with Table 4 of the Sonoma County Visual Assessment Guidelines.

The sensitivity of the project area is considered moderate. The project would be either subordinate or co-dominant when compared with the existing setting of the roadway and ASC, and the new views would be compatible with the surrounding landscape (see **Photo 8** through **Photo 21**). When compared with the existing setting, which already includes the roadway and the ASC, the new bridge would not present a substantial change to the existing facilities. Therefore, impacts would be less than significant (see **Table 4**). Therefore, the project would not result in a substantial adverse effect on a scenic vista.

Table 4. Thresholds of Significance for Visual Impact Analysis

Viewpoint	Sensitivity	Dominance	Visual Impact
Viewpoint 1	Moderate	Subordinate	Less than Significant
Viewpoint 2	Moderate	Co-dominant	Less than Significant
Viewpoint 3	Moderate	Subordinate	Less than Significant
Viewpoint 4	Moderate	Co-dominant	Less than Significant
Viewpoint 5	Moderate	Co-dominant	Less than Significant



Photo 8. Viewpoint 1 – Eastbound Washington School Road Looking East, Existing Conditions



Source: (TRC Companies, 2023)

Photo 9. Viewpoint 1 – Eastbound Washington School Road Looking East, With Project

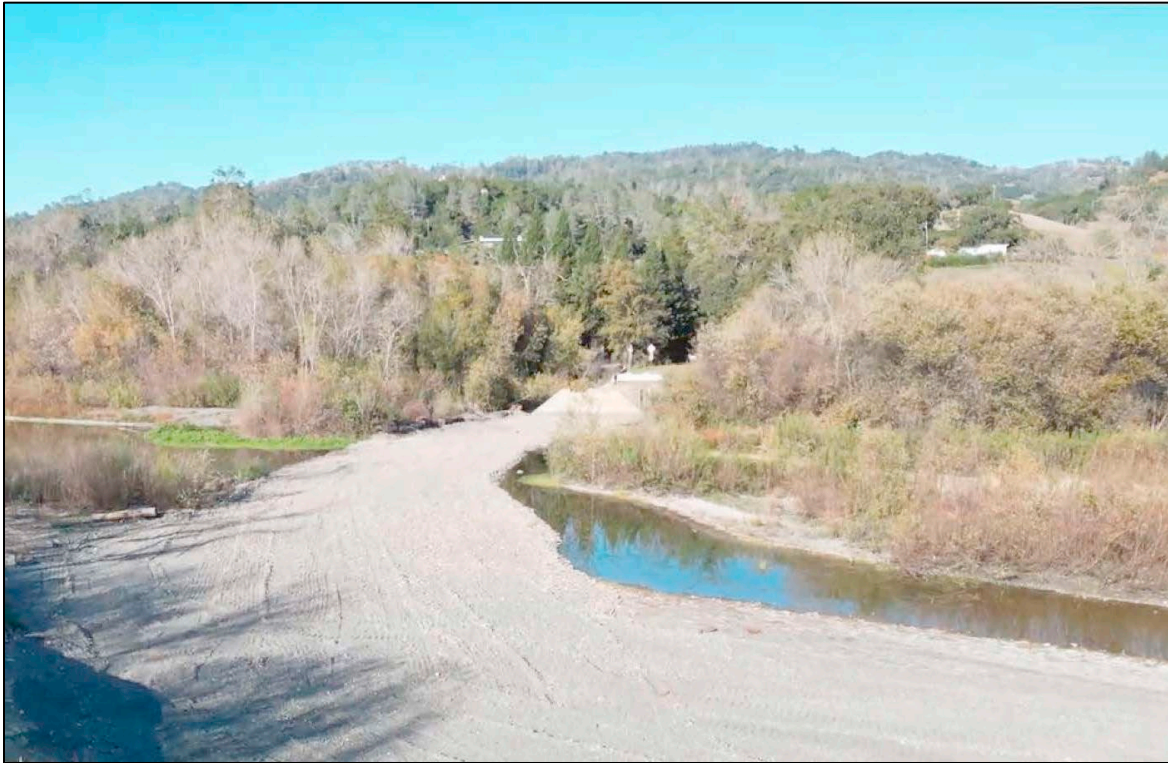


Photo 10. Viewpoint 2 – Eastbound Washington School Road Looking East, Existing Conditions



Source: (TRC Companies, 2023)

Photo 11. Viewpoint 2 – Eastbound Washington School Road Looking East, With Project



Photo 12. Viewpoint 2 – Eastbound Washington School Road Looking East, Existing Conditions with ASC



Source: (TRC Companies, 2023)

Photo 13. Viewpoint 2 – Eastbound Washington School Road Looking East, With Project



Photo 14. Viewpoint 3 – Washington School Road/River Road Intersection, Existing Conditions



Source: (TRC Companies, 2023)

Photo 15. Viewpoint 3 – Washington School Road/River Road Intersection, With Project



Photo 16. Viewpoint 4 – River Road Looking West, Existing Conditions



Source: (TRC Companies, 2023)

Photo 17. Viewpoint 4 – River Road Looking West, With Project



Photo 18. Viewpoint 5 – Russian River Channel Looking Northwest, Existing Conditions



Source: (TRC Companies, 2023)

Photo 19. Viewpoint 5 – Russian River Channel Looking Northwest, With Project



Photo 20. Viewpoint 5 – Russian River Channel Looking Northwest, Existing Conditions



Source: (TRC Companies, 2023)

Photo 21. Viewpoint 5 – Russian River Channel Looking Northwest, With Project

Project construction would result in temporary visual impacts, including vegetation removal, demolition and grading activities, and equipment staging. Construction activities could also result in the generation of dust, night lighting, and other visual intrusions. Construction is anticipated to last no more than two years, and the majority of impacts would be temporary during this period. Vegetation removal would result in impacts lasting for a longer period, until replacement vegetation is established and mature.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

- VIS-1:** Retaining walls would be installed along the bridge approaches to reduce the project impacts on oak trees and other vegetation.
- VIS-2:** Vegetation removal would be minimized to the extent feasible. Vegetated areas temporarily disturbed by the project would be restored following project construction using a context sensitive design that is visually compatible with the surrounding landscape.
- VIS-3:** Tree removal would be minimized to the extent feasible. Removed trees would be replaced on site and off site in accordance with CDFW-required ratios, which are listed in **BIO-5**. Tree replacement would screen the bridge structure from public views where possible. It is anticipated that approximately 43 riparian trees will be planted on site as part of upland habitat creation and enhancement.
- VIS-4:** Staging areas would be located away from the public view where feasible. These areas would be fenced to reduce visibility and would be kept clean and orderly. Soil and debris piles would be covered when not in active use.
- VIS-5:** The bridge design would incorporate design elements to better harmonize the bridge with its surroundings by darkening the superstructure and substructure concrete, using bridge barriers and guard railing with more natural color tones or strategically stamping the bridge/retaining wall concrete to add compatible visual interest and texture to elements visible from the approach roadways and recreational river users.

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

Comment

United States Highway 101 (U.S. 101) located 0.45 mile west of the project area is designated as a Scenic Highway Corridor (County of Sonoma, 2020a). The project area is not on prominent hilltops or ridgelines and existing vegetation and topography screen the project site of views from the nearest scenic corridors of State Highway 101 and Asti Road. The project would require some tree and vegetation removal along Washington School Road to accommodate the roadway realignment and new bridge approaches within the Russian River channel to accommodate the new bridge alignment. Vegetation removal would include removal and pruning of shrubby riparian vegetation along the bridge alignment, and removal of approximately 22 trees, including valley oak, black oak, interior live oak, arroyo willow, narrowleaf willow, and date palm (*Phoenix Dactylifera*). Tree removal has been minimized to the extent feasible while maximizing the amount of out of river space used for construction, staging, and debris removal.

Grading would be required in the river channel for construction of the bridge; however, following construction it is expected that higher river flows would move through this area and restore the natural appearance of the river within a short period of time. In addition an existing rock outcropping in the river channel would be preserved. Therefore, the project would not substantially

damage any scenic resources.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **VIS-1**, **VIS-2**, and **VIS-3** listed above would be implemented to reduce project impacts on scenic resources.

- c. In non-urbanized areas substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

Comment

The project area is in a rural setting within a designated Community Separator, and the visual sensitivity is determined moderate based on the description above. The baseline condition is that of an existing roadway and the ASC present when the roadway is open to public use. The project would be constructed using materials similar to those already used on the existing roadways and hardscape elements would not be constructed of highly reflective materials, and the bridge design would include design elements to better harmonize the bridge with its surroundings. Tree and vegetation removal adjacent to the footprint of the new bridge could result in temporary impacts on existing light and shadow; however, vegetation in the area around the bridge would largely be left in place, which would minimize this effect over time. In addition, vegetation removed would be replaced at appropriate numbers to mitigate the impacts. There would be no lighting or other features that would result in a substantial increase in light or glare in the landscape.

The new bridge would also create new views and would result in beneficial visual changes and would replace the ASC that requires yearly disturbance to the river channel, including construction activities, vegetation maintenance, and grading, which would have a net benefit on visual resources in the river corridor. The project would also result in temporary impacts resulting from construction activities, but these impacts would be short term. Therefore, the project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The project would require disturbance within the riparian corridor of the project area; however, the project is needed to provide a permanent crossing over the Russian River along Washington School Road. The disturbance would be limited to the extent feasible and nearly all of the area would be restored following construction. In addition, the project would include enhancement of areas currently vegetated with non-native and invasive species. The project would be expected improve the health of the river over pre-construction conditions and improve the aesthetic attributes of the crossing as compared to the current ASC seasonal installation.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **VIS-1**, **VIS-2**, **VIS-3**, **VIS-4**, and **VIS-5** listed above would be implemented to reduce project impacts on visual character and quality of the project area.

- d. Create a new source of substantial light or glare which would adversely affect day or**
-

nighttime view in the area?

Comment

The project would be constructed using materials similar to those already used on the existing roadways and hardscape elements would not be constructed of highly reflective materials. Tree and vegetation removal adjacent to the footprint of the new bridge could result in temporary impacts on existing light and shadow; however, vegetation in the area around the bridge would largely be left in place, which would minimize this effect over time. There would be no lighting or other features that would result in a substantial increase in light or glare in the landscape. Because the roadway would be open year-round, there would be intermittent vehicle headlights during times when vehicles are not currently present; however, the majority of vehicles would be expected to use the roadway during the daytime, and due to existing vegetation and other physical barriers along the roadway, headlights are not expected to be highly visible from other public viewpoints. The existing ASC bridge is at minimum soffit elevation (the top point of the inside open section of the bridge) of 257 feet, and the new bridge would be at a minimum soffit elevation of 269 feet, which is a 12-foot difference. As seen in Viewpoints 1 and 2 trees and other vegetation largely block the views looking east.

Significance Level

Less Than Significant Impact

6.2 Agriculture and Forestry Resources

According to the County's Zoning and Land Use Map, land uses surrounding the project area are designated as Diverse Agriculture, Land Intensive Agriculture, and Resources & Rural Development (see **Figure 5**, Land Use) (County of Sonoma, 2019). According to the California Department of Conservation (CDOC) Important Farmland Finder Map, the area surrounding the project is designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Urban and Built-Up Land, and Other Land (California Department of Conservation, 2018). The nearest Williamson Act contract land is located approximately 0.65 mile southwest of the project area and would not be affected by the project (County of Sonoma, 2019). There is no land in the project area zoned as forestland.

The California Agricultural Land Evaluation and Site Assessment (LESA) Model (1997) prepared by the California Department of Conservation was utilized to assess impacts on agriculture and farmland. The LESA Model scoring thresholds assign a score based on a variety of factors which determine the value of the farmland being impacted.

- a. Would the project 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 (FMMP) of the California Resources Agency, to nonagricultural use?**

Comment

The project would require partial acquisition of APNs 118-020-014, 118-040-001, 117-080-037, 117-080-031, 117-080-022, and 118-040-004 (see **Table 5**). Most of these parcels are either partially or fully located on Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (see **Figure 7**, Farmland).



Sources: CA Department of Conservation 2018; ESRI 2023



FIGURE 7. FARMLAND
Asti Permanent Bridge Construction Project

Table 5. Right of Way Impacts within Farmlands

Assessor's Parcel Number	Right of Way Acquisition (Acres)	Total Acreage of Parcel	Farmland Classification	Prescriptive Right of Way ¹ Acquisition (Acres)	Temporary Construction Easement (Acres)
118-020-014 and 118-040-001	1.97	112.32	Farmland of Statewide Importance, Prime Farmland, Unique Farmland, Other Land, Urban and Built-Up Land	0.73	8.26
117-080-037	1.89	17.31	Prime Farmland, Unique Farmland, Other Land	0.11	0
117-080-031	0.04	3.56	Other Land	0.04	0
117-080-022	0.02	20.5	Grazing Land, Other Land	0	0
118-040-004	0	1	Farmland of Statewide Importance	0	0.08

The project would temporarily impact approximately 8.34 acres within parcels that contain farmland; however, the majority of this area is mapped as Urban and Built Up Land and Other Land; only a small area is mapped as farmland (see **Figure 8**, Farmland Zone of Influence). All areas of temporary impact would be restored following construction. The project would also permanently impact approximately 3.88 acres within parcels that contain farmland; however, this acreage would represent less than one percent of the 417.85 total acres within these properties. In addition, only 1.89 acres is currently under agricultural use (APN 117-080-037); the remaining area is within the river corridor. Therefore, the project would convert farmland to nonagricultural use; however, the amount would be minimal and all remaining land on the properties would remain available for agricultural uses. Additionally, the project provides more reliable year-round access to these properties, which would be expected to support the existing agricultural uses.

The LESA model was used to evaluate impacts to farmlands within the project area. In order for the project impact to be considered significant the project would need a score above the 80-point threshold. The project received a total LESA score of 18.87, which is not considered a significant impact.

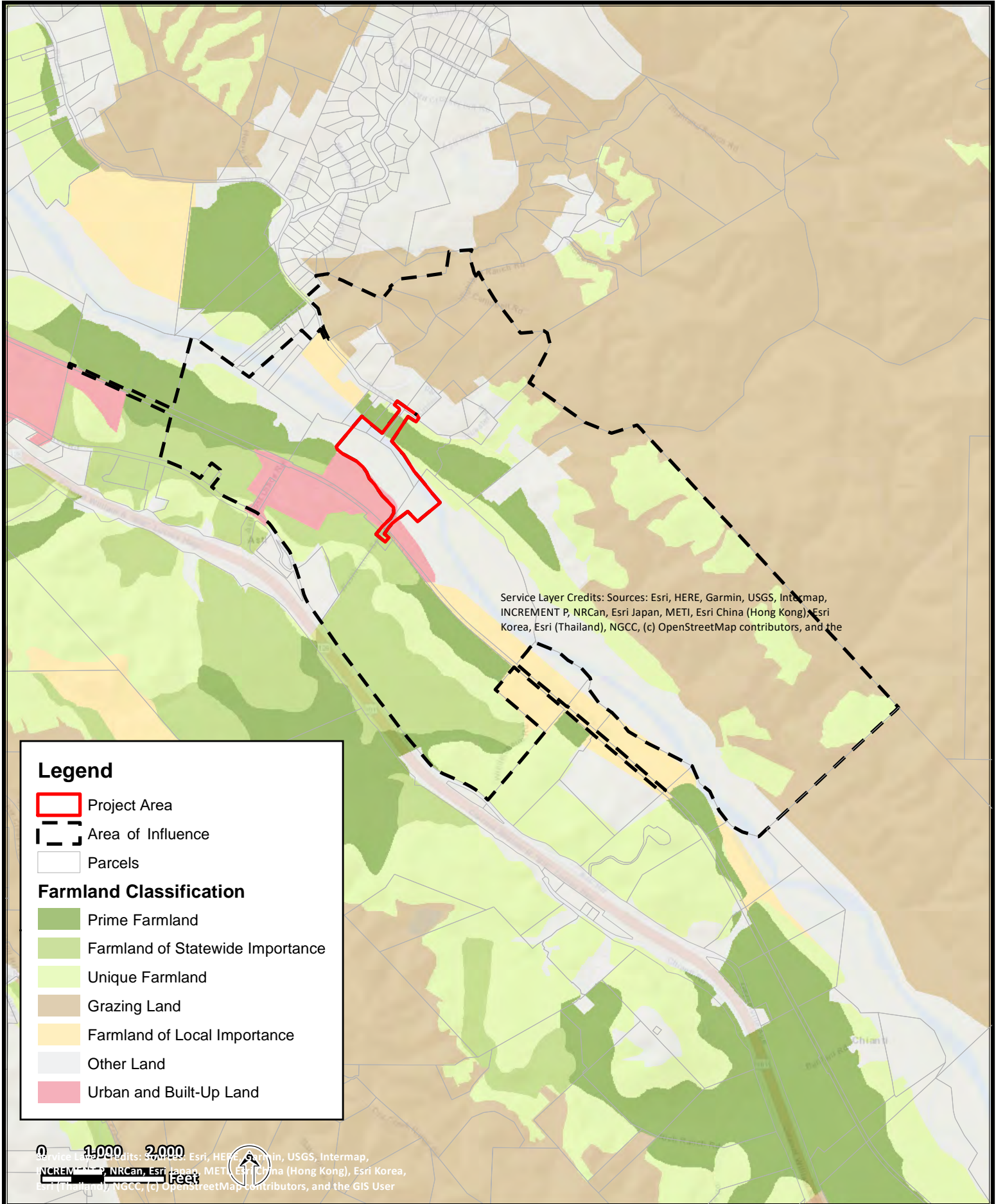
Significance Level

Less Than Significant Impact

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Comment

There are no Williamson Act contracts within or surrounding the project area; therefore, the project would not conflict with a Williamson Act contract.



Sources: CA Department of Conservation 2018; Sonoma County 2023; ESRI 2023



**FIGURE 8. FARMLAND AREA OF INFLUENCE
Asti Permanent Bridge Construction Project**

The project would require right of way from parcels zoned for agricultural use; however, the amount of acquisition would be minimal (less than one percent of the total land) and all remaining land on the properties would remain available for agricultural uses (see **Table 5**). The project provides more reliable year-round access to these properties, which would be expected to support the existing agricultural uses. Therefore, the project would not substantially conflict with existing zoning for agricultural use, or a Williamson Act contract.

Significance Level

Less Than Significant Impact

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production?

Comment

There is no land in the project area zoned as forestland, timberland, or for timberland production. Therefore, the project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production.

Significance Level

No Impact

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

Comment

There is no land in the project area zoned as forestland. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use.

Significance Level

No Impact

e. Would the project 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?

Comment

The project would require acquisition of a small amount of right of way through farmland.

However, the amount of acquisition would be a minimal area (less than one percent of the total land) and all remaining land would remain available for agricultural uses (see **Table 5**). The LESA model was used to evaluate impacts to farmlands within the project area. The project received a total LESA score of 18.87, which is not considered a significant impact. There is no land in the project area zoned as forestland. Therefore, the project would result in conversion of a minimal amount of farmland to non-agricultural use but would not result in conversion of forest land to non-forest use. In addition, the project would not result in other changes that would result in additional conversion of farmland.

Significance Level

Less Than Significant Impact

6.3 Air Quality

An Air Quality & Greenhouse Gas Impact Assessment was prepared for the project (Ambient Air Quality and Noise Consulting, 2023a). The project is located in the unincorporated area of Asti in Sonoma County, within the North Coast Air Basin (NCAB) and within the jurisdiction of the Northern Sonoma County Air Pollution Control District (NSCAPCD). Air quality in the NSCAPCD is influenced by a variety of factors, including topography, and local and regional meteorology. Northern Sonoma County is currently designated attainment for all pollutants and falls below the standards set in the National and California Ambient Air Quality Standards.

The project area is not in or near an area that has been identified as having a potential for naturally-occurring asbestos (NOA) (Ambient Air Quality and Noise Consulting, 2023a). However, asbestos-containing material (ACM) may be present in existing structures within the project area. The demolition of existing structures may be subject to regulatory requirements for the control of ACM. ACM may also be encountered during utility relocation. If ACM is encountered during utility relocation, compliance with National Emission Standards for Hazardous Air Pollutants standards would be required (40 Code of Federal Regulations 61, Subpart M-Asbestos NESHAP). These requirements include but are not limited to 1) notification, within at least 10 business days of activities commencing, to the NSCAPCD, 2) an asbestos survey conducted by a Certified Asbestos Consultant, and 3) applicable removal and disposal requirements of identified ACM. The nearest sensitive receptors within the project area are predominately residential dwellings located adjacent to Washington School Road and River Road, approximately 450 feet from the roadway.

When 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?

Comment

Air districts are required to prepare air quality plans to identify strategies to bring regional emissions into compliance with federal and state air quality standards. The project area is located in the NCAB, where air quality is regulated by the NSCAPCD. The Air Basin is in attainment for all federal ambient air quality standards, and the NSCAPCD is not required to prepare or implement an air quality plan. Therefore, there is no applicable air quality plan with which the project could conflict.

Significance Level

No Impact

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?

Comment

Project construction would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., reactive organic compounds (ROG) and nitrogen oxides (NO_x) and emissions of particulate

matter (PM)). Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

The NSCAPCD has not yet adopted recommended CEQA thresholds of significance for the evaluation of project-generated emissions. To assist in the evaluation of air quality impacts, the NSCAPCD recommends using thresholds and guidance that the Bay Area Air Quality Management District (BAAQMD) has developed. Emissions would be largely a result of mobile-source emissions associated with construction vehicle and equipment operations anticipated to occur during the land clearing and construction phases.

The maximum daily emissions associated with construction would total approximately 17.9 lbs/day of ROG, 48.0 pounds (lbs/day) of carbon monoxide (CO), 21.3 pounds/day of NO_x, 0.5 lbs/day of PM measuring 10 microns or smaller (PM₁₀) exhaust, and 0.4 lbs/day of PM measuring 2.5 microns or smaller (PM_{2.5}) exhaust. The maximum daily construction emissions of criteria pollutants would not exceed the BAAQMD's recommended daily significance thresholds, which are 54 lbs/day of ROG, 54 lbs/day of NO_x, 82 lbs/day of PM₁₀ exhaust, and 54 lbs/day of PM_{2.5} exhaust.

If not controlled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. However, the mitigation measures listed below would reduce the emissions of generated fugitive dust and mobile-source PM made during construction.

Long-term operational emissions resulting from the new bridge would be associated with mobile sources. According to the traffic report prepared for this project, vehicle miles traveled within the region are not expected to increase due to the implementation of the project (TJKM, 2023). Therefore, the amount of PM, volatile organic compounds (VOC), CO, and other emissions would not increase upon the completion of construction. The project would not 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. In addition, the project would eliminate the need for yearly construction of the ASC, and any pollutant emissions created during those activities. Once construction is complete, annual pollution impacts would no longer result from the ASC.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

The following measures would be implemented to reduce construction generated emissions:

- AQ-1:** All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) would be watered a minimum of two times per day.
 - AQ-2:** All haul trucks transporting soil, sand, or other loose material off-site would be covered.
 - AQ-3:** All visible mud or dirt track-out onto adjacent public roads would be removed by using wet power vacuum street sweepers at least once per day. The use of dry power sweeping would be prohibited.
 - AQ-4:** All vehicle speeds on unpaved roads would be limited to 15 mph.
 - AQ-5:** All roadways, driveways, and sidewalks to be paved would be completed as soon as
-

possible.

- AQ-6:** Idling times would be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage would be provided for construction workers at all access points.
- AQ-7:** All construction equipment would be maintained and properly tuned in accordance with manufacturer specifications. All equipment would be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- AQ-8:** Publicly-visible signage would be posted with the telephone number and person to contact at the County regarding dust complaints. The County staff person would respond and take a corrective action within 48 hours. The BAAQMD's phone number would also be visible to ensure compliance with applicable regulations.

c. Expose sensitive receptors to substantial pollutant concentrations?

Comment

Asbestos-containing material (ACM) may be present in existing structures within the project area. The demolition of existing structures may be subject to regulatory requirements for the control of ACM. ACM may also be encountered during utility relocation. If ACM is encountered during utility relocation, compliance with National Emission Standards for Hazardous Air Pollutants standards would be required (40 Code of Federal Regulations 61, Subpart M-Asbestos NESHAP). These requirements include but are not limited to 1) notification, within at least 10 business days of activities commencing, to the NSCAPCD, 2) an asbestos survey conducted by a Certified Asbestos Consultant, and 3) applicable removal and disposal requirements of identified ACM.

Fugitive dust emissions would be generated during site preparation, grading, and vehicle travel on unpaved and paved surfaces. On-site off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM, which could contribute to elevated localized concentration at nearby receptors. Uncontrolled emissions of fugitive dust may also contribute to potential increases in nuisance impacts to nearby receptors. However, measures listed above would reduce the emissions of generated fugitive dust and mobile-source PM made during construction.

Based on the Traffic Analysis prepared for the project, implementation of the project would not result in an increase in traffic volumes or a degradation of traffic operations at nearby intersections (TJKM, 2023). This, combined with the low background CO concentrations in the project area, would result in a low potential for exposure to localized concentrations of CO attributable to the project. Therefore, the project would not expose sensitive receptors to substantial pollutant concentrations. In addition, the project would eliminate the need for yearly construction of the ASC, and any pollutants created during those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **AQ-1** through **AQ-8** listed above would be implemented to reduce project impacts related to pollutants.

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

Comment

The project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. In addition, there are no known odor sources within one mile of the project area. Construction would include the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. These exhaust emissions include VOCs, CO, ozone, nitrogen dioxide, and oxides of sulfur. In addition, pavement coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the odor source. Therefore, short-term construction activities would not expose a substantial number of people to frequent odorous emissions. In addition, the project would eliminate the need for yearly construction of the ASC, and any odors created during those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **AQ-6** and **AQ-7** listed above would be implemented to reduce project impacts related to odors.

6.4 Biological Resources

A Biological Resources Assessment was prepared for the project (GPA Consulting, 2024). GPA Consulting established a Biological Study Area (BSA) for the project. The project limits were determined by coordinating with the project design team and reviewing aerial imagery. The BSA includes areas that could be directly and indirectly impacted by the project, either temporarily or permanently (see **Figure 9**). The BSA includes the permanent footprint of the project, construction access routes, construction staging areas, water diversion area, and temporary grading areas.

The BSA was surveyed on four different dates: June 6, 2022, May 18, 2023, June 13, 2023, and August 21, 2023. A general reconnaissance survey was conducted by GPA biologist Marieka Schrader and environmental planner Erinn Silva on June 6, 2022. A plant survey was conducted on May 18, 2023, by GPA biologists Marieka Schrader and Mario Mayo to inventory plant species observed in the BSA. Vegetation mapping and a jurisdictional delineation were conducted on June 13, 2023, by GPA biologists Marieka Schrader, Mario Mayo, Angela Scudiere, and Patrick Griggs. The entire BSA was visually surveyed on foot to the extent feasible. Results of this work are summarized below.

Plants

Based on research and field surveys, there is potential for 13 special-status plant species to be in the project area including bent-flowered fiddleneck (*Amsinckia lunaris*), watershield (*Brasenia schreberi*), narrow-anthered brodiaea (*Brodiaea leptandra*), three-fingered morning-glory (*Calystegia collina* ssp. *tridactylosa*), bristly sedge (*Carex camosa*), Koch's cord moss (*Entosthodon kochii*), congested-headed hayfield tarplant (*Hemizonia congesta* ssp. *congesta*), Colusa layia (*Layia septentrionalis*), Jepson's leptosiphon (*Leptosiphon jepsonii*), woolly meadowfoam (*Limnanthes floccosa* ssp. *floccosa*), eel-grass pondweed (*Potamogeton zosteriformis*), beaked tracyina (*Tracyina rostrata*), and Napa bluecurls (*Trichostema ruygtii*) (GPA Consulting, 2024).



Source: ESRI 2023



FIGURE 9. BIOLOGICAL STUDY AREA
Asti Permanent Bridge Construction Project

Wildlife

According to the Biological Resource Assessment prepared for the project, there is potential for 18 special-status wildlife species to be in the project area including obscure bumble bee (*Bombus caliginosus*), Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*), freshwater isopod (*Calasellus californicus*), Russian River tule perch (*Hysterothorax traskii* pomom), steelhead - central California coast Distinct Population Segment (DPS) (*Oncorhynchus mykiss irideus* pop. 8), Chinook salmon – California coastal ESU (*Oncorhynchus tshawytscha*), foothill yellow-legged frog - north coast DPS (*Rana boylei* pop. 1), California red-legged frog (*Rana draytonii*), red-bellied newt (*Taricha rivularis*), northwestern pond turtle (*Actinemys marmorata*), grasshopper sparrow (*Ammodramus savannarum*) burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), purple martin (*Progne subis*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), North American porcupine (*Erethizon dorsatum*) and western red bat (*Lasiurus blossevillii*) (GPA Consulting, 2024).

Natural Communities

Based on survey results, there is Great Valley Cottonwood Riparian Forest, Great Valley Valley Oak Riparian Forest, and Valley Oak Woodland in the project area (see **Figure 10**, Vegetation Communities and Cover Classes). These communities are also riparian habitats.

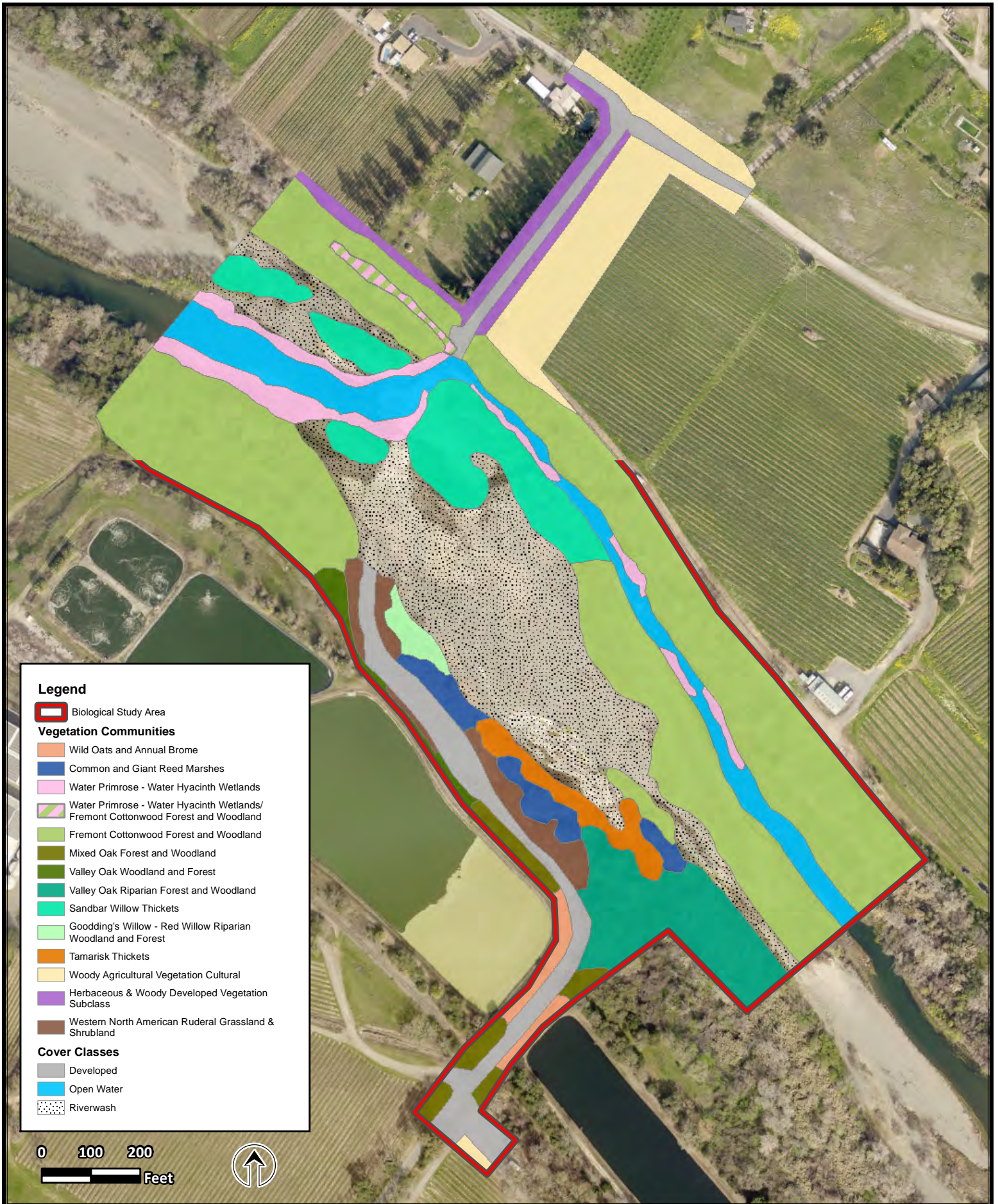
Jurisdictional Resources

The Russian River flows perennially to the Pacific Ocean. At the time of survey, Unnamed Drainage 1 had flowing water and unrestricted flows downstream to the Russian River. Unnamed Drainage 2 appears to have seasonal flows and unrestricted flows downstream to the Russian River. Therefore, the Russian River, Unnamed Drainage 1 and Unnamed Drainage 2 are expected to fall under jurisdiction of the USACE, RWQCB, and CDFW (see **Figure 11**, Potential United States Army Corps of Engineers and Regional Water Quality Control Board Jurisdiction and **Figure 12**, Potential California Department of Fish and Wildlife Jurisdiction). Approximately 1.29 acres of wetlands and 15.68 acres of non-wetland waters of the United States and state were delineated in the project area. Approximately 25.02 acres under CDFW jurisdiction were delineated in the project area.

Wildlife Corridors

According to the CDFW BIOS database, the project area is located in an area where connectivity corridor use is low (California Department of Fish and Wildlife, 2023). Therefore, the project area is not expected to be an essential corridor for terrestrial wildlife movement. There is some potential for local terrestrial wildlife movement through the riparian habitat within the project area; however, the project area is disturbed and the surrounding areas are partially developed with residential, agricultural, and transportation uses. In addition, installation and use of the seasonal crossing every year and seasonal use of the roadway likely are a disturbance to terrestrial wildlife movement. The Russian River flows perennially and is designated as critical habitat for several salmonid fish species and is likely used for migration. In addition, there is suitable habitat for other fish and aquatic species within the river. Therefore, the river corridor is expected to be utilized as a movement corridor for aquatic wildlife.

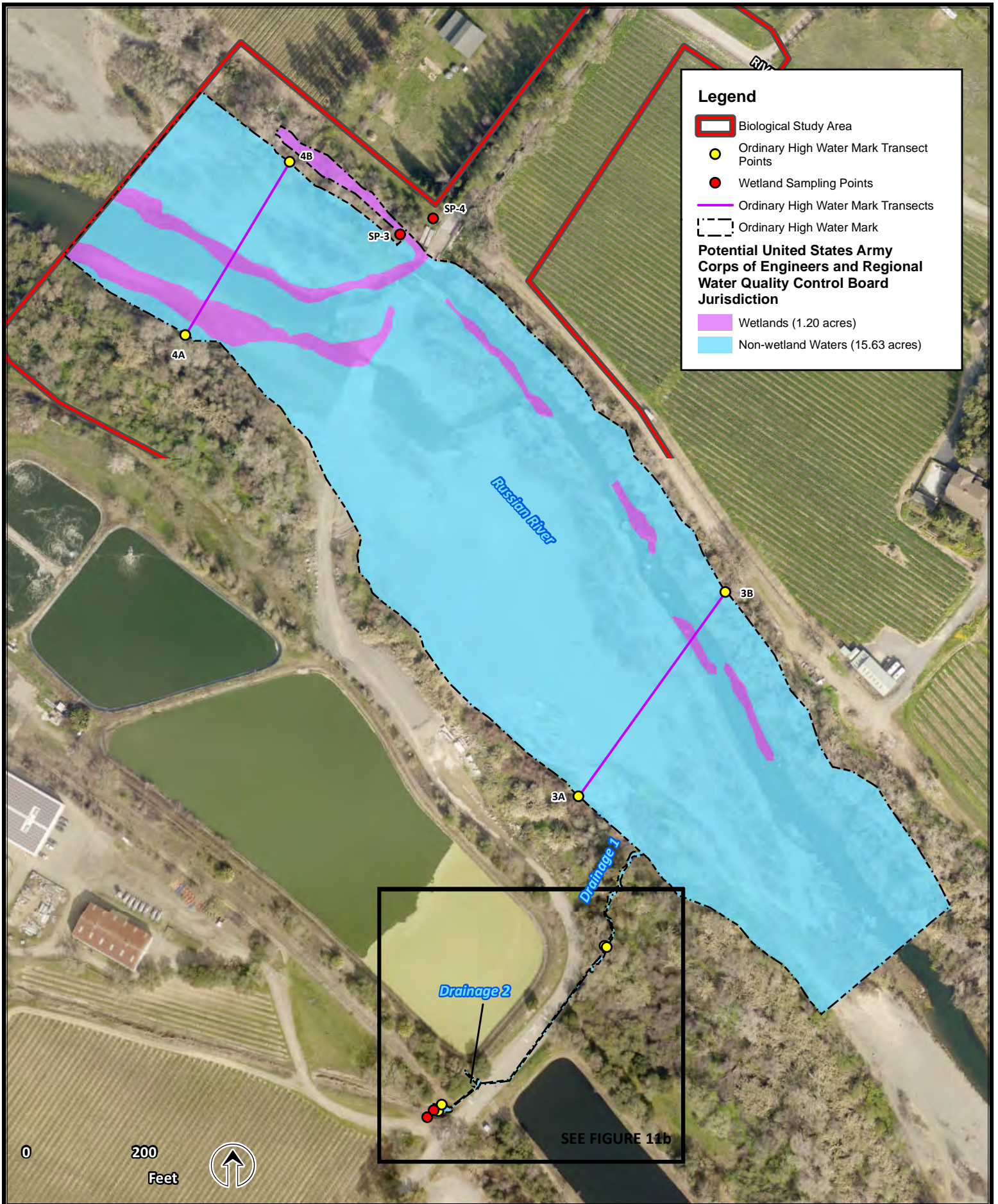
- a. **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS?**
-



Source: ESRI 2023



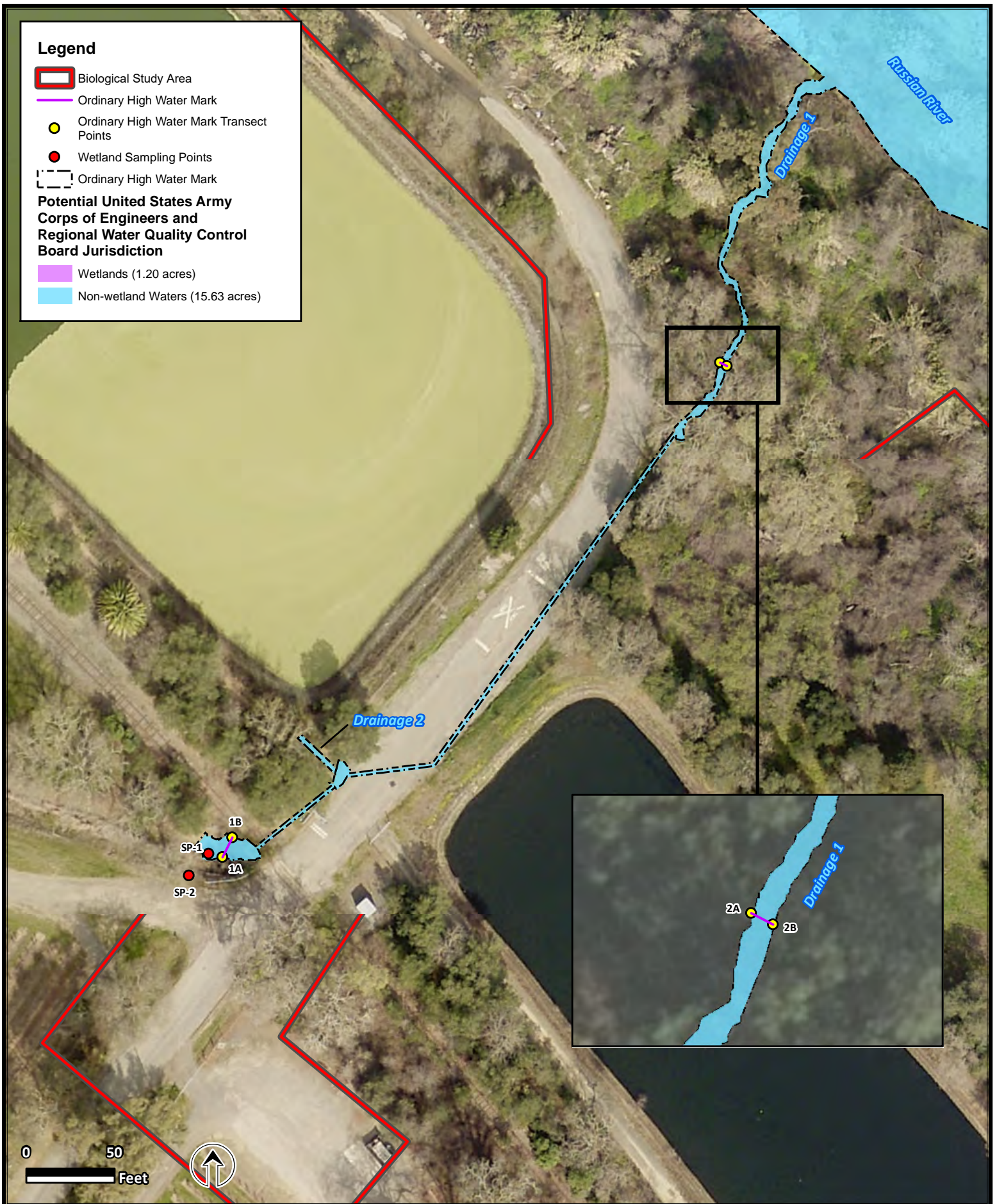
**FIGURE 10. VEGETATION COMMUNITIES AND COVER CLASSES
Asti Permanent Bridge Construction Project**



Source: ESRI 2023



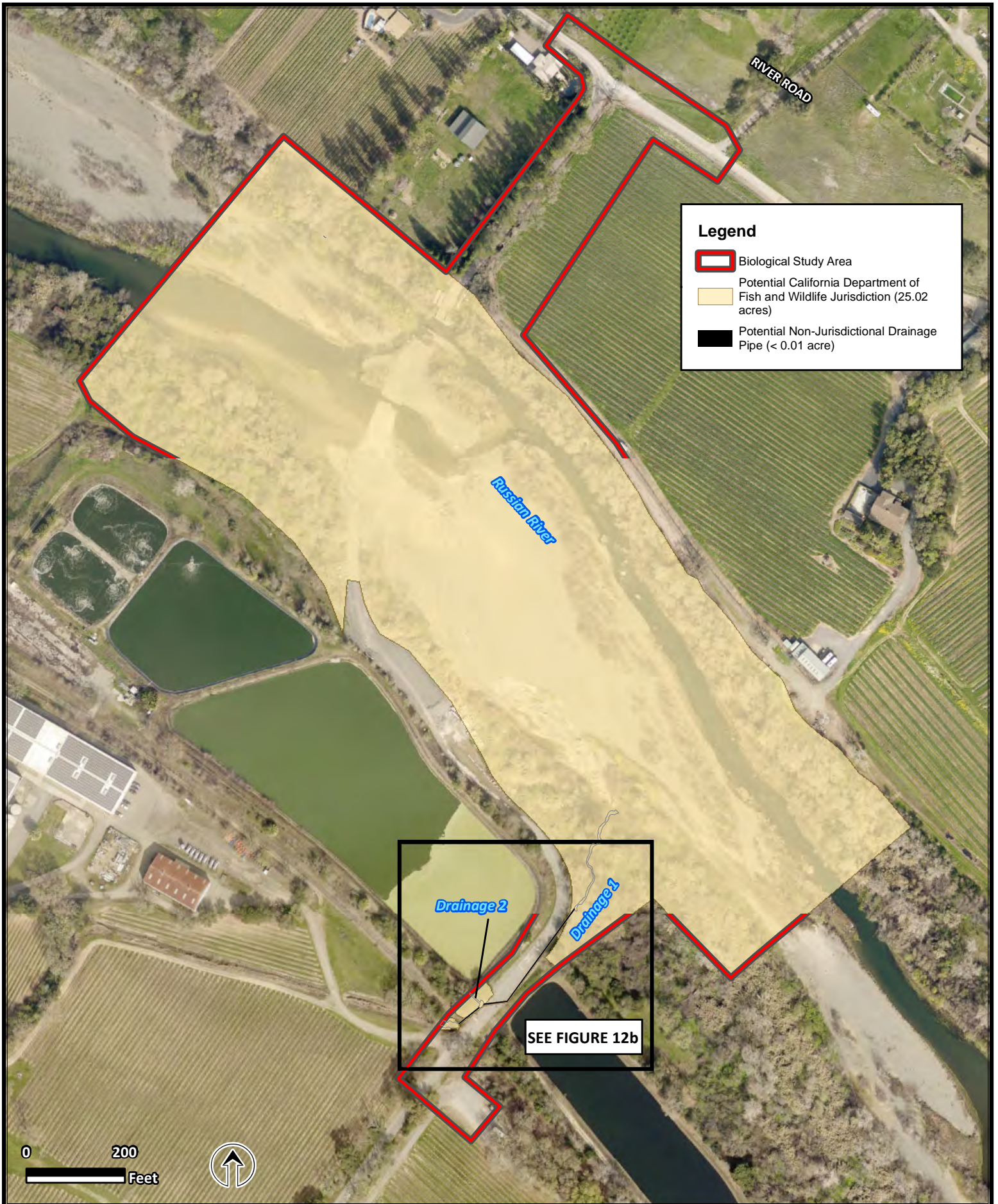
FIGURE 11a. POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Asti Permanent Bridge Construction Project



Source: ESRI 2023



FIGURE 11b. POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION Asti Permanent Bridge Construction Project



Source: ESRI 2023



FIGURE 12a. POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Asti Permanent Bridge Construction Project



Source: ESRI 2023



FIGURE 12b. POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Asti Permanent Bridge Construction Project

Comment

For the purposes of this assessment, special-status species are those that are listed as rare, species of concern, candidate, threatened or endangered by the United States Fish and Wildlife Service (USFWS), NOAA Fisheries, and CDFW.

Plants

Although not observed during surveys, there is a low potential for bent-flowered fiddleneck, narrow-anthered brodiaea, three-fingered morning glory, Koch's cord moss, Jepson's leptosiphon, and woolly meadowfoam to be within the marginal oak woodland and riparian habitat within the BSA. There is a low potential for bristly sedge, congested headed hayfield tarplant, Colusa layia, beaked tracyina, and Napa bluecurls to be within the marginal grassland habitat within the BSA. There is a low potential for watershield and eel-grass pondweed to be within the aquatic and stream habitat within the BSA. Vegetation removal, excavating, grading, paving, pedestrian movement, and water diversion activities could result in direct impacts on these special-status plant species if they were within the limits of work at the time of construction. Direct impacts on special-status plants could include trampling or removal during construction of the new roadway approach and bridge abutments, construction of the new bridge piers, and installation of the temporary water diversion. Additionally, construction activities could result in the production of dust, which could travel into adjacent areas and affect the health of special-status plants. The project would also require removal of approximately 22 trees, including black oak, valley oak, interior live oak, sandbar willow, arroyo willow, and date palm. However, the project would be constructed in compliance with dust control regulations, and with implementation of the avoidance and minimization measures, substantial impacts on special-status plants within oak woodland and riparian habitat are not anticipated.

Wildlife

Invertebrates

Although not observed during surveys, there is a low potential for obscure bumble bee to be within the marginal oak woodland and riparian habitat within the BSA and Ricksecker's scavenger beetle and freshwater isopod to be within the aquatic and stream habitat within the BSA. Vegetation/tree removal and trimming, staging, pedestrian and vehicle movement, paving, and grading could result in direct and indirect impacts on obscure bumble bee, if present during construction. Installation of the water diversion could result in direct and indirect impacts on Ricksecker's water scavenger beetle and freshwater isopod, if present during construction.

Direct impacts on obscure bumble bee could include trampling or crushing of individuals, resulting in mortality, or destruction of bumble bee nests. Indirect impacts could include vibration, and human activity during construction activities, which could result in disturbance and disruption of bee foraging. However, there is a low potential for this species to be in the BSA and with the implementation of avoidance and minimization measures discussed below, impacts on obscure bumble bee are not anticipated.

Direct impacts on Ricksecker's water scavenger beetle and freshwater isopod could include trampling or crushing, resulting in mortality. Russian River would also be channelized during construction, which could indirectly impact movement within the BSA. However, there is a low potential for this species to be in the BSA and with the implementation of avoidance and minimization measures discussed below, impacts on Ricksecker's water scavenger beetle are not anticipated. Following construction, the new bridge would restore the river channel to a more natural condition and would be expected to enhance existing aquatic habitats.

Fish

Although not observed during surveys, there is potential for Russian River tule perch, steelhead - Central California Coast DPS, and chinook salmon – California Coastal ESU to be within the aquatic and stream habitat within the BSA. In addition, the BSA is within critical habitat for the steelhead and chinook salmon. Installation and removal of the water diversion and capture and relocation of fish out of the water diversion area could result in direct and indirect impacts on Russian River tule perch, steelhead - Central California Coast DPS, and chinook salmon – California Coastal ESU, should they be present in the construction area.

Direct impacts on fish could include crushing or entrapment, result in injury or mortality. Indirect impacts could include concrete dust, debris, and construction materials falling into the river during the removal of the ASC abutments and piers and construction of the new bridge, which could affect water quality. Removal of vegetation and trees along the banks could also reduce cover and shade over the river, increase erosion and input of fine sediments into the river, increase water temperatures, reduce water quality, and degrade critical habitat.

Although a portion of the channel would be dewatered, flows would be diverted and maintained in the low flow channel throughout construction to allow for unobstructed fish passage through the BSA. With the implementation of avoidance and minimization measures discussed below, impacts on fish would be substantially minimized. However, the project may result in adverse impacts on steelhead and chinook salmon and formal consultation with NOAA Fisheries is anticipated. Following construction, the temporary low water crossing would no longer need to be rebuilt yearly, and therefore, would no longer result in annual disturbances of the river channel. The river channel would return to a more natural condition where the channel could migrate and braid in a more natural way based on seasonal flows which would most likely enhance existing aquatic habitats.

Central California Coast Steelhead and California Coastal Chinook Salmon Critical Habitat

Project activities, including removal of the ASC abutments and piers, installation and removal of a water diversion structure, tree and vegetation removal, grading, paving, and construction of the new permanent bridge, could result in direct impacts on Central California Coast steelhead and California Coastal Chinook Salmon critical habitat. In addition, there is potential for concrete dust, debris, and construction materials to fall into the river. Direct effects from in-water work include the temporary alteration of the channel, a change in flow velocity, and removal of vegetation which could result in temporary water quality degradation from increased sedimentation and/or turbidity, introduction of pollutants, loss of shade, and increased water temperature. With implementation of measures listed below, the project would not result in substantial adverse effects on Central California Coast steelhead and California Coastal Chinook Salmon critical habitat. In addition, the project would eliminate the need for yearly construction of the ASC, and any impacts on fish habitat during those activities.

Amphibians

Although not observed during surveys, there is potential for foothill yellow-legged frog – North Coast DPS, California red-legged frog, and red-bellied newt to be within the aquatic and upland habitats in the project area, including oak woodlands, riparian, grassland, and stream habitats. Vegetation removal and trimming, paving, staging, pedestrian and vehicle movement, grading, and water diversion activities could result in direct and indirect impacts on foothill yellow-legged frog – North Coast DPS, California red-legged frog, and red-bellied newt if present during construction.

Direct impacts could include trampling or crushing, which could result in injury or mortality. Indirect

impacts could include temporary habitat loss and increases in noise, vibration, and human activity during construction. However, there is a low potential for California red-legged frog and red-bellied newt to be in the BSA, and with the implementation of avoidance and minimization measures discussed below, impacts on foothill yellow-legged frog – North Coast DPS, California red-legged frog, and red-bellied newt would be substantially minimized. However, the project may result in impacts on California red-legged frog, and informal consultation with the USFWS is anticipated. Following construction, the new bridge would restore the river channel to a more natural condition and would be expected to enhance existing aquatic and upland habitats.

Reptiles

Although not observed during surveys, there is potential for northwestern pond turtle to be within the aquatic and upland habitats in the project area, including oak woodlands, riparian, grassland, and river and stream habitats. Vegetation removal and trimming, paving, staging, pedestrian and vehicle movement, grading, and water diversion activities could result in direct and indirect impacts on the northwestern pond turtle if present during construction.

Direct impacts could include trampling or crushing, which could result in injury or mortality. Indirect impacts could include temporary habitat loss and increases in noise, vibration, and human activity during construction. With the implementation of avoidance and minimization measures discussed below, impacts on northwestern pond turtle would be substantially minimized. However, the project may result in adverse impacts on this species, and formal consultation with the USFWS is anticipated. Following construction, the new bridge would restore the river channel to a more natural condition and would be expected to enhance existing aquatic habitats.

Birds

Although not observed during surveys, there is a potential for grasshopper sparrow (foraging only), burrowing owl, white tailed kite, and purple martin to be within the existing trees and vegetation in the project area, including oak woodlands, riparian, grassland, and river and stream habitats. Vegetation/tree removal and trimming, staging, pedestrian and vehicle movement, and grading could result in direct or indirect impacts on grasshopper sparrow (indirect only), burrowing owl, white tailed kite, and purple martin if foraging or nesting in or near the construction area.

Direct impacts could include crushing or trampling of individuals and destruction of nests or burrows, which could result in injury or mortality. Indirect impacts could include increased noise and vibration levels and human activity, which could result in foraging disruption and nest abandonment. However, the potential for burrowing owl to be in the BSA is low, and with implementation of avoidance and minimization measures discussed below, impacts on grasshopper sparrow (indirect only), burrowing owl, white tailed kite, and purple martin are not anticipated. Take of the white-tailed kite, a fully protected species by the CDFW, is not anticipated. In addition, there is potentially suitable habitat for these species up and downstream of the BSA that could be utilized during construction. Following construction, the new bridge would restore the river channel to a more natural condition and would be expected to enhance existing bird habitats.

Mammals

Although not observed during surveys, there is a potential for pallid bat, Townsend's big-eared bat, western red bat, and North American porcupine to be within the existing trees in the project area, including the oak woodland and riparian habitats. Vegetation/tree removal and trimming, staging, pedestrian and vehicle movement, and grading could result in direct and indirect impacts on pallid bat, Townsend's big-eared bat, and western red bat, if roosting in trees in or near the construction area.

Direct impacts could include crushing during vegetation/tree removal, which could result in injury or mortality. Indirect impacts could include roost abandonment resulting from increased construction noise and vibration, which could result in disturbance causing roost abandonment or foraging disruption. However, with implementation of avoidance and minimization measures discussed below, impacts on pallid bat, Townsend's big-eared bat, and western red bat, are not anticipated.

Vegetation removal and trimming, paving, staging, pedestrian and vehicle movement, and grading could result in direct and indirect impacts on the North American porcupine if present during construction. Direct impacts could include trampling or crushing, which could result in injury or mortality. Indirect impacts could include temporary habitat loss and increases in noise, vibration, and human activity during construction. With the implementation of avoidance and minimization measures discussed below, impacts on North American porcupine are not anticipated.

Significance Level

Less Than Significant with Mitigation Incorporated

Mitigation Measures

Special-Status Plant Species

The Measure **VIS-3** from *Section 6.1, Aesthetics*, and following measures would be implemented to minimize impacts on special-status plants:

- BIO-1:** No more than a year prior to construction, a qualified biologist would conduct a pre-construction plant survey within the construction area to reconfirm presence and/or absence of special-status plant species within the project area. Surveys would be conducted during the appropriate blooming period (typically March to July) for species with potential to be in the construction area.
- BIO-2:** If a special-status plant is found during pre-construction surveys, high visibility environmentally sensitive area (ESA) protective fencing would be installed around the special-status plants to prevent construction staff or equipment from entering this area. The ESA protective fencing buffer would be species specific, with a minimum buffer radius based on the guidance from a qualified biologist. If resources cannot be avoided, biologist would collect seed to be disbursed within suitable habitat areas within the site for reestablishment.
- BIO-3:** If it is determined that special-status plants cannot be avoided, a species-specific mitigation plan will be prepared by a qualified biologist. All efforts will be made to mitigate on site as part of the project restoration efforts through plant relocation and/or seed collection and dispersal. A qualified biologist will ensure areas are revegetated and/or reseeded within suitable existing habitat for specific species impacted. If these methods are not feasible, then off-site restoration and/or payment into an agency-approved mitigation bank would be implemented in coordination with regulatory agencies. The plan will be prepared and approved prior to project completion.
- BIO-4:** On-site revegetation efforts will be monitored and maintained as necessary for five years. At the end of the five years of monitoring, with at least three years without supplemental irrigation, each category of plantings (e.g., oaks, other trees, shrubs, etc.) will have a minimum of 85 percent survival at the end of the minimum monitoring period.
- BIO-5:** Tree removal would be minimized to the extent feasible. Removal of trees will be mitigated on site or off site at East Austin Creek Mitigation Bank at the following ratios:
- 1:1 for removal of non-native trees;
-

- 1:1 for removal of native trees up to three inches diameter at breast height (DBH);
- 3:1 for removal of native trees between three and six inches DBH;
- 6:1 for removal of native trees greater than six inches DBH;
- 4:1 for removal of oak trees up to six inches DBH;
- 8:1 for removal of oak trees between six and 15 inches DBH; and
- 10:1 for removal of oak trees greater than 15 inches DBH.

Special-Status Wildlife Species

Invertebrates

The following measures would be implemented to minimize impacts on special-status invertebrate species:

- BIO-6:** Within 48 hours prior to construction, a qualified biologist would survey all areas where vegetation removal would be conducted to confirm the presence/absence of the special-status invertebrates.
- BIO-7:** If a special-status invertebrate nest is identified within the project area, high visibility ESA protective fencing would be installed around the nest to prevent construction staff or equipment from entering this area. The ESA protective fencing buffer would be species specific, with a minimum buffer radius based on the guidance from a qualified biologist. If resource cannot be avoided, nests would be relocated to suitable habitat near the project area in consultation with appropriate resource agencies as applicable.
- BIO-8:** If a special-status invertebrate is identified within the project area, areas temporarily impacted during construction would be restored using native species using one or more of the food plant genera, as appropriate for the region.

Fish

In addition to the measures described above, The following measures would be implemented to minimize impacts on special-status fish species and critical habitat:

- BIO-9:** Project activities within the active flow of the Russian River would be limited to between June 15 and October 15.
- BIO-10:** A NOAA Fisheries approved fish biologist would be onsite prior to and during any activities within the wetted channel to rescue and relocate any fish, via block netting or e-fishing, that are observed in an isolated area during active de-watering. Rescued fish would be relocated to suitable areas within the Russian River downstream of the project area.
- BIO-11:** Installation of the temporary water diversion, including temporary dams or artificial obstructions, would be constructed with materials that would cause little to no siltation within the Russian River, such as cleaned river gravel. Flows within the Russian River would be diverted in such a way that prevents and/or minimizes downstream turbidity. Flows to downstream reaches of the Russian River would be uninterrupted to ensure support for aquatic wildlife and maintain an ideal temperature to support fish upstream and downstream of the temporary water diversion.
- BIO-12:** No heavy equipment would be operated within the Russian River where surface water is present.
- BIO-13:** Mitigation for permanent impacts on critical habitat will be accomplished through on-site creation, restoration, and enhancement. Mitigation will be at a minimum ratio of 1:1 for temporary impacts and 3:1 for permanent impacts; however, the final ratio will be established through consultation and coordination with regulatory agencies during the permitting process. It is anticipated that approximately 0.007 acre of habitat creation and 0.021 acre of habitat enhancement would be conducted within the ordinary high water
-

mark of the river channel. Mitigation for permanent impacts on aquatic species and their critical habitat will be combined with mitigation for jurisdictional features and native communities, as appropriate.

Amphibians

The following measures would be implemented to minimize impacts on special-status amphibian species:

- BIO-14:** At least two weeks prior to the commencement of ground-disturbing activities, the construction area and a minimum 500-foot radius surrounding the construction area, would be assessed by a qualified biologist for the presence of suitable habitat for special-status amphibians, including foothill yellow-legged frog – north coast distinct population segment (DPS), California red-legged frog, and red-bellied newt. Habitat features may include aquatic habitat, such as plunge pools and ponds, and terrestrial habitat, such as burrows or other refugia. Any burrows and refugia sites observed during pre-construction surveys would be flagged or otherwise marked for avoidance. These areas would be avoided to the extent feasible.
- BIO-15:** If habitat is identified during initial surveys, a qualified biologist would complete pre-construction surveys no more than 48 hours prior to construction to determine the presence or absence of special-status amphibian species in the project area. The results of the habitat feature assessment and survey shall be submitted to the CDFW for written acceptance prior to starting project activities.
- BIO-16:** Work areas would be encompassed by temporary exclusion fencing to limit species ability to move into construction zones. The fence would be made of a smooth material that does not allow wildlife to climb or pass through, of a minimum above-ground height of 30 inches, and the bottom would be buried to a depth of at least six inches so that individuals cannot crawl under the fence. Installation of the fence would be monitored by a qualified biologist with experience with these species, who would check the fence alignment prior to vegetation clearing and fence installation to ensure no sensitive species are present. The protective fencing would be checked daily to ensure it is in working order and no wildlife is trapped.
- BIO-17:** Any burrows and refugia sites observed during pre-construction surveys would be flagged or otherwise marked for avoidance. These areas would be avoided to the extent feasible.
- BIO-18:** If a California red-legged frog is encountered during the assessment or construction activities, all activities would be halted and no work would proceed. The CDFW would be notified immediately and no work would be re-initiated until the frog, through its own volition, moves out of harm's way and CDFW has provided permission in writing to proceed with construction activities. If a California red-legged frog is encountered and/or the qualified biologist determines that impacts on the species are likely, consultation with the USFWS would be conducted pursuant to the Federal Endangered Species Act and written approval would be obtained from CDFW prior to the impact. Any additional protection measures requested through this consultation would be implemented as part of the project.
- BIO-19:** If the California red-legged frog and/or foothill yellow-legged frog is found in the construction area, the encounter would be treated on a case-by-case basis in coordination with regulatory agencies, but the general procedure would be as follows: 1) work would immediately be suspended in the vicinity of the frog; 2) a qualified biologist would evaluate the animal; 3) the animal would not be disturbed if it is not in danger and would be allowed to exit the construction site on its own.
-

BIO-20: To prevent inadvertent entrapment of the special-status wildlife species or other animals during construction, all excavated, steep-walled holes or trenches more than six inches deep would be provided with one or more escape ramps constructed of earthen fill or wooden planks. Before such holes or trenches are filled, they would be thoroughly inspected for trapped animals by a qualified biologist.

Reptiles

The following measures would be implemented to minimize impacts on special-status reptile species:

BIO-21: A qualified biologist would complete pre-construction surveys no more than 48 hours prior to construction to determine the presence or absence of northwestern pond turtle in the project area. Surveys would be repeated if construction activities are suspended for five days or more. If these species are identified onsite, appropriate measures would be developed and implemented to avoid impacts on this species, in consultation with appropriate resource agencies as applicable. Measures may include relocating individuals to outside the project area, limiting construction within the project area to avoid impacting these species, or other measures as determined by a qualified biologist in coordination with regulatory agencies.

Birds

The following measures would be implemented to minimize impacts on special-status bird species:

BIO-22: Trimming and removal of vegetation would be minimized and performed outside of the nesting season (February 1 to September 15), to the extent feasible. In the event that trimming or removal of vegetation and/or initial ground disturbance must be conducted during the nesting season, nesting bird surveys would be completed within 500 feet of the construction area (typically 500 feet for raptors and 300 feet for other birds), by a qualified biologist no more than 72 hours prior to activities. Surveys would be repeated if construction activities are suspended for five days or more.

BIO-23: Active bird nest sites found within 500 feet of the construction area would be designated as ESA and protected (while occupied) during construction with an appropriate buffer. Buffer distances for bird nests would be site specific and an appropriate distance, as determined by a qualified biologist. The buffer distances would be specified to protect the bird's normal behavior thereby preventing nesting failure or abandonment. The buffer distance recommendation would be developed after field investigations that evaluate the bird(s) apparent distress in the presence of people or equipment at various distances. The qualified biologist would have authority to order the cessation of all nearby project activities if the nesting bird(s) exhibits signs of distress. A qualified biologist would monitor the behavior of the bird(s) at the nest site to ensure that they are not disturbed by construction activities. Nest monitoring would continue during construction until the young have fully fledged, as determined by the qualified biologist, unless otherwise approved in writing by CDFW.

BIO-24: A qualified biologist would conduct a habitat assessment for wintering burrowing owl, and surveys where habitat is present. The qualified biologist shall follow the California Department of Fish and Game (now CDFW) 2012 Staff Report on Burrowing Owl Mitigation (CDFW 2012 Staff Report) habitat assessment and survey methodology prior to construction activities occurring during the burrowing owl wintering season (September 1 to January 31).

BIO-25: Burrowing owls would be avoided pursuant to the buffer zone prescribed in the CDFW

2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan would be subject to CDFW review. Non-standard and reduced distance construction zone buffers may be proposed where a site-specific analysis indicates that the nesting pair(s) or wintering owl(s) would not be adversely affected by construction activities. The analysis would be submitted to CDFW for review before non-standard buffers are utilized. If a smaller buffer is approved by CDFW, the qualified biologist would conduct monitoring for a minimum of 10 consecutive days following the initiation of construction to verify that construction activities are not resulting in disturbance of nesting owls (e.g., changes in behavioral patterns, reactions to noise), and to verify that the burrows are not in danger of collapse due to equipment traffic. Monitoring would continue at least once a week through the nesting/wintering cycle at that site to verify that no change in behavior by the owls occurs.

Bats

The following measures would be implemented to minimize impacts on special-status bat species:

- BIO-26:** Prior to construction, a qualified bat biologist would conduct a habitat assessment within the project area. The habitat assessment would be conducted a minimum of 15 days prior to tree removal and would include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, or exfoliating bark for colonial species, and suitable canopy for foliage-roosting species). Any trees that are determined to provide potentially suitable habitat would be marked, flagged, or otherwise clearly marked, CDFW would be notified immediately, and tree trimming or removal would not proceed without approval in writing from CDFW.
 - BIO-27:** During the summer months (June 1 to August 31) prior to construction, visual and acoustic surveys would be conducted for at least two nights at all identified roosting habitat to assess the presence of roosting bats. If presence of a roost is detected, a count and species analysis would be completed to help assess the type of colony and usage.
 - BIO-28:** For trees that are assumed to have bats present, removal and trimming, if any, would be conducted outside of the recognized bat maternity season and during the active season for bats (March 1- April 15 and September 1 to October 15).
 - BIO-29:** Removal of trees that are assumed to have bats present would be conducted using a 2-step process over two consecutive days under the supervision of a qualified biologist. On the first day (in the afternoon), limbs and branches would be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures would be avoided. On the second day the entire tree would be removed.
 - BIO-30:** If the biologist determines that bats are being disturbed during this work, work would be suspended until bats have left the vicinity on their own or can be safely excluded under direction of the biologist. Work would resume only once all bats have left the site and/or approval to resume work is given by a qualified biologist.
 - BIO-31:** In the event that a maternal colony of bats is found, no work would be conducted within 100 feet of the maternal roosting site until the maternal season is finished or the bats have left the site, or as otherwise directed by a qualified biologist. The site would be designated as an environmentally sensitive area and protected as such until the bats have left the site. No activities would be authorized adjacent to the roosting site. Combustion equipment, such as generators, pumps, and vehicles, would not be parked nor operated under or adjacent to the roosting site. Construction personnel would not be authorized to enter areas beneath the colony, especially during the evening exodus (typically between 15 minutes prior to sunset and one hour following sunset).
-

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 CDFW or USFWS?

Comment

Project activities, including tree and vegetation removal, grading, paving, staging, construction access, and installation of new retaining walls, would result in temporary and permanent impacts on special-status natural communities (see **Table 6**).

Table 6. Potential Impacts on Special-Status Natural Resource Communities

Natural Community	Temporary Impacts (acres)	Permanent Impacts (acres)
Great Valley Cottonwood Riparian Forest	5.10	< 0.01
Great Valley Valley Oak Riparian Forest	0.27	0.03
Valley Oak Woodland	0.08	--

Direct impacts could include tree mortality from tree removal and trampling of plants from construction personnel or heavy equipment. Additionally, construction activities could result in the production of dust and release of construction pollutants, which could travel onto adjacent areas and result in indirect impacts on special-status natural communities. However, with implementation of measures listed below, the project would not result in substantial adverse effects on riparian and other sensitive natural communities. In addition, the project would eliminate the need for yearly construction of the ASC, and any impacts on vegetation communities during those activities.

Significance Level

Less Than Significant with Mitigation Incorporated

Mitigation Measures

The following measures would be implemented to minimize impacts on riparian areas and other natural special-status natural communities:

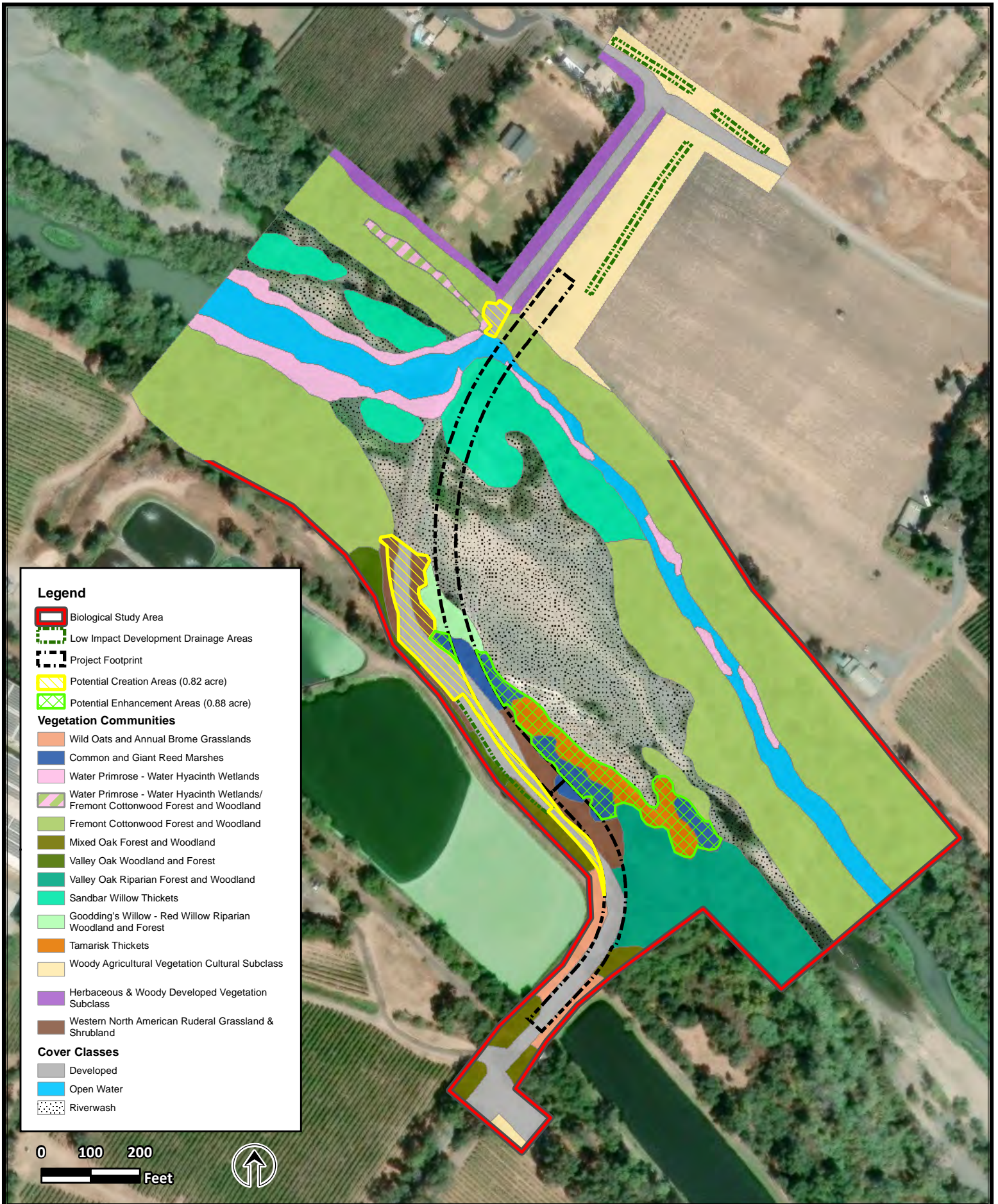
- BIO-32:** Work areas would be reduced to the maximum extent feasible.
- BIO-33:** Equipment staging and storage areas for vehicles, equipment, material, fuels, lubricants, and solvents would be restricted to designated areas and would be a minimum of 25 feet from jurisdictional features and outside of the drip-line of adjacent native vegetation communities.
- BIO-34:** Prior to construction, high visibility ESA protective fencing or flagging would be installed at the limits of construction to protect existing vegetation to remain, which is outside of clearing and grubbing limits, from the contractor's operations, equipment, and materials storage. ESAs would be identified on the project plans to limit contractor work areas.
- BIO-35:** BMPs, such as silt fencing, fiber rolls, straw bales, or other measures would be implemented during construction to minimize dust, dirt, and construction debris from entering into jurisdictional resources and native vegetation communities, and/or leaving the construction area. No erosion control materials containing plastic monofilament netting (erosion control matting) or similar material containing netting within the project area would be used due to documented evidence of wildlife species becoming entangled or trapped in such material. Acceptable substitutes include coconut coir matting or similar.

- BIO-36:** Appropriate hazardous material BMPs would be implemented to reduce the potential for chemical spills or contaminant releases into the jurisdictional features and native vegetation communities, including any non-stormwater discharge. Any hazardous or toxic materials that could be washed into jurisdictional features and be deleterious to aquatic life would be contained in water tight containers or removed from the construction site. In addition, spill kits would be kept on site and field personnel would be trained on how to use them appropriately.
- BIO-37:** All equipment refueling, and maintenance would be conducted in the staging area away from jurisdictional features and outside of the drip-line of adjacent native vegetation communities. In addition, vehicles and equipment would be checked daily for fluid and fuel leaks, and drip pans would be placed under all equipment that is parked and not in operation. Any leaking vehicle or equipment would not be operated in the project area until repaired. All workers would be informed of the importance of preventing spills and the appropriate measures to take should a spill happen.
- BIO-38:** Stationary equipment such as motors, pumps, generators, compressors, and welders located within 50 feet of the jurisdictional resources and native vegetation communities would be positioned over drip-pans, including when in operation.
- BIO-39:** Any temporary erosion control implemented during construction would be completed using non-invasive species. At project completion, all temporarily disturbed areas would be re-contoured to pre-construction conditions and revegetated with native species.
- BIO-40:** Mitigation for permanent impacts on jurisdictional features and native communities will be accomplished on site. Mitigation will be at a minimum ratio of 1:1 for temporary impacts and 3:1 for permanent impacts; however, the final ratio will be established through consultation and coordination with regulatory agencies during the permitting process. On-site mitigation is anticipated to include approximately 0.82 acre of habitat creation in areas that are currently developed or ruderal and 0.88 acre of restoration/enhancement within areas that are currently vegetated with non-native and invasive species (see **Figure 13**, Proposed On-site Mitigation Areas).
- BIO-41:** On-site mitigation will include a combination of habitat creation, restoration, and enhancement. Areas that are currently populated by non-native/invasive vegetation will be enhanced by removing non-native/invasive species and planting native species. In addition, where feasible, areas currently covered with paving and concrete materials from the ASC will be planted with native species, resulting in creation of new habitat.
- 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?**

Comment

Construction materials, dust, and/or debris entering flowing waters could temporarily impact water quality. Surface water is expected within the channel during construction; therefore, a temporary water diversion would be required. Installation of the water diversion would require construction crew and heavy equipment access within the channel, which could temporarily redirect flows and impact water quality. An area of the channel bottom would be graded to ensure surface water elevation would not be increased within the BSA. Grading would be conducted to a maximum depth of six feet of the gravel bar within non-wetted portion of the Russian River. The gravel bar is expected to be dry during construction; therefore, grading would not require in-water work.

The project would include removal of native and non-native/invasive vegetation, including giant reed and tamarisk along the banks of the Russian River. Removal of vegetation would result in temporary impacts within CDFW jurisdiction.



Source: ESRI 2023



**FIGURE 13. POTENTIAL ON-SITE MITIGATION AREAS
Asti Permanent Bridge Construction Project**

However, upon project completion, these areas would be revegetated and enhanced with native plant species. Temporary impacts are anticipated on jurisdictional waters under the USACE, RWQCB, and CDFW (see **Table 7**, **Figure 14**, Impacts on Potential United States Army Corps of Engineers, and Regional Water Quality Control Board Jurisdiction, and **Figure 15**, Impacts on Potential California Department of Fish and Wildlife Jurisdiction). However, with the implementation of the proposed avoidance and minimization measures, and compensatory mitigation discussed below, impacts on jurisdictional features would be minimized.

Table 7. Potential Impacts on Jurisdictional Wetlands and Waters

Regulatory Agency and Jurisdiction	Temporary Impacts (acres)	Permanent Impacts (acres)
United States Army Corps of Engineers Wetlands	1.06	--
United States Army Corps of Engineers Non-Wetland Waters	9.54	< 0.01
Regional Water Quality Control Board Wetlands	1.06	--
Regional Water Quality Control Board Non-Wetland Waters	9.54	< 0.01
California Department of Fish and Wildlife Jurisdiction	16.45	0.24

Permanent impacts are anticipated on jurisdictional waters under the jurisdiction of USACE, RWQCB, and CDFW. The new bridge piers would be installed within the Russian River channel and new retaining walls would be constructed that would permanently impact jurisdictional waters. Installation of new permanent structures would result in obstructions within the channel. Grading the channel bottom could impact the flow of water through the area, which could affect the existing vegetation and aquatic species movement; however, river contours are dynamic and would be expected to continue to change over time. In addition, the project would be constructed in compliance with applicable water quality regulations and conditions within the regulatory permits.

With the implementation of measures listed below, the project would not have a substantial adverse effect on state or federally protected wetlands. In addition, the project would eliminate the need for yearly construction of the ASC, and any impacts on wetlands and other waters during those activities.

Because the project would impact waters of the United States (U.S.) and the state, a Section 404 Nationwide Permit 14 Verification and a Section 401 Water Quality Certification would be required. Work would be required within the Russian River bed/bank/channel, which is under jurisdiction of the CDFW; therefore, a Section 1602 Streambed Alteration Agreement would be required. Permit applications and/or notifications would be submitted to the regulatory agencies prior to construction.

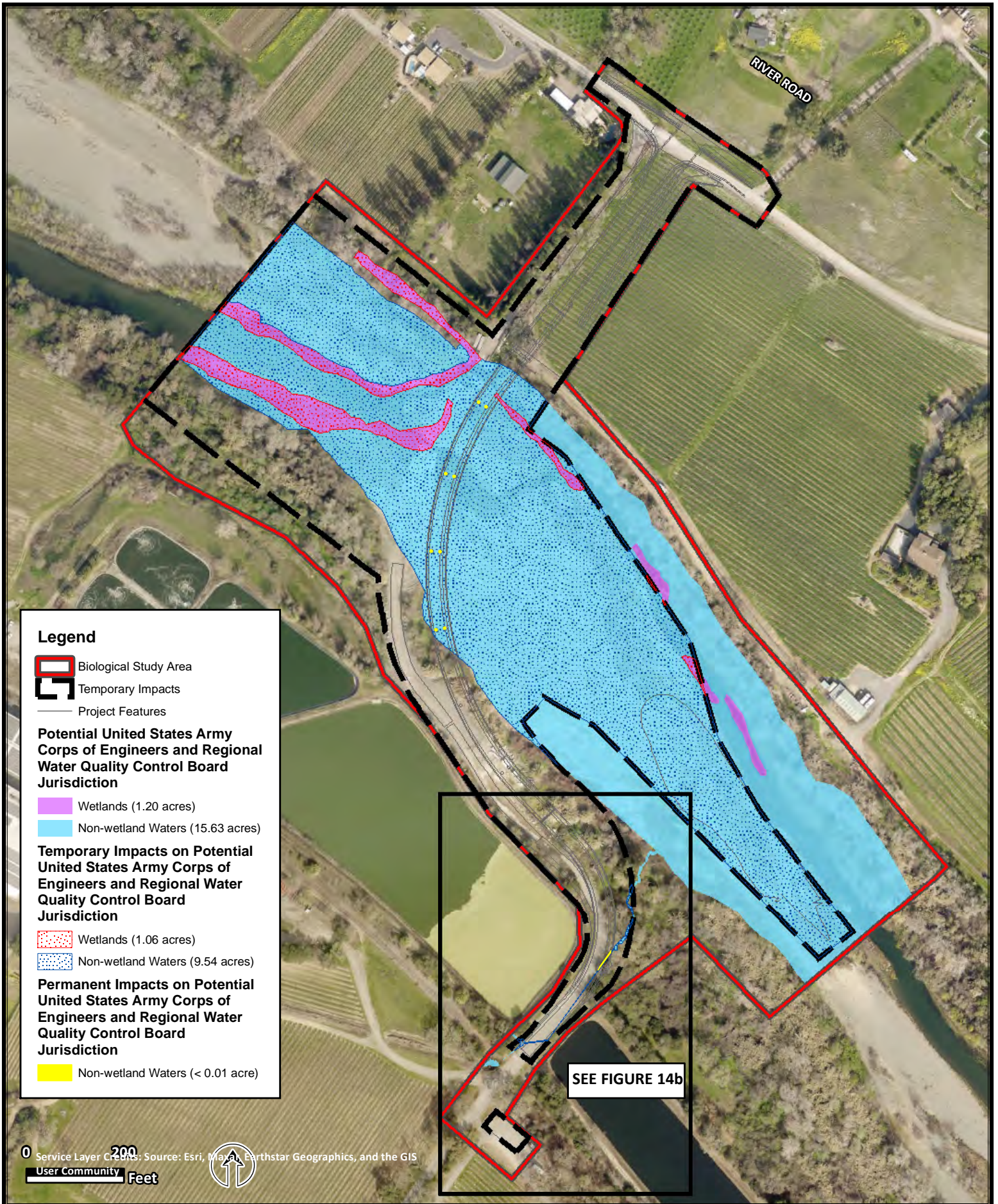
Significance Level

Less Than Significant with Mitigation Incorporated

Mitigation Measures

Measures **BIO-32** through **BIO-41** listed above would be implemented to minimize impacts on state and federally protected wetlands.

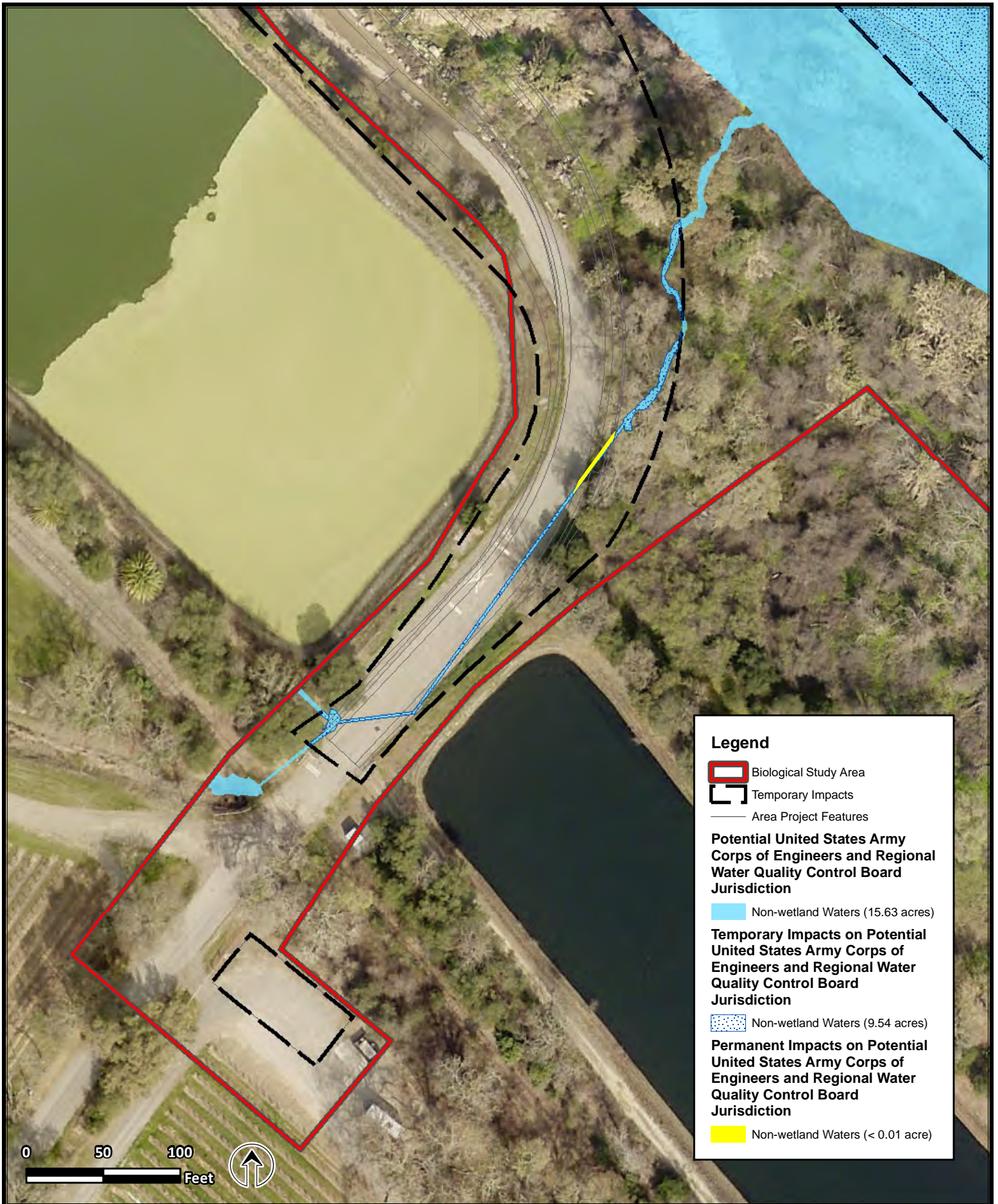
- d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**



Source: ESRI 2023



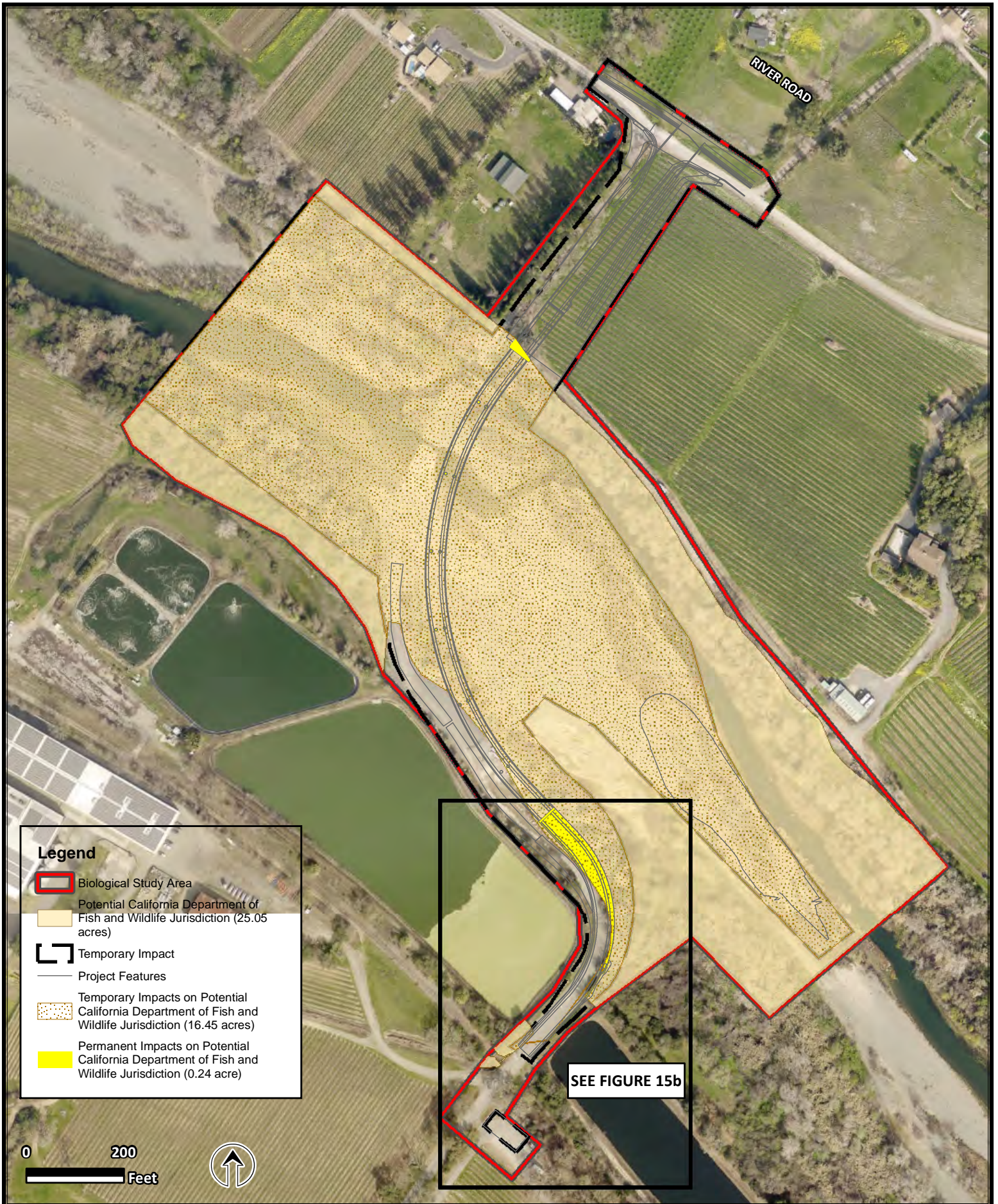
FIGURE 14a. IMPACTS ON POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Asti Permanent Bridge Construction Project



Source: ESRI 2023

**FIGURE 14b. IMPACTS ON POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION
Asti Permanent Bridge Construction Project**

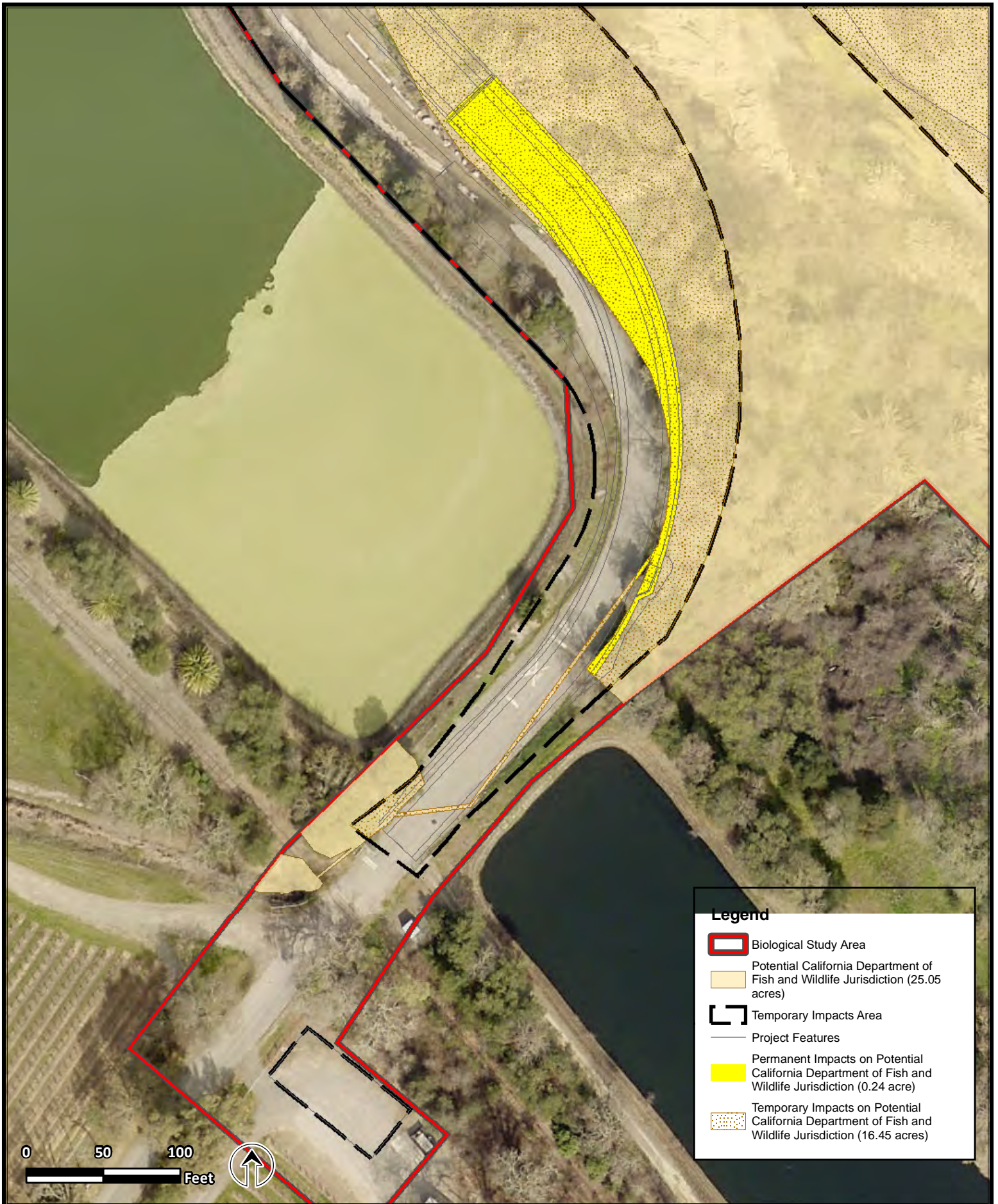










Source: ESRI 2023



FIGURE 15a. IMPACTS ON POTENTIAL UNITED STATES ARMY CORPS OF ENGINEERS AND REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION Asti Permanent Bridge Construction Project



Legend

-  Biological Study Area
-  Potential California Department of Fish and Wildlife Jurisdiction (25.05 acres)
-  Temporary Impacts Area
-  Project Features
-  Permanent Impacts on Potential California Department of Fish and Wildlife Jurisdiction (0.24 acre)
-  Temporary Impacts on Potential California Department of Fish and Wildlife Jurisdiction (16.45 acres)

Source: ESRI 2023

**FIGURE 15b. IMPACTS ON POTENTIAL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION
Asti Permanent Bridge Construction Project**



Comment

Construction materials, dust, and/or debris entering flowing waters could temporarily impact aquatic stream habitat. Surface water is expected within the channel during construction; therefore, a temporary water diversion would be required. Installation of the water diversion would require construction crew and heavy equipment access within the channel, which could temporarily redirect flows and impact water quality. In addition, an area of the channel bottom would be graded and would change the river contours to ensure surface water elevation would not be increased within the project area. Grading would be conducted to a maximum depth of six feet, including removal of the gravel bar within non-wetted portion of the Russian River to maintain flood neutrality within the channel. Installation of the water diversion and channel grading could result in temporary impacts on aquatic stream habitat suitable for salmonids and other aquatic species. The temporary loss in habitat could result in an indirect impact on aquatic species. However, with implementation of measures listed below, the project would not result in substantial interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites. In addition, the project would eliminate the need for yearly construction of the ASC, and any impacts on wildlife movement and nursery sites during those activities.

Significance Level

Less Than Significant with Mitigation Incorporated

Mitigation Measures

Measures **BIO-9** through **BIO-21** and **BIO-32** through **BIO-41** listed above would be implemented to reduce project impacts on wildlife movement and wildlife nurseries.

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

Comment

The General Plan's Open Space & Resource Conservation Element describes policies to protect and enhance the County's natural habitats, diverse plant and animal communities, and riparian corridors (County of Sonoma, 2020a). Chapter 3, Biotic Resources, Section 3.1: Policy for Biotic Habitat Areas, includes policies for protection and enhancement of natural areas. Section 3.2: Policy for Riparian Corridors, includes policies for protection and enhancement of riparian corridors and functions along streams:

The project has been designed to minimize the tree and vegetation impacts, and with implementation of proposed measures, the project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. In addition, the project would eliminate the need for yearly construction of the ASC, and any impacts on biological resources during those activities.

Significance Level

Less Than Significant with Mitigation Incorporated.

Mitigation Measures

Measures **BIO-1** through **BIO-41** listed above would be implemented to reduce project impacts on biological resources.

f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP); Natural Community Conservation Plan; or other approved local, regional, or state HCP?

Comment

The project area is not located within the limits of a regional conservation plan such as an HCP or Natural Community Conservation Plan. Therefore, the project would not conflict with the provisions of an adopted HCP; Natural Community Conservation Plan; or other approved local, regional, or state HCP.

Significance Level

No Impact

6.5 Cultural Resources

An Archaeological and Paleontological Report was prepared for the project by Duke Cultural Resources Management (Duke Cultural Resources Management, 2023). A Historical Resources Technical Memorandum was prepared for the project by GPA Consulting (GPA Consulting, 2023). Outreach under Assembly Bill (AB) 52 was initiated in September 2023 and is closed.

The Archaeological and Paleontological Report included archival research, a cultural records search at the Northwest Information Center (NWIC) and a field survey within the project area to identify any potential cultural resources (Duke Cultural Resources Management, 2023). The Historical Resources Technical Memorandum included the same research (GPA Consulting, 2023). The records search identified five previous cultural resources within one mile of the project area. Of these five resources one is prehistoric, three are historic built environment resources, and one contains both historic and prehistoric elements. The Fulton-Hopland Transmission Line is the closest of these resources; the nearest utility pole is located 20 feet east of the project area. The Fulton-Hopland Transmission line is not listed on the National or California Register of Historic Places. The remaining cultural resources are all located greater than 2,200 feet from the project area. These resources include the Lithic Scatter, Asti Cook House & Prehistoric Lithic Scatter, Northwestern Pacific Railroad, and Icaria-Speranza Commune.

The Native American Heritage Commission (NAHC) Sacred Lands File review returned positive results for tribal resources within the project area. This was supported by the Cloverdale Rancheria of Pomo Indians who stated the project area is located within the area of a known summer camp for the tribe. Additionally, the northernmost portion of the project area was not surveyable due to the heavy vegetation. Therefore, the project area has moderate sensitivity for prehistoric resources, particularly in the northernmost portion that was not surveyed.

The State of California Health and Safety Code Section 7050.5 requires that if human remains are discovered during ground disturbing activities, the County Coroner must be notified, and no further disturbance is authorized until the County Coroner makes a determination of origin and disposition of the remains. If the human remains are determined to be prehistoric, the coroner must notify the NAHC, who would determine and notify a Most Likely Descendant (MLD). The MLD then inspects the site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Would the project:

- a. Cause a substantial adverse change in the significance of a historical resource, pursuant to Section 15064?**

Comment

According to the Historical Resources Technical Memorandum prepared for the project, the properties in the project area are not currently listed under national, state, or local landmark or historic district programs. The proposed area of work is primarily within the public right of way and

edges of private parcels, or the Russian River. No buildings or structures, aside from the existing roadway, would be altered as a result of the project. The new roadway and bridge across the Russian River would be similar to the existing conditions and location of the existing roadways and ASC. The new physical features that would be introduced into the area would not change the existing setting such that any historical resources that may potentially exist within the vicinity would be materially impaired. Therefore, the project would not cause a substantial adverse change in the significance of a historical resource, pursuant to CEQA Section 15064.

Significance Level

No Impact

b. Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064?

Comment

According to Public Resources Code (PRC) 21083.2 (a), if archaeological resources are determined to be significant, then the impacts on that resource should be addressed. PRC 5097.5 prohibits the excavation and/or the removal of a “vertebrate paleontological site...or any other archaeological, paleontological, or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.” PRC 30244 requires reasonable mitigation of adverse impacts on paleontological resources resulting from development on public land.

PRC 21084.1 gives the lead agency power to determine that a resource is a historical resource, even if the resource is not listed or eligible for listing in the California Register of Historical Resources or a local register of historical places. In addition, the lead agency can also determine that a resource is a historical resource, even if it is not deemed significant in a historical resource survey.

According to Archaeological and Paleontological Report and Historic Resources Technical Memorandum, none of the five cultural resources identified in the project area would be impacted by the project (Duke Cultural Resources Management, 2023) (GPA Consulting, 2023). Additionally, due to the previous ground disturbance within the APE for the construction of the ASC and existing road, along with the research and survey results, there is a low potential to adversely affect unknown, potentially intact buried archaeological deposits that might be eligible for the California Register of Historic Places. However, the review of the NAHC Sacred Lands File was positive for tribal resources within the project area. This was supported by Vickey Macis, Cloverdale Rancheria of Pomo Indians treasurer who supported field survey who stated the project area is within a known summer camp for the tribe. Additionally, the northernmost portion of the project area was not surveyable due to the heavy vegetation. Therefore, the project area has moderate sensitivity for prehistoric resources, particularly in the northernmost portion of site that was not surveyed. Based on the moderate sensitivity for prehistoric resources DUKE CRM recommended an archaeologist be present during ground disturbing activities. However, with implementation of measures listed below, the project would not result in a substantial adverse change in the significance of an archaeological resource, pursuant to CEQA Section 15064.

Significance Level

Less Than Significant Impact with Mitigation Incorporated

Mitigation Measures

The following measures would be implemented to minimize impacts on cultural resources:

- CUL-1:** A qualified archaeologist would be on-site at the pre-construction meeting to discuss monitoring protocols. The archaeological monitor would be present full-time during ground disturbance within the project, including but not limited to grading, trenching, utilities, and off-site easements. If, after excavation begins the qualified archaeologist determines that the sediments are not likely to produce fossil resources, monitoring efforts would be reduced.
- CUL-2:** The archeological monitor would be empowered to temporarily halt or redirect grading efforts if archaeological resources are discovered. In the event of an archeological discovery the monitor would flag the area and notify the construction crew immediately. No further disturbance in the flagged area would be conducted until the qualified archaeologist has cleared the area.
- CUL-3:** In consultation with the qualified archaeologist the archeological monitor would quickly assess the nature and significance of the find. If the specimen is not significant it would be quickly mapped, documented, removed, and the area cleared. If the discovery is significant the qualified archaeologist would notify the County immediately. If the discovery is tribal cultural resource the County would notify the consulting Tribes.
- CUL-4:** In consultation with the County and consulting Tribes, if necessary, the qualified archaeologist would develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, scientific removal of the find, removal of sediment from around the resource (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.

c. Disturb any human remains, including those interred outside of formal cemeteries?

Comment

The project area is in a rural part of Sonoma County and is not within or near a formal cemetery. In addition, land within and adjacent to the project area has already been disturbed. However, construction of the project would include ground-disturbing activities that could unearth previously undiscovered human remains interred outside of a formal cemetery, should they be present in the project limits. However, with implementation of measures listed below, the project would not disturb any human remains, including those interred outside of formal cemeteries.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

The following measure would be implemented to minimize impacts on cultural resources:

- CUL-5:** In the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, steps would be taken in compliance with the CCR Section 15064.5. All construction activities would cease, and the County Coroner would be contacted if any human remains are discovered, in accordance with 14 CCR Section 15064.5(e) If the coroner determines that the human remains are of Native American origin, the NAHC would be notified to determine the MLD for the area. The MLD would make recommendations for the arrangements for the human remains per PRC Section 5097.98.

6.6 Energy

The project area includes an existing transportation facility. The roadway does not currently require energy resources to operate.

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?**

Comment

During the construction period, construction vehicles, worker vehicles, and equipment would require the use of fuel (gasoline and diesel) and electricity to operate. Equipment used during construction would be compliant with California Air Resources Board (CARB) Standards. Compliance with CARB emission standards and state anti-idling regulations would minimize wasteful or inefficient energy consumption during construction. The project would be constructed in compliance with applicable CARB regulations regarding retrofitting, repowering, or replacing diesel off-road construction equipment. In addition, project construction would comply with state regulations (CCR Title 13, Motor Vehicles, Section 2449(d)(3)) that limit the construction vehicle idling times to no more than five minutes. The project would not include the addition of lighting, and operation of the project would not require long term energy input beyond that which is currently required. Therefore, the project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. In addition, the project would eliminate the need for yearly construction of the ASC, and any energy consumption resulting from those activities.

Significance Level

Less Than Significant Impact

- a. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

Comment

Fuel consumption from construction vehicles and equipment would be temporary and would represent a negligible increase in regional energy consumption. In addition, project construction and operation would be compliant with CARB Standards. Compliance with CARB emission standards would reduce energy consumption associated with the use of construction equipment. Once operational, the project would not require the use of energy. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Significance Level

No Impact

6.7 Geology and Soils

Sonoma County is located in a seismically active region. The closest active fault to the project site is the Maacama Fault, located approximately 2.5 miles northeast (California Department of Conservation, 2015). The project site does not lie within an Alquist-Priolo Earthquake Fault Zone and no known active or unzoned faults are mapped by the California Geological Survey within the project site. According to the County's General Plan Landslide Hazard Areas Map, the project is rated a 1, which is considered the least susceptible to landslides. According to the General Plan, the project area is located in a high to very high liquefaction zone (County of Sonoma, 2020a).

No evidence of significant geologic hazards (such as faulting, volcanoes, settlement, very soft soils, severe erosion, springs, or subsidence) were observed at the project site during a 2022 survey (Crawford & Associates, 2024).

The following General Plan policy applies to the project:

- **Policy PS-1j:** Encourage strong enforcement of State seismic safety requirements for design and construction of buildings and facilities subject to State and Federal standards such as bridges, dams, power plants, hospitals and schools.

The United States Department of Agriculture Web Soil Survey indicates that the project area is underlain primarily by Alluvial Land; Sandy, Clough Gravelly Loam, 2 to 9 Percent Slopes; Riverwash; Sobrante Loam, 30 to 50 Percent Slopes; Yolo Sandy Loam 0 to 2 Percent Slopes; and Yolo Sandy Loam, Overwash, 0 to 5 Percent Slopes soil types (United States Department of Agriculture, 2019).

Rock slope protection was observed along the embankment at the eastern abutment location of the existing low-water crossing. An existing rock outcropping was observed in the river channel that would be preserved. Alluvium within and along the channel was predominantly gravel with some cobbles.

According to the Cultural and Paleontological Report, no paleontological resources were identified within the project area, but a fossil locality in similar deposits is documented nearby (4.6 miles). Ground disturbance in the project area is considered to be a high-sensitivity area for deposits (Duke Cultural Resources Management, 2023).

The Preliminary Foundation Report provided design elements for the bridge and approach fills to maximize safety. Based on preliminary boring and seismic survey data, the installation of large diameter CIDH piles is recommended. Where piles would be required to penetrate the underlying bedrock, dewatering of pile excavations would require the use of permanent casing into the bedrock to achieve an adequate seal. For the roadway approach fills, expansive materials would not be used within the limits of the bridge abutment. Soils used for embankment construction would be the least locally susceptible to erosion and erosion control measures, such as planting and erosion control mats, would be utilized. Additionally, the project would be designed to meet current seismic safety standards.

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?**

Comment

Sonoma County is located in a seismically active region; however, the project would be designed to meet current seismic standards and follow all building code regulations. Therefore, the project would not directly or indirectly cause potential substantial adverse effects related to rupture of a known fault.

Significance Level

Less Than Significant Impact

- ii. **Strong Seismic Ground shaking?**
-

Comment

Ground shaking would be anticipated within the project area in the event of an earthquake from a nearby seismic source; however, the project would be designed to meet current seismic standards and would not increase exposure to existing hazards in the project area. In addition, construction of the project would not increase the chances of seismic ground shaking. Therefore, the project would not directly or indirectly cause potential substantial adverse effects related to strong seismic ground shaking. In addition, the project would eliminate the need for yearly construction of the ASC, and any associated risks, such as tons of gravel being hauled in every year. Construction of the project would also provide the community with a permanent, year-round evacuation route.

Significance Level

Less Than Significant Impact

iii. Seismically Induced Ground Failure Including liquefaction?

Comment

The project area is located in a high to very high liquefaction zone; however, the project would be designed to meet current seismic standards and would not increase exposure to existing hazards in the project area. Therefore, the project would not directly or indirectly cause potential substantial adverse effects related to ground failure, including liquefaction. In addition, the project would eliminate the need for yearly construction of the ASC, and any associated risks, such as tons of gravel being hauled in every year. Construction of the project would also provide the community with a permanent, year-round evacuation route.

Significance Level

Less Than Significant Impact

iv. Landslides, Including Seismically Induced Landslides

Comment

The project area is not located within a landslide zone and the topography is relatively flat. Therefore, the project would not result in substantial adverse effects related to landslides.

Significance Level

No Impact

b. Result in Substantial Soil Erosion or Loss of Topsoil?

Comment

Soils in the project area have a low to high erosion potential; however, the project would be designed to meet current standards and would include erosion control BMPs to reduce the potential for erosion. Therefore, the project would not result in substantial adverse effects related to soil erosion or loss of topsoil. In addition, the project would eliminate the need for yearly construction of the ASC, and any soil erosion resulting from those activities.

Significance Level

Less Than Significant Impact

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?

Comment

See discussion in response (a.iii) and (a.iv) above. The project would be designed to meet current seismic standards. Therefore, the project would not result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. In addition, the project would eliminate the need for yearly construction of the ASC, and any risks resulting from those activities.

Significance Level

Less Than Significant Impact

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?

Comment

Soils in the project area have a low to moderate potential to shrink and swell; however, the project would not include the construction of any new property development or habitable structures that could create substantial risks. In addition, the project would eliminate the need for yearly construction of the ASC, and any risks resulting from those activities.

Significance Level

Less Than Significant Impact

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

Comment

The project would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, the project would result in no impact related to septic tanks and alternative wastewater systems.

Significance Level

No Impact

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

Comment

The project area has a high sensitivity for paleontological resources; therefore, construction activities could potential impact unique paleontological resources. However, with implementation of the measure listed below, the project would not result in destruction of paleontological features. In addition, the project would eliminate the need for yearly construction of the ASC, and any impacts resulting from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

The following measure would be implemented to minimize impacts on paleontological resources:

- **GEO-1:** If previously unidentified paleontological resources are encountered or unearthed
-

during construction, work would be halted in that area until a qualified paleontologist can assess the nature and significance of the find.

6.8 Greenhouse Gas Emissions

Within California, the transportation sector is the largest contributor, accounting for approximately 39.7 percent of the total state-wide greenhouse gas (GHG) emissions. Emissions associated with industrial uses are the second-largest contributor, totaling roughly 21.1 percent. Electricity generation totaled roughly 14.1 percent. Other major emission sources included commercial uses, residential uses, agriculture, refrigerants, and waste. An Air Quality and Greenhouse Gas Impact Assessment was prepared for the project (Ambient Air Quality and Noise Consulting, 2023a). Emissions associated with the construction of the proposed project were calculated using the CalEEMod, version 2022.1.1.2 computer program for project development.

Would the project:

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

Comment

Under the BAAQMD updated CEQA thresholds, construction GHG emissions are excluded from significance determinations because they represent a very small portion of a project's lifetime GHG emissions (Ambient Air Quality and Noise Consulting, 2023a). The use of construction equipment, delivery of construction materials and waste, and worker commutes would contribute to the generation of GHGs. Construction-generated GHG emissions would be short-term and would not exceed the significance threshold of 1,100 metric tons of carbon dioxide equivalent (MTCO_{2e})/year. Based on the modeling conducted, construction related GHG emissions would total approximately 686 MTCO_{2e} in 2028 and 246 MTCO_{2e} in 2029.

A small amount of GHG emissions would be generated from waste during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted. Because construction would be temporary and short term, the contribution of construction GHG emissions to climate change would be minimal. Project operation is not expected to increase GHG emissions because the same number of through lanes (one in each direction) would be maintained and capacity would not be increased. Therefore, the project would not result in greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Significance Level

Less Than Significant Impact

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

Comment

The Sonoma County Climate Change Action Resolution (CCAR) is a long-range plan to reduce GHG emissions from City government operations and community activities within the community. The County's CCAR includes numerous measures to reduce GHG emissions associated with energy use, motor vehicle use, water use, waste generation, and construction. Project operation is not expected to increase GHG emissions, and construction of the project would contribute to minimal increases in GHG emissions. The project is consistent with CCAR Measures. The Sonoma County Comprehensive Transportation Plan outlines how the region will meet or exceed its GHG reduction targets through the promotion of a variety of transportation demand

management & system management tools and techniques to maximize the efficiency of the transportation network. The proposed project would not be considered to conflict with regional VMT-reduction efforts and associated reductions in mobile-source emissions. Therefore, the project is not expected to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Significance Level

No Impact

6.9 Hazards and Hazardous Materials

According to the Initial Site Assessment (ISA) prepared for the project, no Recognized Environmental Conditions (REC), Controlled RECs, or historical RECs were identified that have potential to impact the project area (Crawford & Associates, 2024). In addition, reconnaissance surveys of the project alignment did not identify the presence of hazardous materials, hazardous substances, or petroleum hydrocarbons, and there was no evidence of NOA. In addition, asbestos containing construction materials and lead containing paint were not identified on the ASC bridge structure. There is the possibility of persistent pesticides in the vineyard property that is to be acquired for the new Washington School Road right of way, and, given the age of Washington School Road and River Road, lead may be present in the soil adjacent to these roads. Soils adjacent to the railroad tracks may contain petroleum hydrocarbons and metals.

There is one hazardous waste site listed located 0.41 mile southwest of the project area; however, the site's status is completed/case closed. The nearest school is Washington Middle School located approximately 3.8 miles northwest of the project area. The Cloverdale Airport is the nearest airport to the project, located approximately 1.45 miles northwest of the project area. The project is located within the Cloverdale Airport Safety Zone (County of Sonoma, n.d.) According to the State Fire Marshall, the project area is located adjacent to a moderate to very high fire hazard severity zone (Department of Forestry and Fire Protection, 2023). Washington School Road is an important evacuation route for nearby properties in the event of fire other another emergency.

Would the project:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

Comment

During construction, soils may be disturbed that could potentially contain hazardous materials; these soils may need to be transported from the site along nearby roadways and disposed of at disposal site. However, any transport and disposal of hazardous materials would be handled in compliance with standard practices and regulations. Operation of the project would not increase the use of hazardous materials or substances and would not create any hazard to the public. With implementation of measures listed below, the project would not be expected to create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. In addition, the project would eliminate the need for yearly construction of the ASC, and any risks from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

The following measures would be implemented to minimize impacts related to hazardous materials:

HAZ-1: Prior to construction, soil within the new project alignment that would be disturbed by construction activities would be screened for the presence of lead at concentrations that exceed hazardous waste limits.

HAZ-2: Prior to construction, soil within the new project alignment that would be disturbed by construction activities would be screened for organochlorine pesticides and arsenic.

HAZ-3: If the project would disturb soil within the railroad right of way, this soil should be screened for the presence of petroleum hydrocarbons and metals.

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?

Comment

During construction, soils may be disturbed that could potentially contain hazardous materials; these materials could be released into the river or other areas adjacent to the construction zone. However, any use of hazardous materials would be handled in compliance with standard practices and regulations. Operation of the project would not increase the use of hazardous materials or substances and would not create any hazard to the public. With implementation of measures, the project would not be expected to create a significant hazard to the public or environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. In addition, the project would eliminate the need for yearly construction of the ASC, and any risks from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures HAZ-1, HAZ-2, and HAZ-3 listed above would be implemented to reduce impacts related to hazardous materials.

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

Comment

There are no schools located within a mile of the project area. Therefore, the project would not be expected to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.

Significance Level

No Impact

d. Be located on a site that 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?

Comment

There are no active sites within or adjacent to the project area. Therefore, the project would not

create a significant hazard to the public or the environment related to hazardous materials.

Significance Level

No Impact

- 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, result in a safety hazard or excessive noise for people residing or working in the project area?**

Comment

The project is located within the Cloverdale Airport Safety Zone; however, the project would include the replacement of the existing ASC with a permanent bridge and would not create any safety hazards or excessive noise levels that would impact airport operation or land use plans. In addition, the project would eliminate the need for yearly construction of the ASC, and any safety hazards or excessive noise levels from those activities.

Significance Level

Less Than Significant Impact

- f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Comment

Currently, Washington School Road over the Russian River operates as a seasonal crossing during the summer months. During construction, the ASC would remain open so there would be no interference with emergency access routes or evacuation plans. Once construction is complete, the new bridge would provide a permanent crossing along Washington School Road, which would improve emergency access in the project area and surrounding area. Therefore, the project would not be expected to impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Significance Level

Less Than Significant Impact

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

Comment

The project area is located adjacent to a moderate to very high fire hazard severity zone; however, the project would enhance the safety of the area by creating a permanent crossing along Washington School Road which would double as an evacuation route in the event of fire or other emergencies. The ASC would remain open during construction. Therefore, the project would not be expected to increase the potential for wildland fires or expose people or structures to a significant risk of loss, injury or death involving wildland fires in the area.

Significance Level

Less Than Significant Impact

6.10 Hydrology and Water Quality

The following General Plan Policies apply to the project:

- **Policy WR-1b:** Design, construct, and maintain County buildings, roads, bridges, drainage and other facilities to minimize sediment and other pollutants in stormwater flows. Develop and implement “best management practices” for ongoing maintenance and operation.
- **Policy WR-1c:** Prioritize stormwater management measures in coordination with the RWQCB direction, focusing first upon watershed areas that are urbanizing and watersheds with impaired water bodies. Work cooperatively with the RWQCBs to manage the quality and quantity of stormwater runoff from new development and redevelopment in order to:
 - Prevent, to the maximum extent practicable, pollutants from reaching stormwater conveyance systems.
 - Ensure, to the maximum extent practicable, that discharges from regulated municipal storm drains comply with water quality objectives.
 - Limit, to the maximum extent practicable, stormwater from post development sites to pre-development quantities.
 - Conserve and protect natural areas to the maximum extent practicable.
- **Policy WR-1h:** Require grading plans to include measures to avoid soil erosion and consider upgrading requirements as needed to avoid sedimentation in stormwater to the maximum extent practicable.
- **Policy WR-1g:** Minimize deposition and discharge of sediment, debris, waste and other
- **Policy PS-2m:** Regulate development, water diversion, vegetation management, grading, and fills to minimize any increase in flooding and related damage to people and property.

The project would be designed in compliance with all applicable RWQCB water quality regulations. The project would include BMPs to minimize any impacts related to erosion or pollutant emissions. Additionally, the project would include removal of the ASC which contributes to annual disturbance of the river channel. The river channel would return to a more natural condition where the channel could migrate and braid in a more natural way based on seasonal flows which would most likely reduce erosion and disturbance of water quality in the river channel. Therefore, the project would be consistent with the General Plan policies.

A Floodplain Evaluation Report was prepared for the project (WRECO, 2024). The Russian River and its tributaries drain a watershed area of approximately 636.8 square miles at the project area. The Russian River Watershed spans Mendocino and Sonoma Counties and runs southeast from the headwaters in the Laughlin Range and is bound to the east by the Mayacamas Mountains and by the Mendocino Range to the west. According to the Floodplain Evaluation Report, the watershed upstream of the project area is dominated by agricultural uses and only 1.1 percent of the land is classified as impervious (WRECO, 2024).

There are three surface waterways in the project area, including the Russian River, Unnamed Drainage 1, and Unnamed Drainage 2. The project area is located in the Cloverdale area subbasin of the Alexander Valley Groundwater Basin (State Water Resource Control Board, 2004). According to the ISA completed for the project, there are two areas with shallow groundwater wells ranging from 1,500 to 2,500 feet below ground water surface (Crawford & Associates, 2024).

The RWQCB Water Quality Control Plan (Basin Plan) for the project area covers the streams that drain the California Coast Ranges in Marin, Sonoma, Mendocino, Humboldt, and Del Norte

Counties. Not all water bodies are identified in the Basin Plan but the beneficial uses of the specifically identified water body in the Basin Plan typically apply to its tributary streams. Natural and beneficial floodplain values associated with the project area include fish habitat, wildlife, and plants (WRECO, 2024).

According to the Federal Emergency Management Agency Flood Insurance Rate Map Panel 06097C0140E, the project area is within Zone AE (see **Figure 16**, Flood Zones). Zone AE is an area that has a one percent annual chance of inundation. In addition, the project area is located within and adjacent to a federal regulatory floodway zone (Federal Emergency Management Agency, 2019). According to the CDOC, the project is not located in a tsunami or seiche zone (California Department of Conservation, 2022).

Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Comment

Construction materials, dust, and debris could result in temporary impacts on water quality if they were to enter the adjacent waterways and if surface water were to be present. Construction of the project is planned to occur during the spring, summer, and fall construction season, during that portion of the year outside of the rainy season when surface water within the Russian River is at its seasonal minimum. The project would be constructed in compliance with applicable water quality and dust control regulations. Low Impact Development Best Management Practices, such as bioretention and/or infiltration trench facilities, would be located on each approach of the bridge structure.

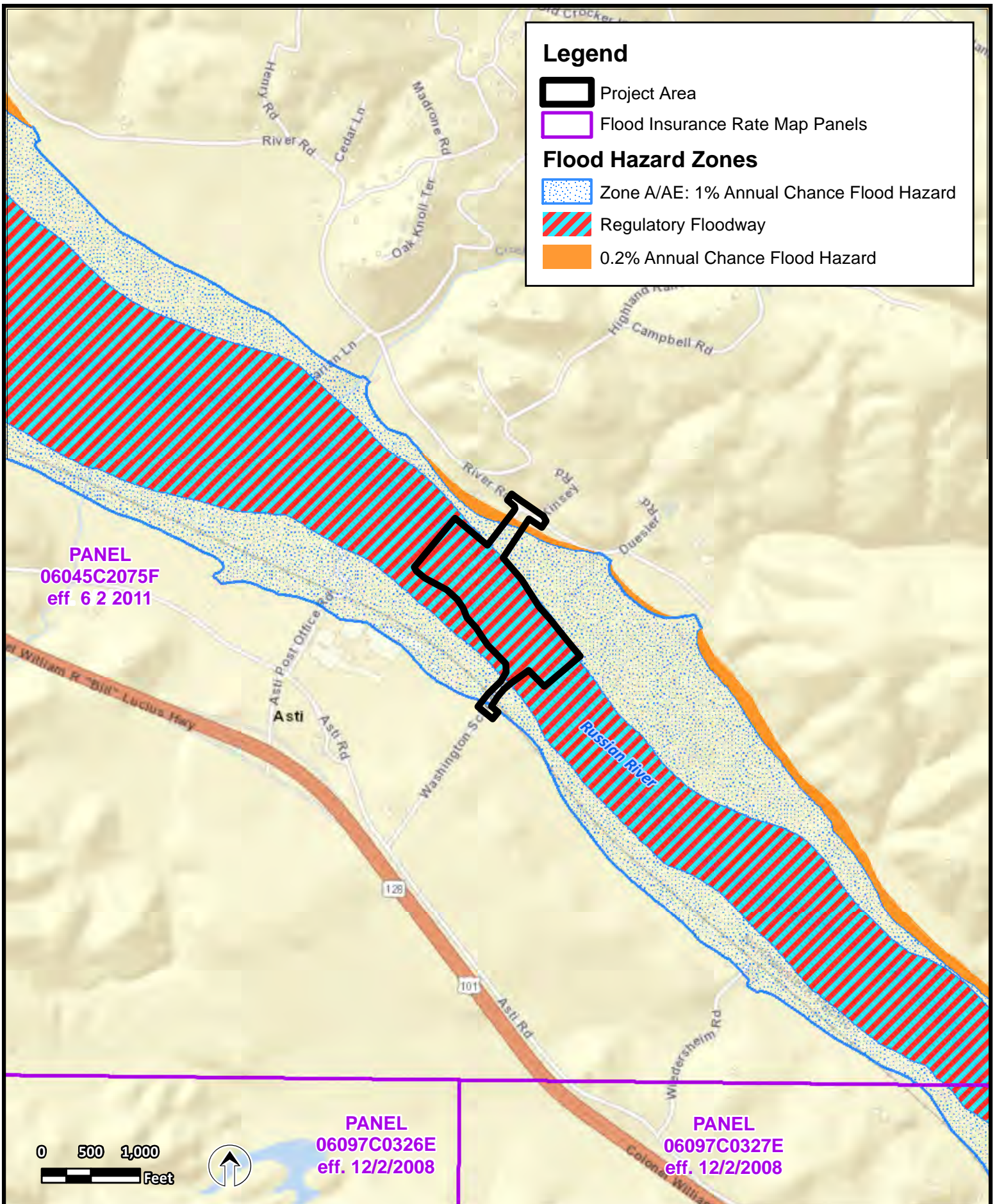
The temporary river diversion system would divert the river away from all but one pier, which would be constructed just south of the channel. However, this pier can be constructed from the south side with casings if necessary to address water in the drilled holes. Water pumped from casings would be collected and sediment allowed to settle out before being released to the channel. This would leave most of the piers to be constructed in the floodplain well away from the low flow channel. If flows are higher than normal during the summer construction season, it is possible that more extensive channelization would be required. This can be accomplished in several ways depending on the flow to be channeled, including, in order of increasing flow capacity:

- Construction of a clean gravel berms covered with plastic sheeting.
- Stacked K-rail with plastic sheeting
- Inflatable cofferdams

If flows are particularly high during the construction season, more extensive means of directing flows through the construction site would be required. This would most likely involve the use of large pipes laid in the channel similar to the pipes the County often places beneath their gravel berm when constructing the annual ASC. Because flows in the Russian River vary greatly from year to year, the specifics of the channelization would be determined by water levels at the time of construction. The project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Significance Level

Less Than Significant with Mitigation Incorporated



Sources: FEMA 2008, 2011; ESRI 2023



FIGURE 16. FLOOD ZONES
Asti Permanent Bridge Construction Project

Measures

Measures **BIO-32** through **BIO-41** listed in *Section 6.4, Biological Resources*, would be implemented to minimize impacts on water quality.

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

Comment

Construction would require a minimal amount of water for dust control; however, water would likely be brought in from outside the project area and would not be expected to impact groundwater recharge. Project operation would not require the use of any water. The new bridge and realigned roadway would increase the area of impervious surface in the project area by approximately 46,000 square feet (one acre); however, the increase is considered to be minimal with respect to the overall size of the watershed and is not expected to substantially impact groundwater recharge. In addition, a large portion of the new surfaces would be over the river channel, and runoff from these areas would still be released into the river. Therefore, the project is not expected to substantially decrease groundwater supplies or interfere substantially with groundwater recharge. In addition, the project would eliminate the need for yearly construction of the ASC and impacts from those activities.

Significance Level

Less Than Significant Impact

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:**
 - i. Result in substantial erosion or siltation on- or off-site;**

Comment

Soils in the project area have a low to high susceptibility of erosion. Temporary vegetation removal, grading, and excavation, including in-channel grading, could result in soil erosion; however, standard BMPs, including erosion control measures, would be incorporated into the project to comply with the RWQCB's Water Quality Control Plan. In addition, the side slopes of the new bridge embankments would be stabilized with BMPs to avoid erosion, and areas of temporary vegetation removal would be revegetated following construction. The project would include a new bridge that would replace the existing ASC and would change flow patterns in the river. The bridge result in fill at the piers and the southwest abutments; however, grading of the channel gravel bar downstream of the bridge would offset the additional fill from the bridge construction to ensure that river flows would not be impeded. Therefore, the project would not result in substantial erosion or siltation on- or off-site. In addition, the project would eliminate the need for yearly construction of the ASC and impacts from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **BIO-32** through **BIO-41** listed in *Section 6.4, Biological Resources*, would be implemented to minimize impacts on erosion and siltation.

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

Comment

The new bridge and realigned roadway would increase the area of impervious surface in the project area by approximately 46,000 square feet (one acre). A large portion of the new surfaces would be over the river channel, and runoff from these areas would still be released into the river; however, the increase would be minimal with respect to the overall size of the watershed and is not expected to contribute additional runoff levels that would result in flooding. Additionally, the project would be designed to accommodate anticipated runoff and flooding is not expected. According to the hydraulic modeling, the bridge and roadway approaches would not be overtopped during a 100-year storm event. Therefore, the project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

Significance Level

Less Than Significant Impact

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

Comment

As discussed in (c.ii) above, the project would result in an increase in impervious surface area of approximately 46,000 square feet (one acre), but not result in a substantial increase in runoff flow. Additionally, the project would be designed to accommodate anticipated runoff. Therefore, the project would not 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. In addition, the project would eliminate the need for yearly construction of the ASC and impacts from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **BIO-32** through **BIO-41** listed in *Section 6.4, Biological Resources*, would be implemented to minimize impacts on runoff.

iv. Impede or redirect flood flows?

Comment

The Russian River would not be dewatered during construction. It is anticipated that the river would be channelized during construction to direct flows away from construction. Typical summer flows pass under the seasonal bridge which would be constructed to span over the low flow channel, as it does every year. If flows are higher than normal during the summer construction season, it is possible that more extensive channelization would be required. Following construction, the diversion would be removed.

The project would include a new bridge that would replace the existing ASC and would change flow patterns in the river. The bridge result in fill at the piers and the southwest abutments; however, grading of the channel gravel bar downstream of the bridge would offset the additional fill from the bridge construction to ensure that flood flows would not be impeded. The floodplain

and change in the 100-year water surface elevation would decrease or remain the same following construction. The bridge and roadway approaches would not be overtopped during a 100-year storm event. Therefore, the project would not impede or redirect flood flows. In addition, the project would eliminate the need for yearly construction of the ASC and impacts from those activities.

Significance Level

Less Than Significant Impact

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

Comment

The project is not within a tsunami or seiche zones. The project would include a new bridge that would replace the existing ASC and would change flow patterns in the river. The bridge result in fill at the piers and the southwest abutments; however, grading of the channel gravel bar downstream of the bridge would offset the additional fill from the bridge construction to ensure that flood flows would not be impeded. The floodplain and change in the 100-year water surface elevation would decrease or remain the same following construction. The bridge and roadway approaches would not be overtopped during a 100-year storm event. Therefore, the project would not result in an increase in pollutants due to flood hazard, tsunami, or seiche zones. In addition, the project would eliminate the need for yearly construction of the ASC and impacts from those activities.

Significance Level

No Impact

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

Comment

Construction materials, dust, and debris could result in temporary impacts on water quality if they were to enter the adjacent waterways and if surface water were to be present. Permanent impacts would include new bridge piers, retaining walls, and abutments that would be installed within the Russian River channel. However, the project would be constructed in compliance with applicable water quality and dust control regulations and regulatory permit requirements.

Construction may require a minimal amount of water for dust control; however, water would likely be brought in from outside the project area and would not be expected to impact groundwater recharge. Project operation would not require the use of any water. The new bridge and realigned roadway would increase the area of impervious surface in the project area; however, the increase is considered to be minimal with respect to the overall size of the watershed and is not expected to substantially impact groundwater recharge. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. In addition, the project would eliminate the need for yearly construction of the ASC and impacts from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **BIO-32** through **BIO-41** listed in *Section 6.4, Biological Resources*, would be implemented to minimize impacts on water quality.

6.11 Land Use and Planning

Would the project:

a. Divide an Established Community?

Comment

The project would replace the ASC, which is only accessible in the dry months, with a permanent bridge with year-round access. The ASC would remain accessible throughout the duration of project construction. The project would not result in the construction of any new barriers that could potentially divide an established community. The project would provide a more reliable and permanent connection along Washington School Road to River Road. Therefore, the project would not divide an established community; rather, it would provide a better connection.

Significance Level

Less Than Significant Impacts

b. Conflict with Land Use Plans or Policies?

Comment

CCR Section 65402 requires that public and private projects be reviewed for conformity with the applicable County General Plan. The Comprehensive Planning Division of the Sonoma County Permit and Resource Management Department have reviewed the project and found it to be consistent with the Sonoma County General Plan. Therefore, the project would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect, including the Sonoma County General Plan and zoning ordinances.

Significance Level

No Impact

6.12 Mineral Resources

The project area is not located within a known mineral resource deposit area. Sonoma County has adopted an Aggregate Resources Management Plan to detail the state mandated mineral management policy for Sonoma County (County of Sonoma, 2020b). The closest In-Stream Mining is approximately 1.25 miles north of the project area. Any river gravel removed from the riverbed would be reused to the greatest extent feasible.

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?

Comment

There are no known mineral resources in the project area. Therefore, the project would not 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.

Significance Level

No Impact

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?

Comment

See discussion in response a) above. Therefore, the project would not 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.

Significance Level

No Impact

6.13 Noise

A Noise Impact Assessment was prepared for the project (Ambient Air Quality and Noise Consulting, 2023b). The nearest sensitive receptors within the project area are predominately residential dwellings located adjacent to Washington School Road and River Road, approximately 450 feet from the roadway. Additionally, the roadway intersects directly with the Russian River. The nearest public airport in relation to the project area is the Cloverdale Airport, which is located approximately 1.3 miles northwest of the project area.

Noise is generally defined as sound that is loud, disagreeable, or unexpected. Sound, as described in more detail below, is mechanical energy transmitted in the form of a wave because of a disturbance or vibration. Amplitude is the difference between ambient air pressure and the peak pressure of the sound wave. Amplitude is measured in decibels (dB) on a logarithmic scale. For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Amplitude is interpreted by the ear as corresponding to different degrees of loudness. Laboratory measurements correlate a 10 dB increase in amplitude with a perceived doubling of loudness and establish a 3-dB change in amplitude as the minimum audible difference perceptible to the average person.

Frequency is the number of fluctuations in the pressure wave per second. The unit of frequency is the Hertz (Hz). One Hz equals one cycle per second. The human ear is not equally sensitive to sound of different frequencies. Sound waves below 16 Hz or above 20,000 Hz cannot be heard at all, and the ear is more sensitive to sound in the higher portion of this range than in the lower. To approximate this sensitivity, the environmental sound is usually measured in A-weighted decibels (dBA). On this scale, the normal range of human hearing extends from about 10 dBA to about 140 dBA.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound-pressure level in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies, which is referred to as the “A-weighted” sound level (expressed in units of dBA). The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-weighted noise scale.

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 a local general plan or noise ordinance or applicable standards of other agencies?**

Comment

Construction noise typically occurs intermittently and varies depending upon the nature or phase (e.g., demolition/land clearing, grading and excavation, erection) of construction. Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Although noise ranges were found to be similar for all construction phases, the initial site preparation phase involves the most equipment.

Typical noise levels associated with construction equipment are summarized in **Table 8**. As noted in **Table 8**, noise levels generated by individual pieces of construction equipment typically range from approximately 77 to 101 dBA maximum sound level (L_{max}) at 50 feet. Typical operating cycles may involve two minutes of full power, followed by three or four minutes at lower settings. Average-hourly noise levels associated with construction equipment generally range from approximately 73 to 94 dBA equivalent continuous sound level (L_{eq}) at 50 feet (FHWA 2008).

Table 8. Typical Construction Equipment Noise Levels

Equipment	Noise Level (dBA at 50 feet)	
	L_{max}	L_{eq}
Backhoes	78	74
Compressors	78	74
Dump Trucks	77	73
Excavator	81	77
Generator	81	78
Grader	85	81
Front End Loaders	79	75
Impact Pile Driver	101	94
Pumps	81	78
Rollers	80	73
Scrapers	84	80
Tractor	84	80

Based on measured instantaneous noise levels (L_{max}), average equipment usage rates, and calculated average-hourly (L_{eq}) noise levels derived from the FHWA Road Construction Noise Model (FHWA 2008). Reflects representative equipment for road-widening projects based on equipment use derived from the SMAQMD's Road Construction Emissions Model.

Noise from localized point sources, such as construction sites, typically decreases by approximately six to 7.5 dBA with each doubling of distance from source to receptor. Assuming a minimum noise-attenuation rate of six dB per doubling of distance from the source and the equipment noise levels noted above, construction-related noise levels could reach 94 dBA L_{eq} at roughly 50 feet from on-site activities. Residential dwellings within the project area are located at a distance of 450 feet, or more, from construction activity areas. Based on a 450-foot minimum distance and six dB attenuation rate, noise levels at residential dwellings would be approximately

75 dBA L_{eq} and would be below 80 dBA L_{eq} . The 80 dBA L_{eq} threshold is used because although current environmental regulations do not identify quantitative criteria, metrics, or computation methods pertaining to single-event noise exposure for determination of land use compatibility, Federal Interagency Committee on Aviation Noise data indicates that at that level approximately 10 percent of exposed individuals would be awakened (Ambient Air Quality and Noise Consulting, 2023b)

Noise levels associated with construction activities during the more noise-sensitive evening and nighttime hours (i.e., 7:00 p.m. to 7:00 a.m.) are also of increased concern. Because exterior ambient noise levels typically decrease during the evening and nighttime hours, as community activities (e.g., commercial activities, vehicle traffic) decrease, construction activities performed during these more noise-sensitive periods of the day may result in increased annoyance and potential sleep disruption for occupants of nearby residential dwellings.

Existing traffic noise levels in the project vicinity range from 46 to 60 dBA and are predominantly caused by traffic along River Road and Washington School Road. Based on the traffic report prepared for this project, the ADT volume for River Road is 1,694 under existing conditions. Traffic volumes along this roadway will increase to 2,399 under future year 2040 conditions (TJKM, 2022). Typically, on 2-lane roadways an ADT of over 7,000 would be required before predicted traffic noise would exceed 60 dBA CNEL/ L_{dn} outside the road right of way. Under cumulative conditions, the ADT along area roadways would not approach 7,000 vehicles per day. Therefore, with implementation of measures listed below, the project would not result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies. In addition, the project would eliminate the need for yearly construction of the ASC and noise from those activities.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

The following measures would be implemented to minimize noise impacts:

- NOI-1:** construction activities (excluding activities that would result in a safety concern to the public or construction workers) would be limited to between the hours of 7 a.m. and 7 p.m. on weekdays (Monday through Friday) and between 9 a.m. and 5 p.m. on Saturdays. Construction activities would be prohibited on Sundays and legal holidays.
- NOI-2:** Construction equipment would be properly maintained and equipped with exhaust mufflers and engine shrouds in accordance with manufacturers' recommendations.
- NOI-3:** To the extent locally available, electrified or alternatively powered construction equipment would be used.
- NOI-4:** Construction equipment staging areas would be located at the furthest distance possible from nearby noise-sensitive land uses.
- NOI-5:** Stationary noise sources such as generators, pumps, and pavement crushers, would be located at the furthest distance possible from noise sensitive uses.

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

Comment

Groundborne vibration generated by road vehicles can have a significant environmental impact on nearby buildings. Inhabitants perceive vibration either directly as motion in floors and walls or indirectly as reradiated noise. Movement of household objects, or by the rattling of windowpanes

and glassware is another significant source of disturbance caused by groundborne vibrations. In all these cases, the problem of groundborne vibration is important at frequencies typically up to 200 to 250 Hz. Vibration at higher frequencies is generally attenuated rapidly with distance along the transmission path through the ground. Although the nearest sensitive receptors are located approximately 450 feet away from the project area, vibration can travel long distances from its source.

No major stationary sources of groundborne vibration were identified in the project area that would result in the long-term exposure of proposed onsite land uses to unacceptable levels of ground vibration. In addition, the project would not involve the use of any major equipment or processes that would result in potentially significant levels of ground vibration that would exceed these standards at nearby existing land uses. However, construction activities associated with the project would require the use of various tractors, trucks, jackhammers and potentially pile driving that could result in intermittent increases in ground borne vibration levels.

Groundborne vibration levels commonly associated with construction equipment are summarized in **Table 9**. As identified, groundborne vibration levels generated by construction equipment would be approximately 1.518 inches/second (in/sec) peak particle velocity (ppv), or less, at 25 feet.

Table 9. Representative Vibration Source Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 Feet (In/Sec)
Large Bulldozers	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers	0.003

Source: FTA 2018, Caltrans 2020

The nearest existing residential dwellings are located approximately 450 feet from the expected construction activities. Predicted groundborne vibration levels at the nearest residential structures were quantified based on these distances and the reference noise levels identified in **Table 10**. Predicted groundborne vibration levels at the nearest existing structures are summarized in **Table 10**.

Table 10. Predicted Construction Vibration Levels at the Nearest Structure

Activity	Peak Particle Velocity (in/sec)
Demolition	0.002
Grading	0.002
Pile Driving	0.035
Paving	0.005

Ground borne vibration levels were calculated based on representative equipment levels noted in Table 7. Based on distances of 25 feet from construction activities to the nearest residence.

Based on the vibration levels presented above, predicted groundborne vibration levels at the nearest existing residential structures would be approximately 0.035 in/sec ppv, or less. Predicted vibration levels at the nearest residential structures would not exceed commonly recommended criteria for structural damage and human annoyance (i.e., 0.5 in/sec ppv and 0.2 in/sec ppv, respectively).

In addition, haul trucks traveling along project area roadways may result in perceptible increases in vibration levels. However, these vibration levels would be transient and instantaneous events, which would be typical of existing vibrations along the roadway network. Based on measurements conducted by Caltrans, on-road heavy-duty trucks would not generate substantial increases in groundborne vibration that would be expected to exceed commonly applied criteria for structural damage or annoyance (California Department of Transportation, 2020). Therefore, the project would not result in the generation of excessive groundborne vibration or groundborne noise levels. In addition, the project would eliminate the need for yearly construction of the ASC and noise from those activities.

Significance Level

Less Than Significant Impact

- 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?**

Comment

Implementation of the project would not result in locating any permanent workers or sensitive receptors in the vicinity of aircraft noise levels, nor would the project affect airport operations. Therefore, the project would not expose people residing or working in the project area to excessive noise levels.

Significance Level

Less Than Significant Impact

6.14 Population and Housing

According to the U.S. Census, the 2020 population estimate within Sonoma County was approximately 488,863 people and has not increased substantially since 2010 (United States Census Bureau, 2020). The project area is surrounded by rural residential properties and vineyards and land is zoned for Land Intensive Agriculture, Resources and Rural Development, and Diverse Agriculture; therefore, the potential for development or growth in the area is low.

Would the project:

- a. Induce Population Growth?**

Comment

A growth-inducing project is a project that could foster economic or population growth, or the construction of additional housing, either directly or indirectly in the surrounding environment. The purpose of the project is to provide a reliable year-round crossing over the Russian River for residents and other property owners surrounding the project area in the event of fire or another emergency. The project would not change existing land use designations and/or zoning ordinances applied to the private parcels near the site. The project would not create new access to the existing area and no additional subdivision of the existing properties would be possible

without a General Plan amendment; therefore, the project would not foster growth in this area. The surrounding rural subdivisions in the area are landlocked by the Russian River and any alternate routes would add additional travel time that may be life-threatening during an emergency. The project would provide a permanent crossing that would improve safety for emergency services, such as emergency vehicles that may be required during fire season. Construction workers would be present in the project area for a temporary period of time but are not expected to contribute to population growth in the project area. Therefore, the project would not induce population growth.

Significance Level

Less Than Significant

b. Displace Population or Housing?

Comment

The project does not require the acquisition of any residential properties; therefore, the project would not displace population or housing.

Significance Level

No Impact

6.15 Public Services

Fire Protection is provided by the California Department of Forestry and Fire Protection, located at 1001 South Cloverdale Boulevard in Cloverdale. The project area is served by the Sonoma County Sheriff's Department, located at 2796 Ventura Avenue in Santa Rosa. The nearest school to the project area is Washington Middle School, located approximately 3.8 miles northwest of the project area. The nearest County-operated recreational facility to the project area is the Cloverdale River Park located approximately five miles north of the project area. The nearest hospital to the project area is Healdsburg Hospital located approximately 11 miles south of the project area. There are two Northern Sonoma County Fire stations located in Cloverdale and Geyserville.

Would the Project:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or 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 following public services:

i. Fire protection?

Comment

The ASC is only accessible in the dry months. The project would include the replacement of the ASC with a permanent bridge that provides year-round access. The project would be designed to improve local access and circulation in the surrounding area during fire or another emergency. The Department of Forestry and Fire Protection (CalFire) and Northern Sonoma County Fire would continue to serve this area following implementation of the project. During construction, the ASC would remain open to through-traffic during the dry months. Therefore, the project would not result in the need for new or physically altered fire services to maintain acceptable service ratios, response times, or other performance objectives.

Significance Level

Less Than Significant Impact

ii. Police protection?

Comment

See discussion in response (a.i.) above. The project would include the replacement of the ASC with a permanent bridge that provides year-round access. The project would be designed to improve local access and circulation in the surrounding area during fire or another emergency. Therefore, the project would not result in the need for new or physically altered police services to maintain acceptable service ratios, response times, or other performance objectives.

Significance Level

Less Than Significant Impact

iii. Schools?

Comment

The project would not include residential development, would not result in an increase in population, and would not increase the potential number of students within the service area of the Cloverdale Unified School District. Therefore, the project would not result in the need for new or physically altered school facilities to maintain acceptable service ratios, response times, or other performance objectives.

Significance Level

No Impact

iv. Parks?

Comment

The project would not include residential development and would not increase the potential number of residents within the service area of the County of Sonoma Department of Parks and Recreation. Therefore, the project would not result in the need for new or physically altered park services to maintain acceptable service ratios, response times, or other performance objectives.

Significance Level

No Impact

v. Other Public Facilities?

Comment

The project would not include residential development and would not increase the potential number of residents within the project vicinity that could result in an increase demand for other public services such as public libraries or hospitals. During construction, it is anticipated that the ASC would remain open during the dry months to through-traffic to maintain continuous access. Access would be improved following construction activities. Therefore, the project would not result in the need for new or physically altered public services to maintain acceptable service ratios, response times, or other performance objectives.

Significance Level

No Impact

6.16 Recreation

The nearest County-operated recreational facility to the project area is the Cloverdale River Park located approximately five miles north of the project area.

Would the project:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Comment

Although the Russian River is commonly used for recreational activities there are no officially designated parks or recreational facilities near the project area. Additionally, the project would include the replacement of the ASC with a permanent bridge, which would allow more reliable access across the Russian River once construction is complete. Therefore, the project would not 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.

Significance Level

No Impact

- b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Comment

The project would not include recreational facilities or induce population growth in the area. Therefore, the project would not require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Significance Level

No Impact

6.17 Transportation

According to the Traffic Analysis prepared for the project, Washington School Road currently accommodates 1,694 daily vehicles, and is projected to accommodate 2,399 daily vehicles in 2040 (TJKM, 2023).

Would the project:

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

Comment

The following General Plan policies apply to the project:

- Goal CT-4: Provide and maintain a highway system capacity that serves projected highway travel demand at acceptable levels of service in keeping with the character of rural and urban communities.
 - Goal CT-3: Establish a viable transportation alternative to the automobile for residents of Sonoma County through a safe and convenient bicycle and pedestrian transportation network, well integrated with transit, that will reduce greenhouse gas emissions, increase outdoor
-

recreational opportunities, and improve public health.

- Policy CT-3z: Require road construction projects to minimize their impacts on bicyclists and pedestrians through the proper placement of construction signs and equipment and by providing adequate, safe, well-marked detours. Where it is safe to do so, allow bicyclists and pedestrians to pass through construction areas in order to avoid detours. Where two-way bicycle and pedestrian travel can be safely accommodated in a one-way traffic control zone, adequate signage shall be placed to alert motorists of bicycles and pedestrians in the lane.
- Policy CT-6h: Carry out on an as needed basis projects that enhance traffic safety but do not significantly increase capacity, including but not limited to traffic control devices, curvature reduction, turn lanes at intersections, shoulder improvements, reconstruction and resurfacing.

The project would include the replacement of the ASC with a permanent bridge that provides year-round access. The bridge would be designed to blend with the existing rural character of the area. The project would be designed to improve local access and circulation in the surrounding area and would include bicycle and pedestrian facilities. The ASC would also remain open during construction seasonally, allowing access across the river to continue. Therefore, the project would not conflict with any program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. The project would be consistent with applicable General Plan policies.

Significance Level

Less Than Significant

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

Comment

CEQA Guidelines section 15064.3, subdivision (b) outlines criteria for analyzing transportation impacts. Per CEQA Guidelines section 15064.3 subdivision (b), transportation projects that reduce or have no impact on vehicle miles traveled should be presumed to cause a less than significant transportation impact. During construction, the project would not require any temporary road closures or detours. The new bridge would maintain the same number of lanes as the existing ASC. Based on the traffic analysis prepared for the project, it was determined that the project would not result in a net increase of vehicle miles traveled (TRC Companies, 2022). Therefore, the project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). In addition, the project would eliminate the need for residents to drive to the next bridge crossing during part of the year, reducing the length of these trips.

Significance Level

No Impact

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

Comment

The new bridge and roadway improvements would be designed to meet current safety and geometric standards. The project design would be subject to review and permitting by Sonoma County to ensure the design and construction is consistent with applicable standards. Therefore, the project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses.

Significance Level

Less Than Significant Impact

d. Result in inadequate emergency access?

Comment

The project would result in a permanent bridge over the Russian River to replace a seasonal crossing that was only available during the dry months. The seasonal crossing would remain open during construction of the permanent bridge. The new bridge would improve emergency access; therefore, it would not result in inadequate emergency access.

Significance Level

Less Than Significant Impact

6.18 Tribal Cultural Resources

A record search of the APE and a surrounding 1-mile radius was conducted at the NWIC to identify if any historic properties or previous cultural resources studies on file. The records search identified five previous cultural resources within 1-mile of the project area. Additionally, a cultural studies document investigation identified three cultural studies that were found within the project boundary limits.

The APE is located within the territory of native Kashaya and Southern Pomo tribes. The territory of the Kashaya occupied approximately 30 miles of the coast of Sonoma County and extended inland about 15 miles. The territory of the Southern Pomo extended approximately five miles south of Santa Rosa, northward for about 40 miles, and from the eastern drainage of the Russian River with a narrow extension to the coast.

Would the project:

- a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is:**
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5030.1(k), or**

Comment

According to the Archaeological and Paleontological Report none of the five resources would be impacted by the project; The cultural records search did not identify cultural resources within the Project APE (Duke Cultural Resources Management, 2023). However, The review of the NAHC Sacred Lands File was positive for Tribal Resources within the project and this finding was supported by the Cloverdale Rancheria of Pomo Indians who indicated that the project area is a sensitive area and that all construction activities should be monitored by a tribal representative. These data indicate the Project has moderate sensitivity for prehistoric resources, particularly in the northernmost portion of site. The project has potential to uncover previously unknown materials during construction. Cultural and Tribal Cultural Mitigation Measures defined below would reduce this potentially significant impact to a less-than-significant level.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

In addition to measures **CUL-1** through **CUL-4** listed in *Section 6.5, Cultural Resources*, the following measures would be implemented to minimize impacts on Tribal Cultural Resources:

- TCR-1:** A tribal representative from the Cloverdale Rancheria of Pomo Indians would be present during ground disturbing activities within the project to monitor for Tribal cultural resources.
 - TCR-2:** The tribal monitor would be on-site at the pre-construction meeting to discuss monitoring protocols.
 - TCR-3:** The tribal monitor would be present full-time during ground disturbance within the project, including but not limited to grading, trenching, utilities, and off-site easements. If, after excavation begins, the tribe determines that the sediments are not likely to produce Tribal cultural resources, monitoring efforts would be reduced.
 - TCR-4:** The tribal monitor would be empowered to temporarily halt or redirect grading efforts if Tribal cultural resources are discovered.
 - TCR-5:** In the event of an unanticipated Tribal cultural resource discovery the monitor would flag the area and notify the construction crew immediately. No further disturbance in the flagged area would occur until the tribal monitor has cleared the area.
 - TCR-6:** If the Tribal cultural resource is also an archaeological resource, the tribal monitor would notify and consult with the qualified archaeological monitor. The tribal monitor would quickly assess the nature and significance of the find. If the specimen is not significant it would be quickly mapped, documented, removed, and the area cleared.
 - TCR-7:** If the Tribal cultural resource is significant, the tribal monitor would notify the County immediately.
 - TCR-8:** In consultation with the County and the Cloverdale Rancheria of Pomo Indians, if necessary, the qualified archaeologist will develop a plan of mitigation which will likely include full-time monitoring, salvage excavation, scientific removal of the find, removal of sediment from around the resource (in the laboratory), research to identify and categorize the find, curation of the find in a local qualified repository, and preparation of a report summarizing the find.
- ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Comment

See discussion (a.i) above.

Significance Level

Less Than Significant With Mitigation Incorporated

Mitigation Measures

Measures **CUL-1** through **CUL-4** listed in *Section 6.5, Cultural Resources* and measures listed above would be implemented to minimize impacts on Tribal cultural resources.

6.19 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?**

Comment

There is one utility pole at the existing intersection of Washington School Road and River Road and fiberoptic utilities along the east side of River Road. Additionally, there are drainage ditches located along the roadway. There are currently no other utilities located within the project area. The project may require the relocation of fiberoptic utilities along the east side of River Road. This relocation would be conducted in coordination with the service providers. Additionally, new roadside drainages would be graded to replace existing drainages and LID features would be installed. All other utilities would be protected in place, and no new utilities would be introduced to the project area. Therefore, the project would not require or result in the relocation or construction of new or expanded utilities that could cause significant environmental effects.

Significance Level

Less Than Significant Impact

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

Comment

The project may require temporary water supplies to meet dust control specifications. However, the project would not involve the construction of any structures or facilities that would require additional water supplies. Additionally, the project would not increase population or alter the distribution of population in the project such that additional water supplies would be required. Therefore, the project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

Significance Level

Less Than Significant Impact

- 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?**

Comment

The project would not include any uses, features, or facilities that would generate wastewater and would not require the need for wastewater treatment. Therefore, the project would have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Significance Level

No Impact

- 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?

Comment

The project would generate solid waste during construction. Vegetation removed would need to be disposed of and the project may generate debris from other construction-related work. However, the disposal of solid waste during construction would be short-term, and operation of the project would not result in the long-term generation, or disposal, of solid waste. Additionally, all construction waste would be disposed of by the contractor in compliance with AB 939 and Senate Bill (SB) 1016 requirements. Therefore, the project would not 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.

Significance Level

Less Than Significant Impact

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

Project operation would not result in long-term generation, or disposal of solid waste. The County would be required to comply with AB 939 and SB 1016 requirements. The disposal of solid waste during construction would be short-term. Solid waste would be transferred to a landfill and would be diverted appropriately to meet AB 939 and SB 1016 requirement. Therefore, the project would comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Significance Level

Less Than Significant Impact

6.20 Wildfire

According to CalFire, the community surrounding the project area is located in a Very High Fire Hazard Severity Zone (FHSZ) in a State Responsibility Area (Department of Forestry and Fire Protection, 2023). The project area is in a Moderate FHSZ in a Local Responsibility Area. There is one utility pole at the existing intersection of Washington School Road and River Road and fiberoptic utilities along the east side of River Road. Additionally, there are drainage ditches located along the roadway. There are currently no other utilities located within the project area.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

Comment

The project would not require any temporary road closures or detours that would interfere with emergency access. The ASC would remain open during construction. Under existing conditions, the seasonal crossing is only available when the Russian River is nearly dry. Any delays related to construction would be temporary. Once the new bridge is operational, emergency access would be improved. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan.

Significance Level

Less Than Significant Impact

- 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?**

Comment

The purpose of the project is to enhance the safety of the area by creating a permanent crossing along Washington School Road which would double as an evacuation route in the event of fire or other emergencies. Slope and prevailing winds conditions would remain the same following construction. Therefore, the project would not increase the potential for wildland fires or expose people or structures to a significant risk of loss, injury or death involving wildland fires in the area.

Significance Level

Less Than Significant Impact

- 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?**

Comment

The project may require the relocation of fiberoptic utilities along the east side of River Road. This relocation would be conducted in coordination with the service providers. Additionally, new roadside drainages would be graded to replace existing drainages and LID features would be installed. All other utilities would be protected in place, and no new utilities would be introduced to the project area. All utilities added for the project would be installed in accordance with standard practices to prevent the risk or spread of fire. Therefore, the project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.

Significance Level

Less Than Significant Impact

- 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?**

Comment

As discussed in response (b), the purpose of the project is to provide more reliable access in the event of a wildfire through the construction of a permanent bridge. After construction of the bridge and approach work, the slopes would be re-graded and permanent erosion control BMPs would be installed to re-establish the side slopes. Therefore, the project would not 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.

Significance Level

No Impact

6.21 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?

Comment

The project would result in impacts on biological resources (see *Section 6.4, Biological Resources*); however, with the implementation of mitigation measures, impacts would be less than significant. The project may also result in impacts on historic and prehistoric resources (see *Section 6.5, Cultural Resources* and *Section 6.18, Tribal Cultural Resources*); however, with the implementation of mitigation measures, impacts would be less than significant. Therefore, the project would not be expected 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.

Significance Level

Less Than Significant with Mitigation Incorporated

Mitigation Measures

Measures listed in *Sections 6.4, Biological Resources*, would be implemented to minimize impacts on biological, historic, and cultural resources.

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.)

Comment

Cumulative impacts are impacts on the environment that result from the incremental impacts of a project when added to other past, present, and reasonably foreseeable future actions (State CEQA Guidelines Section 15355[b]). The project would replace an existing seasonal crossing with a new bridge, which is not anticipated to intensify development within the Asti area. In addition, with implementation of proposed mitigation measures, all project impacts would be less than significant. There are no known current projects planned in the vicinity of the project area that would contribute to cumulative impacts of the project. Therefore, the project’s contribution to cumulative impacts would not be cumulatively considerable.

Significance Level

Less Than Significant with Mitigation Incorporated

Mitigation Measures

Measures listed in *Section 6.4, Biological Resources*, *Section 6.5, Cultural Resources*; and *Section 6.18, Tribal Cultural Resources* would be implemented to minimize impacts.

c. Does the Project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Comment

The project would replace the seasonal ASC with a permanent bridge crossing over the Russian

River, which reduce the safety hazards associated in the existing area. The project would improve emergency routes in the event of fire or emergency and the project would not increase environmental effects. Any hazards related to project construction would be less than significant with implementation of mitigation measures. Therefore, the project is not expected to result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly.

Significance Level

Less than Significant with Mitigation Incorporated

Mitigation Measures

Measures listed in *Section 6.1, Aesthetics; Section 6.3, Air Quality; Section 6.9, Hazards and Hazardous Materials; and Section 6.13, Noise* would be implemented to minimize impacts on human beings.

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