DRAFT
Mitigated Negative Declaration

Sonoma County Permit and Resource Management Department
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(707) 565-1900 FAX (707) 565-1103

Publication Date:
Public Review Period:
State Clearinghouse Number:
Prepared by: Robert Aguero
Phone: (707) 565-3718

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

Project Title: River Road over Gill Creek Bridge Replacement Project

Lead Agency: Sonoma County

Project Applicant/Operator: Sonoma County Department of Transportation and Public Works

Project Location/Address: River Road over Gill Creek

Decision Making Body: County of Sonoma Board of Supervisors

Project Description: The Department of Transportation Public Works proposes to replace the existing bridge on River Road over Gill Creek, east of Geyserville CA.

The proposed project consists of placing a temporary bridge to the west of the existing bridge to maintain traffic during the construction phase, removing the existing deficient two lane bridge and replacing it with a new two lane bridge. The project will also remove a weir in the Gill Creek streambed that has blocked fish passage.

See Item III, below of the Initial Study for additional details.

Environmental Finding: The Sonoma County Environmental Review Committee has determined, on the basis of the attached Initial Study, 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 Robert Aguero, Senior Environmental Specialist, at (707) 565-3718.

Mitigation Measures: Included in attached Initial Study. The project applicant 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 and in the summary table below.

Table 1. Summary of Topic Areas

Topic Area	Abbreviation*	**Yes**	**No**
Aesthetics	VIS	X	
Agriculture & 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 Emission	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

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

Table 2 list the agencies and other permits that will be required to construct and/or operate the project. Leave this section out if there are no permits required. (Include only applicable Agencies)

Table 2.**Agency**	**Activity**	**Authorization**
U. S. Army Corps of Engineers	Work in navigable waters	Rivers and Harbors Act, Section 106
Regional Water Quality Control Board (North Coast)	Discharge or potential discharge to waters of the state	California Clean Water Act (Porter Cologne) – Waste Discharge requirements, general permit or waiver

State Water Resources Control Board	Generating stormwater (construction, industrial, or municipal)	National Pollutant Discharge Elimination System (NPDES) requires submittal of NOI
California Department of Fish and Wildlife	Lake or streambed alteration	Fish and Game Code, Section 1600
NOAA Fisheries/ National Marine Fisheries Service (NMFS)	Incidental take permit for listed plant and animal species	Endangered Species Act
Native American Heritage Commission	Cultural Resources and Tribal Resources Records	
State Historic Preservation Office	Cultural Resources and Tribal Resources Records	

ENVIRONMENTAL FINDING:

Based on the evaluation in the attached Expanded 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. The applicant has agreed in writing to incorporate identified mitigation measure into the project plans.

Prepared by: Date

Initial Study

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

I. INTRODUCTION:

The Sonoma County Department of Transportation and Public Works proposes to replace the existing River Road Bridge over Gill Creek (Bridge number 20C-0406). A referral letter was sent to the appropriate local, state and federal agencies and interest groups who may wish to comment on the project.

This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by Robert Aguero, Senior Environmental Specialist, with the Sonoma County Permit and Resource Management Department, Natural Resources Division. Information was provided by Sonoma County Department of Transportation and Public Works. Additional information was provided by various consultants as identified in this Initial Study. Technical studies referred to in this document are available for review at the Permit and Resource Management Department (Permit Sonoma).

Please contact Robert Aguero, Sr. Environmental Specialist, at (707) 565-3718, for more information.

II. EXISTING FACILITY

The existing bridge on River Road (Bridge Number 20C-0406) spans approximately 40 feet and was built in 1962. The structure is a single span bridge, consisting of a reinforced concrete slab haunched rigid frame with reinforced concrete abutments and wingwalls. The structure carries two lanes of traffic for a total width of 23 feet between barriers. A vehicular guardrail with approach flares runs along each edge of the bridge deck. The rails exhibit no damage but are too low to provide adequate safety for pedestrians or bicyclists.

The current Caltrans Bridge Inspection Report shows a sufficiency rating of 40.0 of a possible 100, and is listed as Structurally Deficient. The report indicates the substructure, channel and channel protection, scour conditions, and waterway adequacy are in poor condition.

Recent traffic counts indicate that the bridge carries a daily traffic volume of approximately 284average daily traffic (ADT). Traffic will be maintained by a temporary crossing during construction of the new bridge.

III. PROJECT DESCRIPTION

The proposed project objective to replace the structurally deficient bridge will meet all the current design standards including improvements to roadway approaches, creek health, drainage facilities, and appurtenant facilities. The replacement bridge will also require removal of the existing grade control downstream of the bridge thus improving fish passage conditions and not alter long-term channel stability.

River Road is a local rural road in Sonoma County located north of the City of Geyserville. The portion of River Road in the project area is rural and narrow, consisting of two-lanes with no shoulders. The road traverses Gill Creek, a tributary to the Russian River, between Fox Ridge Road and Vineyard Road which

is approximately 2 miles northwest of State Route 128. It is the only route available to residents and facilities west of the bridge.

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The latest Caltrans Inspection Reports indicates the substructure, channel and channel protection, scour conditions, and waterway adequacy are in poor condition. The bridge is listed on the Local Agency Bridge List (published by Caltrans) as Structurally Deficient and has a Sufficiency Rating of 40.0 out of 100. Therefore, the structure is eligible and recommended for replacement.

The replacement bridge will meet all the current design standards including improvements to roadway approaches, drainage facilities, and appurtenant facilities. The project will upgrade the bridge barriers to current standards and add shoulders to improve operational characteristics for motorized and non-motorized vehicles.

The replacement structure will also require removal of the existing weir downstream of the bridge and therefore improve fish passage without altering long term channel stability. The weir restricts creek flow and has resulted in excessive sediment buildup behind the structure. Removal of the weir will improve the hydraulic conditions and creek health by increasing the creek opening to 100 feet, and partially allowing the creek to restore to the natural condition of the channel. Removing the weir, will also help prevent future scour at the proposed bridge site.

The bridge will meet Caltrans' requirement to pass the 100-year flood event with 0-ft of freeboard.

River Road will remain open to traffic throughout project duration. River Road is the only means of access for property owners on the west side of the bridge. Since both sides of the bridge will be accessible, a portion of the existing roadway to the west and east of the bridge can be used for equipment staging and product lay down. In addition, the driveway located northwest of the bridge (APN 141-250-011-000) and the driveway southeast of the bridge (APN 141-190-017-000) will be used for construction staging. These larger staging areas would be utilized for parking large equipment and for material storage. River Road will also be used for employee parking during construction.

Due to insufficient public right of way, portions of adjacent properties will be affected and require acquiring temporary construction easements (TCE). Some land will also need to be acquired in fee due to the expanded improvement footprint. The properties affected are:

- APN 141-190-034-000
- APN 141-190-038-000
- APN 141-250-011-000
- APN 141-270-004-000
- APN 141-190-017-000

A temporary fenced construction area directly beneath the bridge will be used for access to the existing abutments during demolition activities.

The most likely sequencing and staging of equipment is described below during the various phases of construction. Work would occur within the identified areas, however, the order of activities, type of equipment, and materials could vary depending on the contractor selected to construct the project.

Site Preparation

Trees and shrubs on the approaches will be removed to provide a clear travelled path. Minor shrubs can be removed with an excavator or backhoe while larger shrubs and trees may require tree removal equipment and a backhoe to remove stumps. To prevent soil erosion resulting from the access road entering the creek, a fabric material may be laid down and angular gravel temporarily placed over it. This will also provide the necessary traction for construction vehicles.

Weir Removal and Temporary Bridge Construction

The project's construction window falls within the dry season when the creek does not convey any flow, therefore a 2 lane temporary crossing approximately 20 to 24 ft wide will be constructed through the dry creek bed. The temporary crossing will be located south of the existing structure with approximately 10-ft of separation between the crossing and the existing structure.

The temporary crossing will be constructed when the creek is dry. It will be constructed before work on the bridge demolition begins. It will require the approaches to be graded with a bulldozer leading into the river bed. Given the current roadway embankments, it is expected that fill and/or cut will be required for construction of the approaches. An excavator and/or backhoe will be used to excavate necessary portions of the creek bank and to place engineered fill as needed. The fill will be compacted with tractor mounted compactors or self-propelled rollers and hand-guided compactors to ensure compliance with standard backfill requirements.

An existing concrete weir located downstream of the bridge will obstruct the temporary crossing. Therefore, after the approaches have been graded and the gravel road bed is constructed, equipment will be mobilized to begin demolition of the weir. The weir will be removed using equipment such as generators, a hydraulic impact breaker attached to an excavator or back hoe, air compressors and hand tools. This equipment will be used to break the concrete and wooden weir into manageable debris. The debris will be removed with a loader (or similar equipment) from the channel bottom and hauled away. Trucks will haul away the debris for proper disposal. The weir is primarily concrete with some pressure treated wood, the volume of sediment removed with the weir will be approximately 107 cubic yards. The weir removal area will be approximately 750 square feet.

With the weir removed, bulldozers and excavators will be used to shape the channel bottom between approaches. The channel will be graded to restore creek conditions, approximately 10,730 square feet and will remove a volume of 1,920 cubic yards of sediment.

With the channel graded, corrugated metal pipes will be placed in the dry creek bed to convey flow in the event of a summer storm. Backfill material will then be placed over the pipes to create the temporary detour road. To protect the channel from construction and traffic activity, graded work pads will be used to line the detour road. The work pads can then be topped with clean river run gravel to further protect the creek and provide an acceptable riding surface for vehicles using the detour. Appropriate erosion control including fabric, straw wattles, and appropriate native seeding can be implemented on the graded bank of the dry creek bed crossing.

The contractor will require access below the existing bridge to assist with demolition, and will provide a graded work pad in the dry creek bed to facilitate construction vehicle movement. This work would involve excavators and back hoes grading the channel. Although the dry creek bed crossing will provide equipment access to and from the work area beneath the existing bridge, an additional access road for construction vehicles can be constructed adjacent to the northeast approach of the existing bridge. This road would be constructed in a manner similar to the temporary detour, and would fall within the footprint of the proposed bridge. This access road would serve to separate construction traffic from residential traffic without additional environmental impacts.

Existing Bridge Demolition

As the contractor begins demolition of the existing bridge, a back hoe or loader and an excavator mounted with a hydraulic impact breaker will be staged for the work. The channel will be graded and prepped for demolition as described in the preceding section. The contractor will then use the excavator mounted hydraulic impact breaker to break apart the existing concrete superstructure, letting the debris fall into the prepared area of the creek channel. If water is flowing beneath the bridge during demolition, a protective cover could be constructed to protect the creek from debris and construction materials. With the superstructure demolished, loaders will be used to haul the debris away to the staging area, where it will be hauled away with trucks and properly disposed.

When the debris and rubble from the superstructure are clear, the contractor can remove the existing abutments similarly employing the excavator mounted hydraulic impact breaker and back hoe. The abutments and footings will be removed in their entirety. It is likely that a back hoe will be needed to excavate soil around the footings to properly break apart and haul away the footings. The debris from both abutments will be gathered with the loader and dumped in the staging area, where it will be hauled away with trucks and properly disposed.

During demolition the contractor will use the access points of the low water crossing and the construction access road to enter and exit the channel. Flagging crews will be necessary on site to ensure that vehicular traffic does not interfere with construction activities and vice versa.

Channel Restoration

With the existing bridge demolished, the channel will be excavated upstream and downstream of the bridge using excavators and bulldozers. Approximately 10,730 square feet will be graded and 1,920 cubic yards of sediment will be removed. Excavation limits will be adequate to convey the 100-yr hydraulic flow as indicated in the contract documents. If construction activities during this stage create an excessive amount of dust, water trucks can be brought on site to dampen the soil and reduce the dust to acceptable levels. Excavated material can be used as engineered fill to build the north embankments of the new structure. A revegetation plan has not been finalized and will be developed in coordination with regulatory agencies.

The banks of the creek channel will be graded at a 2:1 slope. With the approach earthwork complete, the new approach embankments can be used as a staging area for construction of the abutments and retaining walls. A fence will be constructed around the work areas to delineate construction limits for the foundations, abutments and retaining walls.

Foundation Construction

An excavator will be staged within the channel to excavate the proposed bridge foundations. Excavated materials can be stored on site and used as engineered fill to build the embankments or as abutment backfill.

When excavation is complete the excavator will be removed from the channel and replaced with a small crane. Formwork for the footings will be built by hand or with the help of the crane if a prefabricated rebar cage is used. When the foundations are formed, a concrete pump will be staged at the adjacent approach. The concrete pump will be staged on the west approach to install the west footing and on the east approach to install the east footing. A crew will direct placement of the concrete from the pump into the foundation concrete cures, erection of the abutments and retaining walls can begin.

Abutment and Retaining Wall Construction

Once the foundation elements are set and ready for abutment construction, the contractor will build plywood abutment forms and use a backhoe to set them in place. With the abutment forms in place, the contractor will then begin placing reinforcement in the abutments. Construction of the abutments can be simultaneously completed with concrete placed at one abutment then the other.

While abutment construction takes place, construction on the adjacent retaining walls can begin. This would involve crews placing forms on the north sides of the bridge. Similar to the abutment, the contractor will build plywood abutment forms and use a backhoe to set them in place. With the abutment forms in place, the contractor will then begin placing reinforcement in the abutments. Construction of the abutments can be simultaneously completed with concrete placed at one abutment then the other.

With the abutment and retaining walls placed, the structure can be partially backfilled with an engineered fill, preferably from material excavated on site from other construction activities. The fill would be placed with an excavator staged on the approach and compacted using self-propelled rollers and hand-guided compactors, ensuring compliance with standard backfill requirements.

Superstructure Construction

To erect the precast bulb tee girders, a large crane will be staged on the east approach behind the new east abutment. The girders will be delivered to the site on tractor trailers arriving from the east. The crane will be used to pick the girders from the truck trailer and place them onto the bridge abutment bearings. It is likely that each crane pick will require temporary roadway closures of approximately 60 minutes. A crew of flaggers will be employed to conduct traffic during closures and staging. This process will be repeated for each of the five girders comprising the proposed bridge and can be completed within a single work day.

Once the girders are in place, forms for the internal and end diaphragms can be constructed. Workers will place the forms and reinforcement by hand. Deck construction will involve erecting either plywood or stay-in-place metal formwork between the girders and hand placing deck reinforcement. All formwork will be sealed to prevent construction material from into the channel below. When the deck is ready for the concrete pour, concrete pumps will be staged at both the west and east approaches of the bridge. The contractor will perform deck surface elevation calculations and identify measurements to place the screed line at even intervals from end to end. A screed machine will be positioned on site and placed on the screed rails outside the extents of the bridge deck forms. Once the final checks for bridge deck elevations are completed, concrete will be poured. Minor traffic delays will be necessary while the concrete trucks are staged but otherwise traffic will not be impacted during this construction stage.

When the deck concrete is cured workers will remove the plywood forms and hang the required utilities under the bridge. If needed, a temporary debris tarp may be slung across the channel during this stage to prevent construction materials from falling into the graded channel. While the deck forms are removed and the utilities are installed, formwork for the concrete curbs and barriers will be constructed. Rebar will be hand placed within the forms and concrete can be poured from a truck staged on the bridge deck. Within a few days the forms can be removed.

Approaches

Approach work can now be completed on both ends and the new structure can be used as access for crews and vehicles from one side of the project site to the other. The contractor will haul in additional structure backfill and will complete grading behind the abutment backwalls and retaining walls. Ideally, the structure would be backfilled with material excavated on site from other construction activities. The contractor will use self-propelled rollers and hand-guided compactors to achieve backfill compaction requirements. The base material for approach slabs and roadway can then be laid down and compacted in a similar fashion. The reinforced concrete approach slabs will be formed, rebar placed and then cast against the side forms. The metal beam guard rails will be installed. Asphalt pavers will roll new hot mix asphalt along the roadway to serve as the new approach roadway and will be placed up to the edge of the existing approach paving.

IV. SETTING

Regional Setting

The project is located along Gill Creek, a tributary of Russian River. The confluence of Gill Creek and Russian River is approximately 0.6 creek miles from the project site. Gill Creek and its tributaries drain a basin of approximately 7.43 square miles. Gill Creek is a second order stream and has approximately 3.75 miles of blue line stream, according to the USGS Geyserville 7.5 minute quadrangle (CDFW 2006). Elevations of Gill Creek range from about 220 feet at the mouth of the creek to 1640 feet in the headwaters. Mixed evergreen forest dominates the watershed, but there are zones of grassland and oak-woodland in the watershed. The watershed is privately owned and is managed for grazing and vineyards (CDFW 2006).

Land use adjacent to the project area is primarily viticulture. The lower reach of the Gill Creek is bordered by vineyards and includes farm roads near the top of the stream bank. The stream reach in the project area is artificially channelized with levies and revetments on both banks. The result is a wide active channel with little connectivity to its flood plain (NMFS 2007).

Physical Site Conditions

The topography at the site consists of the generally flat valley floor and wide channel bottom of Gill Creek. Soils at the project site consist of the following types, as mapped by the Natural Resource Conservation Service. Yolo silt loam, Manzanita gravelly silt loam, Riverwash. Riverwash soils consist of unconsolidated alluvium, composed primarily of gravel and cobbles with some sandier deposits. These soil types are found in river valleys. Adjacent upland soils include Yorkville clay loam and Suther loam.

Gill Creek is an ephemeral creek and goes dry at the bridge location in the summer months. The Gill Creek watershed area is approximately 7.4 square miles. The creek channel is approximately 40 feet wide at the bridge, and is open and unshaded for most of the channel. The principal natural hydrological sources for Gill Creek are direct precipitation and surface run-off from adjacent lands. Data recorded by the U. S. Geological Survey indicates that almost all of the streamflow occurs from November through April (USGS 2002). Dry conditions were observed at the time of the site visits. The channel bottom is composed of primarily of gravel and cobbles with scattered sandy deposits. Gill Creek is a tributary to the Russian River, flows into the Pacific Ocean in Jenner, California. Gill Creek has multiple tributaries that will be unaffected by the project activities.

Figure 1: Location Map

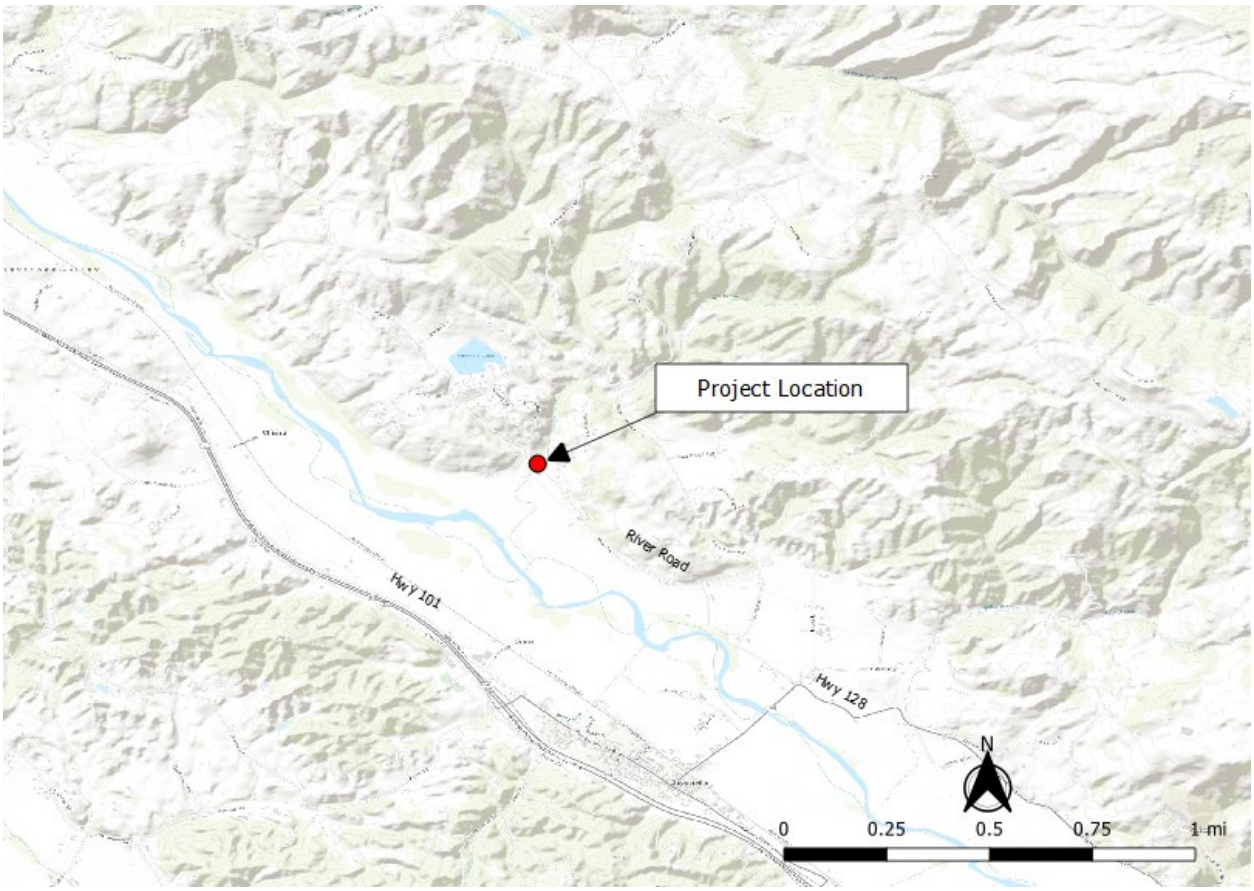
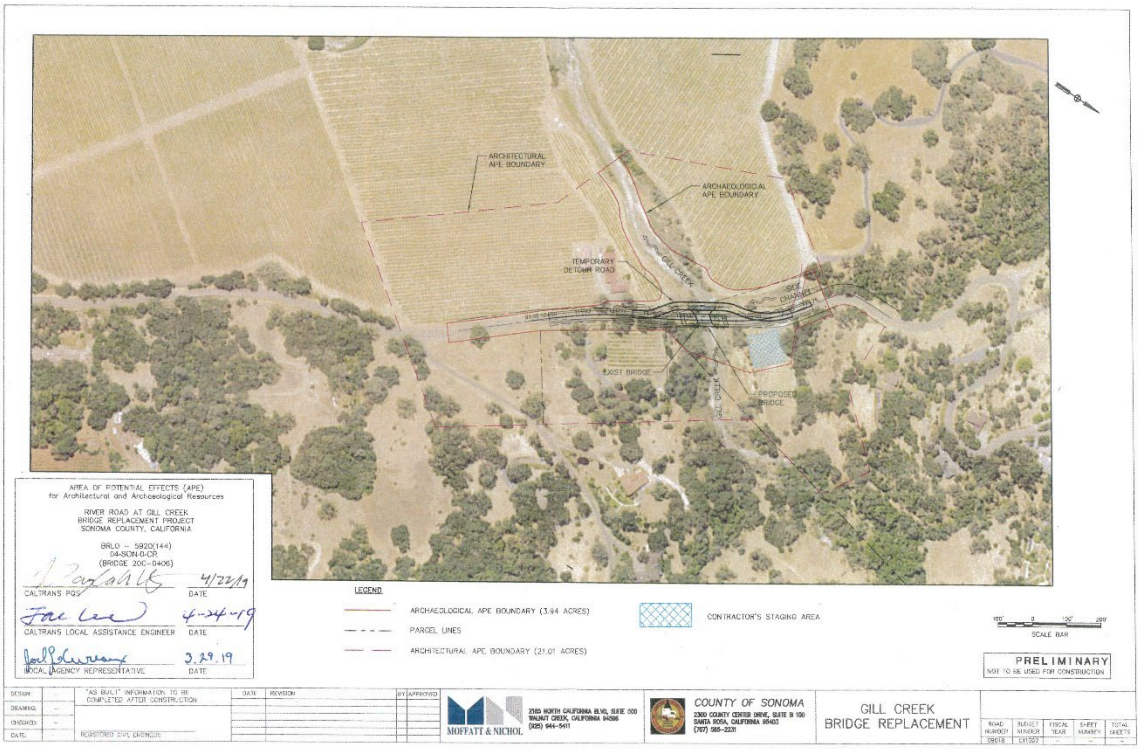


Figure 2: Project Impact Area



V. 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.

No issues have been raised.

VI. OTHER RELATED PROJECTS

There are no related projects in the region at the time of document preparation.

VII. EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts of this project based on the criteria set forth in the State 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 Sonoma County Department of Transportation and Public Works has agreed to accept all mitigation measures listed in this Initial Study as conditions of approval for the proposed 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.

1. AESTHETICS:

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

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

Comment:

The PRMD Visual Assessment (VA) Guidelines have been applied to the visual characteristics of the proposed bridge replacement project. While the analysis of visual impacts involves qualitative judgments, this procedure is intended to define a methodology that utilizes, to the extent practicable, objective standards that can be described and utilized in a consistent manner. Project impacts have been analyzed by considering public viewing points. Public viewing points include public roads, public trails, and public parks. Viewing points from private properties are not used when applying the VA Guidelines.

Viewer sensitivity is defined both as the viewers' concern for scenic quality and the viewers' response to change in the visual resources that make up the view. Local values and goals may confer visual significance on landscape components and areas that would otherwise appear unexceptional in a visual resource analysis. Even when the existing appearance of a project site is uninspiring, a community may still object to projects that fall short of its visual goals.

The project is not likely to be controversial with the community as a whole. The project is located in a remote part of the County that is rural in nature, as there are very few residents in the area, and the roadway has low traffic volumes (284vehicles per day) resulting in relatively few viewers. River Road in the area is primarily used by private landowners and agricultural operations.

Viewer exposure is typically assessed by measuring the number of viewers exposed to the resource change, type of viewer activity, duration of their view, speed at which the viewer moves, and position of the viewer. High viewer exposure heightens the importance of early consideration of design, art, and architecture and their roles in managing the visual resource effects of a project.

There are no parks or trails from which the bridge can be viewed, and based on a site survey as well as review of topography and aerials, the bridge cannot be viewed from any residences, with the closest residence being approximately 0.1 miles away with intervening trees obstructing views of the site. Exposure is low as daily use of River Road is low with an average daily traffic count at 284 vehicles per day (Sonoma County, 2018). The roadway is primarily used by local residences and agricultural workers. Viewers familiar with the roadway as it is now would likely have a low sensitivity to changes that result from modifications to its setting.

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. As described in the above sections, changes to the existing project corridor will be minimized to the extent possible. The combination of a limited viewshed, a design that is compatible with the existing visual character and only temporary impacts to visual quality results in the visual impacts determined to be moderately low. These impacts include the new structure, new asphalt at the approaches, and bank stabilization to protect the new structure. Over time these new elements will blend in with the existing roadway.

Permanent Impacts

The new bridge will be in the same location as the old bridge. This structure will be wider than the existing bridge to meet current AASHTO safety standards. The alignment will not change. . The existing downstream weir will be removed to improve flow conditions and fish habitat. The new bridge structure, removal of weir, and channel grading and rock slope protection will be a permanent impact, resulting in a low to moderate resource change. Overall, this impact would be beneficial because it will result in a more open bridge opening and natural channel appearance. .

Temporary Impacts

Temporary visual impacts will be high during the construction due to the presence of large equipment and removal of vegetation within the new alignment. The equipment staging will occur at the project site in an existing turn out and wide spots in the shoulder. Construction signage will notify travels of the roadwork. Disturbed areas will be regraded to meet pre-project grades at the end of construction. These areas will be revegetated and monitored to ensure the success of the replacement plantings. (1, 29)

Significance Level:

Less than Significant with Mitigation Incorporated

The County will or has incorporated the following measures to avoid or minimize visual impacts:

- Minimize vegetation removal to the extent possible, and trim trees rather than remove where possible. Replace any vegetation removed for construction activities. Native species will be replaced in kind and any invasive plants within the project area will be removed and replaced with native.

- Protect existing vegetation to remain, which is outside of clearing and grubbing limits, from the contractors operations, equipment and materials storage. Environmentally Sensitive Areas (ESA) are identified on the project plans to limit contractor action areas.

- Screen Construction staging and storage areas where feasible. Place unsightly material, equipment storage and staging so that they are not visible to the maximum extent possible.

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

Comment:
River Road is not a designated state scenic highway. The existing bridge is not a Sonoma County Historic Landmark. The project will not affect heritage trees, unique geological features or any other historic buildings within a state scenic highway. (1, 30)

Significance Level:

Less than Significant Impact

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 is located within a non-urbanized area. The project is located along the valley floor of the Alexander Valley, at a crossing of the road and Gill Creek. Parcels immediately adjacent to the bridge are privately owned. The surrounding land use is agriculture, with a rural residence approximately 0.1 miles to the southeast. The current viewshed within the project area is open, with agriculture and vineyards to the west and hills and forest land to the east. Existing views of the bridge occur from River Road and are primarily of the bridge deck. The approach roadway provides the viewer with minimal visual change, as the new bridge would have a more open appearance. Construction of the proposed project would not substantially change the viewshed or the visual character or quality of public views of the site and its surrounds within the corridor. (1, 30)

Significance Level:

Less than Significant Impact

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

Comment:
No new structures will introduce new sources of light and glare. River Road and the immediate vicinity of the project site do not contain any street lighting or residential lighting. The only exiting source of nighttime lighting in the immediate vicinity of the project site is from motor vehicle headlights. Guardrail reflectors are provided at each approach of the existing bridge. With the exception of motor vehicle windshields and to a lesser extent seasonal water in Gill Creek, there are no exiting sources of glare in the project area.

No new lighting is proposed for the replacement bridge or River Road as a part of the project. The new bridge would include new guardrail reflectors at each approach but it would not increase the motor vehicle carrying capacity compared to the existing bridge. The replacement bridge would not include new sources of substantial glare. (1)

Significance Level:

No Impact

2. AGRICULTURE AND FOREST RESOURCES:

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

Would the project:

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

Comment:
There is Prime Farmland and Unique Farmland adjacent to the project area. There will be approximately 0.33 acres of permanent right of way acquisition required and approximately 0.34 acres of temporary construction easement will be required. It is not expected that the right of way acquisition will result in the permanent or temporary conversion of Prime Farmland or Unique Farmland. Where permanent acquisition of private land is required for the project, the County will negotiate just compensation (fair market value) for property owners prior to construction. The County will also negotiate just compensation for temporary use of land. The negotiation process for permanent acquisitions and temporary easements will include compensation (such as replacement-in-kind or monetary compensation) for loss of property features such as landscaping, fencing, etc.

Property acquisition for the project will be done in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended in 1987, and with all requirements of Title VI of the 1964 Civil Rights Act, as required per the Local Assistance Procedures Manual, Chapter 13. (1, 2)

Significance Level:

Less than Significant Impact

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

Comment:
The project will not conflict with existing zoning for agricultural use. Public projects are exempt from zoning requirements per Sonoma County Code 26-02-070). (1, 2)

Significance Level:

No Impact

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

Comment:
Zoning at the project site is "Rural Residential", "Land Intensive Agriculture", "Resources and Rural Development", and "Planned Community" The project would not conflict with the existing zoning of the site or necessitate rezoning of the site. Therefore, no impact would occur with implementation of the project. (1, 12)

Significance Level:

No Impact

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

Comment:
Approximately 19 individual trees will be removed. The proposed project will not result in the loss of forest land nor will it convert forest land to non –forest use. Individual trees removed would be replaced via mitigation plantings. (1)

Significance Level:

No Impact

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use or conversion of forest land to non-forest use?

Comment:
There is Prime Farmland and Unique Farmland adjacent to the project area. There will be approximately 0.33 acres of permanent right of way acquisition required and approximately 0.34 acres of temporary construction easement will be required. It is not expected that the right of way acquisition will result in the permanent or temporary conversion of Prime Farmland or Unique Farmland. Where permanent acquisition of private land is required for the project, the County will negotiate just compensation (fair market value) for property owners prior to construction. The County will also negotiate just compensation for temporary use of land. The negotiation process for permanent acquisitions and temporary easements will include compensation (such as replacement-in-kind or monetary compensation) for loss of property features such as landscaping, fencing, etc.

Property acquisition for the project will be done in compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended in 1987, and with all requirements of Title VI of the 1964 Civil Rights Act, as required per the Local Assistance Procedures Manual, Chapter 13. (1,2)

Significance Level:

Less than Significant Impact

3. AIR QUALITY:

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

Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Comment:

The project is within the jurisdiction of the Northern Sonoma County Air Pollution Control District (NSCAPCD). The NSCAPCD does not have an adopted air quality plan because it is in attainment for all federal and state criteria pollutants. (1, 5)

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:
The project is located in the NSCAPCD jurisdiction, a region that is in attainment for criteria pollutants under applicable state and federal ambient air quality standards, however, PM_{10} is a criteria pollutant that is closely monitored in the NSCAPCD. Readings in the district have exceeded state standards on several occasions in the last few years. The high PM_{10} readings occurred in the winter and are attributed to the seasonal use of wood burning stoves. The project will have no long-term effect on PM_{10}, because all surfaces will be paved, gravel, landscaped or otherwise treated to stabilize bare soils, and operational dust generation will be insignificant. However, there could be a significant short-term emission of dust (which would include $PM_{2.5}$ and PM_{10}) during construction. While these emissions could be significant at the project level, site BMPs and mitigation measures for controlling dust will lower construction related airborne particulates to a less than significant amount. (1, 5)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

This potentially significant impact can be reduced to a less-than-significant level by implementing the following mitigation measure during construction:

Mitigation Measure AIR-1 Air Quality/ Fugitive Dust Control.

The County shall include provisions in the construction bid documents that the contractor shall implement a dust control program to limit fugitive dust emissions. The dust control program shall include, but not be limited to, the following elements, as appropriate:

- Water inactive construction sites and exposed stockpile sites at least twice daily, including during non-work days, or until soils are stable.
- Pursuant to the California Vehicle Code (State of California 2009), all trucks hauling soil and other loose material to and from the construction site shall be covered or shall maintain at least 6 in. of freeboard (i.e., minimum vertical distance between top of load and the trailer).
- Any topsoil that is removed for the construction operation shall be stored on-site in piles not to exceed 4 ft. in height to allow development of microorganisms prior to resoiling of the construction area. These topsoil piles shall be clearly marked and flagged. Topsoil piles that will not be immediately returned to use shall be revegetated with a non-persistent erosion control mixture.
- Soil piles for backfill shall be marked and flagged separately from native topsoil stockpiles. These soil piles shall also be surrounded by silt fencing, straw wattles, or other sediment barriers or covered unless they are to be immediately used.

- Equipment or manual watering shall be conducted on all stockpiles, dirt/ gravel roads, and exposed or disturbed soil surfaces, as necessary, to reduce airborne dust.

c) Expose sensitive receptors to substantial pollutant concentrations?

Comment:
Sensitive receptors include hospitals, schools, convalescent facilities, and residential areas. State the type and location of the nearest sensitive receptor. There are several rural residences near the project area located along Fox Ridge Road to the southeast of the project area. Potential exposure would be temporary and at the project level. Implementation of Mitigation Measure AIR-1 would reduce these impacts to less than significant. (1)

Significance Level:

Less than Significant with Mitigation Incorporated

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

Comment:
Construction equipment may generate odors during project construction. The impact would be less than significant as it would affect a very low number of people due to the rural setting and would be a short-term impact that ceases upon completion of the project. (1)

Significance Level:

Less than Significant Impact

4. BIOLOGICAL RESOURCES:

The River Road Bridge over Gill Creek Project has a long history and has been surveyed for biotic resources several times by County Environmental Specialist staff. General site surveys have been conducted by Robert Aguero, Richard Stabler and Jackson Ford, Senior Environmental Specialists with the Sonoma County Permit and Resource Management Department (PRMD) Natural Resources Division. Richard Stabler has a Master of Science Degree in Biology with an emphasis on plant ecology at Sonoma State University and has 20 years of experience performing wildlife, plant, and wetland surveys for the County. Jackson Ford has a Master of Science in Environmental Policy and Planning from California State Polytechnic University, Pomona and has 5 years of experience performing wildlife surveys for construction projects. Robert Aguero has a Bachelor of Science in Forestry and Natural Resource Management from California Polytechnic State University, San Luis Obispo, and is a registered professional forester with 5 years of experience performing wildlife surveys in Sonoma County Previous site visits conducted by PRMD and resource agency staff are described below.

- August 20, 2012: Crystal Acker and Richard Stabler

- April 29, 2019 Richard Stabler

Additionally, County biologists coordinated an agency meeting on May 5th, 2016. Representatives from California Department of Fish and Wildlife, North Coast Regional Water Quality Control Board, and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries). The purpose of this meeting was to introduce the project and discuss grading plans. The information was then used to develop a project Natural Environment Study (NES) in effort to satisfy requirements of the

National Environmental Policy Act (NEPA). The report was submitted to Caltrans Local Assistance who represents the Federal Highway Administration (FHWA), the NEPA lead agency for the project. The NES was approved January 2022.

A project Biological Assessment was written, and Caltrans staff submitted to NOAA Fisheries to initiate Section 7 consultation of the Federal Endangered Species Act consultation. NOAA Fisheries issued a letter of concurrence on February 24, 2022 that the project was either not likely to adversely affect or have no impact on listed salmonids or their critical habitat.

The following analysis has been summarized from the project's NES and BA documentation.

Regulatory Framework

The following discussion identifies federal, state and local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Federal

Federal Endangered Species Act (FESA)

FESA establishes a broad public and federal interest in identifying, protecting, and providing for the recovery of threatened or endangered species. The Secretary of Interior and the Secretary of Commerce are designated in FESA as responsible for identifying endangered and threatened species and their designated critical habitat, carrying out programs for the conservation of these species, and rendering opinions regarding the impact of proposed federal actions on listed species. The USFWS and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries) are charged with implementing and enforcing the FESA. USFWS has authority over terrestrial and continental aquatic species, and NOAA Fisheries has authority over species that spend all or part of their life cycle at sea, such as salmonids.

Section 9 of FESA prohibits the unlawful "take" of any listed fish or wildlife species. Take, as defined by FESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such action." USFWS's regulations define harm to mean "an act which actually kills or injures wildlife." Such an act "may include "significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3). Take can be permitted under FESA pursuant to sections 7 and 10. Section 7 provides a process for take permits for federal projects or projects subject to a federal permit, and Section 10 provides a process for incidental take permits for projects without a federal nexus. FESA does not extend the take prohibition to federally listed plants on private land, other than prohibiting the removal, damage, or destruction of such species in violation of state law.

The Migratory Bird Treaty Act of 1918 (MBTA)

The U.S. MBTA (16 USC §§ 703 et seq., Title 50 Code of Federal Regulations [CFR] Part 10) states it is "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill; attempt to take, capture or kill; possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or in part, of any such bird or any part, nest or egg thereof…" In short, under MBTA it is illegal to disturb a nest that is in active use, since this could result in killing a bird, destroying a nest, or destroying an egg. The USFWS enforces MBTA. The MBTA does not protect some birds that are non-native or human-introduced or that belong to families that are not covered by any of the conventions implemented by MBTA. In 2017, the USFWS issued a memorandum stating that the MBTA does not prohibit incidental take; therefore, the MBTA is currently limited to purposeful actions, such as directly and knowingly removing a nest to construct a project,

hunting, and poaching.

The Clean Water Act (CWA)

The CWA is the primary federal law regulating water quality. The implementation of the CWA is the responsibility of the U.S. Environmental Protection Agency (EPA). However, the EPA depends on other agencies, such as the individual states and the U.S. Army Corps of Engineers (USACE), to assist in implementing the CWA. The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 and 401 of the CWA apply to activities that would impact waters of the U.S. The USACE enforces Section 404 of the CWA and the California State Water Resources Control Board enforces Section 401.

Section 404

As part of its mandate under Section 404 of the CWA, the EPA regulates the discharge of dredged or fill material into "waters of the U.S.". "Waters of the U.S: include territorial seas, tidal waters, and non-tidal waters in addition to wetlands and drainages that support wetland vegetation, exhibit ponding or scouring, show obvious signs of channeling, or have discernible banks and high-water marks. Wetlands are defined as those areas "that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3(b)). The discharge of dredged or fill material into waters of the U.S. is prohibited under the CWA except when it is in compliance with Section 404 of the CWA. Enforcement authority for Section 404 was given to the USACE, which it accomplishes under its regulatory branch. The EPA has veto authority over the USACE's administration of the Section 404 program and may override a USACE decision with respect to permitting. Substantial impacts to waters of the U.S. may require an Individual Permit's Projects that only minimally affect waters of the U.S. may meet the conditions of one of the existing Nationwide Permits, provided that such permit's other respective conditions are satisfied. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions (see below).

Section 401

Any applicant for a federal permit to impact waters of the U.S. under Section 404 of the CWA, including Nationwide Permits where pre-construction notification is required, must also provide to the USACE a certification or waiver from the State of California. The "401 Certification" is provided by the State Water Resources Control Board through the local Regional Water Quality Control Board (RWQCB). The RWQCB issues and enforces permits for discharge of treated water, landfills, storm-water runoff, filling of any surface waters or wetlands, dredging, agricultural activities and wastewater recycling. The RWQCB recommends the "401 Certification" application be made at the same time that any applications are provided to other agencies, such as the USACE, USFWS, or NOAA Fisheries. The application is not final until completion of environmental review under the CEQA. The application to the RWQCB is similar to the pre-construction notification that is required by the USACE. It must include a description of the habitat that is being impacted, a description of how the impact is proposed to be minimized and proposed mitigation measures with goals, schedules, and performance standards. Mitigation must include a replacement of functions and values, and replacement of wetland at a minimum ratio of 2:1, or twice as many acres of wetlands provided as are removed. The RWQCB looks for mitigation that is on site and in-kind, with functions and values as good as or better than the water-based habitat that is being removed.

State

California Endangered Species Act (CESA)

Provisions of CESA protect state-listed threatened and endangered species. The CDFW is charged with establishing a list of endangered and threatened species. CDFW regulates activities that may result in "take" of individuals (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the California Fish and Game Code (CFGC), but CDFW has interpreted "take" to include the killing of a member of a species which is the proximate result of habitat modification.

Fish and Game Code 1600-1602

Sections 1600-1607 of the CFGC require that a Notification of Lake or Streambed Alteration Agreement (LSAA) application be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions in the application and, if necessary, prepares a LSAA that includes measures to protect affected fish and wildlife resources, including mitigation for impacts to bats and bat habitat.

Nesting Birds

Nesting birds, including raptors, are protected under CFGC Section 3503, which reads, "It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto." In addition, under CFGC Section 3503.5, "it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto". Passerines and non-passerine land birds are further protected under CFGC 3513. As such, CDFW typically recommends surveys for nesting birds that could potentially be directly (e.g., actual removal of trees/vegetation) or indirectly (e.g., noise disturbance) impacted by project-related activities. Disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by CDFW.

Non-Game Mammals

Sections 4150-4155 of the CFGC protects non-game mammals, including bats. Section 4150 states "A mammal occurring naturally in California that is not a game mammal, fully protected mammal, or fur-bearing mammal is a nongame mammal. A non-game mammal may not be taken or possessed except as provided in this code or in accordance with regulations adopted by the commission". The non-game mammals that may be taken or possessed are primarily those that cause crop or property damage. Bats are classified as a non-game mammal and are protected under the CFGC.

California Fully Protected Species and Species of Special Concern

The classification of "fully protected" was the CDFW's initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibians and reptiles at §5050, birds at §3503 and §3511, and mammals at §4150 and §4700) dealing with "fully protected" species state that these species "…may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species," although take may be authorized for necessary scientific research. This language makes the "fully protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003, the code sections dealing with "fully protected" species were amended to allow the CDFW to authorize take resulting from recovery activities for state-listed species.

California Species of Special Concern (CSC) are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFW because they are declining at a rate that could result in listing or because they historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFW, land managers, consulting biologists, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal

status, they are given special consideration under the CEQA during project review.

Porter-Cologne Water Quality Control Act

The intent of the Porter-Cologne Water Quality Control Act (Porter-Cologne) is to protect water quality and the beneficial uses of water, and it applies to both surface and ground water. Under this law, the State Water Resources Control Board develops statewide water quality plans, and the RWQCBs develop basin plans that identify beneficial uses, water quality objectives, and implementation plans. The RWQCBs have the primary responsibility to implement the provisions of both statewide and basin plans. Waters regulated under Porter-Cologne, referred to as "waters of the State," include isolated waters that are not regulated by the USACE. Projects that require a USACE permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, any person discharging, or proposing to discharge, waste (e.g., dirt) to waters of the State must file a Report of Waste Discharge and receive either waste discharge requirements (WDRs) or a waiver to WDRs before beginning the discharge.

Local

Sonoma County General Plan

The *Sonoma County General Plan 2020* Land Use Element and Open Space & Resource Conservation Element both contain policies to protect natural resource lands including, but not limited to, watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors.

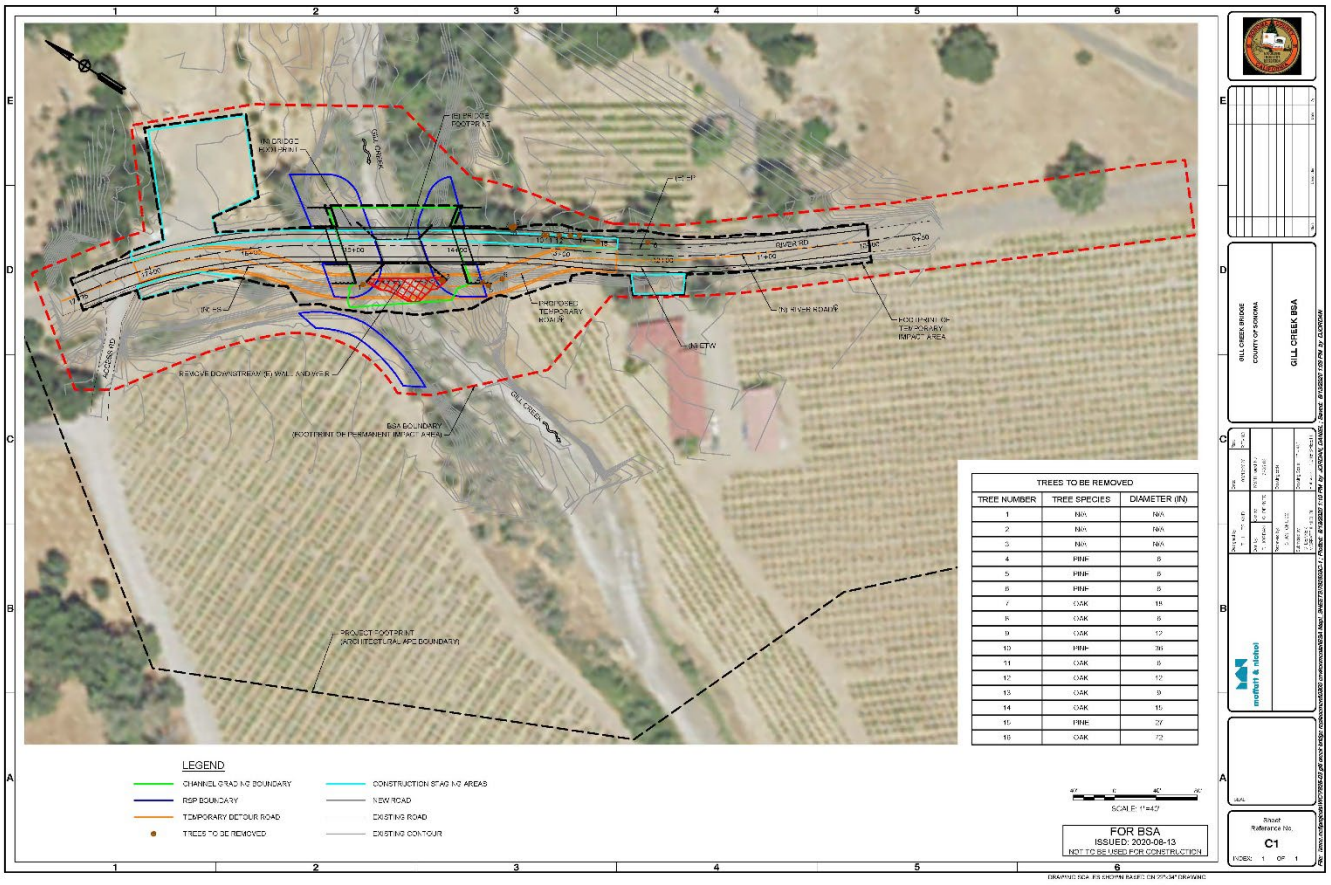
Riparian Corridor Ordinance

The RC combining zone is established to protect biotic resource communities, including critical habitat areas within and along riparian corridors, for their habitat and environmental value, and to implement the provisions of the General Plan Open Space and Resource Conservation and Water Resources Elements. These provisions are intended to protect and enhance riparian corridors and functions along designated 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, floodplain management, wildlife habitat and movement, stream shade, fisheries, water quality, channel stability, groundwater recharge, opportunities for recreation, education and aesthetic appreciation and other riparian functions and values.

Environmental Setting

The Biological Study Area was defined to include the project footprint, including the existing right-of-way, proposed right of-way, temporary construction easements, and temporary staging areas. In addition, the BSA includes the riparian corridor and stream channel 100 feet upstream and downstream of the project limits, in order to consider indirect impacts and adjacent habitat from which species might migrate into the project site. In total the project BSA encompasses approximately 3.6 acres. Potential impacts to salmonids were evaluated on a watershed basis rather than within a discrete BSA.

Figure 3: Biological Study Area and Project Impact Area



<u>Plant Communities and Habitat Types in the BSA</u>

The following natural communities are found at and surrounding the site:

Riparian habitat

Riparian habitat is present within the OHWM channel and along the banks of Gill Creek. The dominant vegetation of the riparian habitat includes Fremont cottonwood and willows. This is an early seral, willow-dominated plant community. Understory herbs are primarily non-native and weedy species common to areas of high disturbance, some of which are known to be invasive and responsible for degradation of native habitat quality.

Gill Creek Channel

The Gill Creek channel allows for northeast and southwesterly movement through riparian habitat. During the wet season, this corridor provides migration, spawning and rearing habitat for steelhead. There is currently a wooden-weir structure within the channel that is acting as a fish barrier. This is planned to be removed as part of the bridge replacement.

Disturbed Upland

Areas outside the riparian corridor include areas of disturbed upland habitat which include: bare soil and road shoulder adjacent to vineyards, driveway access points to vineyards, residences, a winery, and vineyards. The primary vegetation in the disturbed areas consist of grasses along the road edges, all of which are non-native, including wild oats (*Avena fatua*), foxtail barley (*Hordeum murinum*), ripgut brome (*Bromus diandrus*), and rattlesnake grass (*Briza maxima*). Trees proposed to be removed in this area are gray pine (*Pinus sabiniana*).

(1,31)

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Comment:
Regulatory Framework

The following discussion identifies federal, state and local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Special-Status Species

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These acts afford protection to both listed and proposed species. In addition, California Department of Fish and Wildlife (CDFW) Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, U.S. Fish and Wildlife Service (The Service) Birds of Conservation Concern, and CDFW special-status invertebrates, are all considered special-status species. Although CDFW Species of Special Concern generally have no special legal status, they are given special consideration under the California Environmental Quality Act (CEQA). In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Plant species on California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants with California Rare Plant Ranks (Rank) of 1 and 2 are also considered special-status plant species and must be considered under CEQA. Bat species designated as “High Priority” by the Western Bat Working Group (WBWG) qualify for legal protection under Section 15380(d) of the CEQA Guidelines. Species designated High Priority” are defined as “imperiled or are at high risk of imperilment based on available information on distribution, status, ecology and known threats.

Endangered Species Act

The Endangered Species Act (ESA) of 1973, as amended (16 USC 1531 *et seq*.) was enacted to provide a means to identify and protect endangered and threatened species. Under the Section 9 of the ESA, it is unlawful to take any listed species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting a listed species. "Harass" is defined as an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. "Harm" is defined as an act which actually kills or injures fish or wildlife and may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Actions that may result in "take" of a federal-listed species are subject to The Service or National Marine Fisheries Service (NOAA Fisheries) permit issuance and monitoring. Section 7 of ESA requires federal agencies to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of designated critical habitat for such species. Any action authorized, funded, or carried out by a federal agency or designated proxy (e.g., Army Corps of Engineers) which has potential to affect listed species requires consultation with The Service or NOAA Fisheries under Section 7 of the ESA.

Critical Habitat

Critical habitat is a term defined in the ESA as a specific geographic area that contains features essential for the conservation of a threatened or endangered species and that may require special management and protection. The ESA requires federal agencies to consult with the USFWS to conserve listed species on their lands and to ensure that any activities or projects they fund, authorize, or carry out will not jeopardize the survival of a threatened or endangered species. In consultation for those species with critical habitat, federal agencies must also ensure that their activities or projects do not adversely modify critical habitat to the point that it will no longer aid in the species' recovery. In many cases, this level of protection is similar to that already provided to species by the ESA jeopardy standard. However, areas that are currently unoccupied by the species but which are needed for the species' recovery are protected by the prohibition against adverse modification of critical habitat.

Essential Fish Habitat

Essential Fish Habitat (EFH) is regulated through the NMFS, a division of the National Oceanic and Atmospheric Administration (NOAA). Protection of Essential Fish Habitat is mandated through changes implemented in 1996 to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to protect the loss of habitat necessary to maintain sustainable fisheries in the United States. The Magnuson-Stevens Act defines Essential Fish Habitat as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" [16 USC 1802(10)]. NMFS further defines essential fish habitat as areas that "contain habitat essential to the long-term survival and health of our nation's fisheries" Essential Fish Habitat can include the water column, certain bottom types such as sandy or rocky bottoms, vegetation such as eelgrass or kelp, or structurally complex coral or oyster reefs. Under regulatory guidelines issued by NMFS, any federal agency that authorizes, funds, or undertakes action that may affect EFH is required to consult with NMFS (50 CFR 600.920).

Discussion of Special Status Plants

A list of regionally occurring special-status plant species was compiled based on a review of pertinent literature, the results of the field surveys, and the review of the USFWS species list, and CNDDB and CNPS database records. For each species, habitat requirements were assessed and compared to the habitats within the BSA and immediate vicinity in order to determine their potential to be affected by the proposed project. Based on this review of habitat requirements and the results of the field assessment, no special-status plant species were determined to have suitable habitat within the BSA.

Discussions of Special Status Animals

A list of regionally occurring special-status animal species was compiled based on a review of pertinent literature, the results of the field surveys, and the review of the USFWS species list, CNDDB database records, and a query of the California Wildlife Habitat Relationships (CWHR) system (California Department of Fish and Game 2008a). The CWHR system was used to help determine wildlife species that potentially occur in the vegetation habitats within the BSA. The CWHR is a predictive database system based on scientific information concerning wildlife species and their habitat relationships. Fish and invertebrates are not included in the CWHR system.

For each species, general habitat requirements were assessed and compared to the habitats within the BSA and immediate vicinity in order to determine their potential to be affected by the proposed project. Based on this review of general habitat requirements presented in, and the results of the field assessment, the special-status animal species potentially affected by the project include: Central California Coast Coho salmon *(Oncorhynchus kisutch*), Central Coast California District Population Segment (DPS) steelhead (*Oncorhynchus mykiss irideus*) California coastal chinook salmon (*Oncorhynchus tshawytscha).* Potential impacts and recommended mitigation measures for the species listed above are addressed in this document.

Critical Habitat and Essential Fish Habitat

The project is within designated Essential Fish Habitat (EFH) for central coastal chinook salmon and central California Coast coho salmon. The Magnuson-Stevens Act requires consultation for all federal agency actions that may adversely affect EFH. EFH consultation with NOAA FISHERIES is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH. Because localized short-term impacts to designated critical habitat, the County determined the project may have an effect to EFH. Conservation measures to avoid, minimize, mitigate, or otherwise offset adverse effects to EFH have been included in the project design to reduce these impacts to negligible and temporary. A Biological Assessment/Essential Fish Habitat Assessment (BA/EFHA) was submitted to the NOAA Fisheries for review under Section 7 of the Endangered Species Act (ESA) to address potential impacts to EFH. NOAA Fisheries issued a letter of concurrence on February 24, 2022, stating that with the conservation measures proposed, the project would not adversely affect EFH. Mitigation measures BIO-1(erosion and sediment control), BIO-2 (accidental spills), BIO-3 (riparian habitat), BIO-4 (invasive species) and BIO-5 (salmonids) will be incorporated into the project to minimize potential effects on federally listed species and biological resources, including critical habitat and EFH.

Central California Coast ESU Coho

Central California Coast Coho (also sometimes called silver salmon) are anadromous, salmonids that have historically been distributed throughout the north Pacific coastal waters. Coho spend 1-2 years in their natal streams before moving downstream to sea, and return after spending 1-2 years in the ocean. The spawning migrations begin in the late-fall or winter after heavy rains have occurred, and generally peak between December and January. Spawning nests (or redds) are generally in the heads of riffles or pools, with loose, coarse gravel, and nearby cover. Both males and females die after spawning, although females may guard their nests from predators for up to two weeks.

The listed range of the Central California coast coho salmon ESU includes the Russian River watershed, which includes Big Sulphur Creek. Coho are not known to occur in Gill Creek. Coho salmon have not been detected on Gill Creek during site surveys. The reach within the project action area is designated critical habitat and there are no substantial barriers to upstream mitigation from The Russian River and therefore take may be possible but highly unlikely.

Central California Coast DPS Steelhead

The Central California Coast Steelhead Distinct Population Segment was federally listed as threatened in 1997, with the threatened status reaffirmed on January 5, 2006. The DPS includes all naturally spawned populations of steelhead in California streams from the Russian River to Aptos

Creek, and the drainages of San Francisco, San Pablo and Suisun Bays eastward to Chipps Island.

Steelhead are anadromous rainbow trout. The steelhead on Russian River and its tributaries are "winter-run," meaning that fish return to their freshwater spawning grounds from late fall to April (NMFS 2001). Some steelhead survive to return to the ocean then spawn again in subsequent years. Steelhead construct nests called redds in spawning gravel, generally prefer gravel sized 0.5 to 6 inches dominated by 2- to 3-inch gravel (Flosi, et al 1998), and need gravel that is free from excessive sediment that can smother eggs. Egg development is temperature dependent, varying from about 19 days at 60 degrees F to about 80 days at 42 degrees F (NMFS 2001). Steelhead hatch as ''alevins'' (a larval life stage dependent on food stored in a yolk sac), and emerge from the gravel as "fry." In their first summer, fry generally rear in shallow habitats such as pool tailouts, shallow riffles, and edgewater habitats. In winter, they are often found under large boulders in shallow riffles and quiet backwater and edge areas. (Flosi, et al 1998) Cover in the form of boulders, root wads and woody debris provides important summer and winter habitat. Later as they grow, juveniles move into the deeper water of riffles and pools. Steelhead prefer rearing water temperatures between 53 to 58 degrees F, and have an upper lethal limit around 75 degrees F (NMFS 2001). Pools provide a cool water refuge for higher summer temperatures. Juvenile steelhead remain in fresh water 1-3 years, migrate to the ocean as "smolts" (typically between March and June) and then spend 2-3 years in the ocean before returning to spawn in their natal stream.

The habitat in the BSA may support multiple steelhead life stages, though only juvenile steelhead were have been observed during the site surveys. The BSA is known to serve as a migratory corridor for steelhead traveling to spawning grounds in the upper watershed. Juvenile steelhead have been present during several of the site visits, though other suitable habitat such as large boulders, aquatic vegetation, and large woody debris are generally lacking.

Adult steelhead may be present at the site during the spawning season of late fall to April. Young steelhead may be present at any time of year.

California Coast ESU Chinook

The California coastal chinook are anadromous, semelparous, and are the largest of the Pacific salmon species. Chinook salmon prefer rivers with deep, cold, fast-moving water, and gravel substrates. During the freshwater portion of their life history, chinook does not feed. Both males and females die after spawning. After eggs are deposited, it takes 3-4 months for them to hatch.

California coastal chinook salmon are known to occur in the main stem of the Russian River, but are not known to use Gill Creek, which is higher in the watershed. In various surveys by CDFW from 1957-2000, chinook salmon have not been observed (CDFG 2006). The reach within the project action area is not designated critical habitat. Take is unlikely.

Potential Impacts to Salmonids from the Project

The project as proposed is designed not to have adverse impacts to listed salmonids. All work is proposed to take place in dry weather and dry channel conditions. No work is proposed to take place in flowing water conditions. Impacts to fish would be to less than significant with the implementation of measures included in BIO-5- Mitigation for salmonids, listed below.

Removal of riparian vegetation in the temporary disturbance areas could potentially affect steelhead indirectly through loss of shade. However, this impact would be temporary with incorporation of mitigation measure BIO-3 (replacement of lost riparian habitat) will fully mitigate for any loss of riparian habitat. Continuous riparian vegetation is also present upstream and downstream of the BSA to provide shade to any steelhead in the project area during construction. Since the work is planned to take place when water is not present in the channel, it is not expected that there will be turbidity impacts as a result of project construction. Mitigation measure BIO-1 (erosion and sediment control) will ensure that disturbed areas are stabilized and appropriate erosion control measures (i.e., silt fencing) have been implemented during, as well as immediately following, construction to minimize

and/or prevent erosion and sedimentation effects. Additional measures included in BIO-5 (salmonids) will ensure impacts to salmonids are less than significant.

Migratory Birds

Most birds in the United States, including non-status species, are given special protection under the Migratory Bird Treaty Act of 1918. Riparian trees and street trees in the BSA may provide nesting habitat for songbirds or raptors. The bridge itself does not show any evidence of swallow nesting.

Potential Impacts to Migratory Birds from the Project

Migratory bird species may nest in or adjacent to the project area. Construction disturbance during the breeding season could result in the loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. The proposed project may also result in a small, temporary reduction of foraging or roosting habitat for migratory bird species. However, due to the regional abundance of similar habitats, temporary nature of habitat loss, and implementation of mitigation measure BIO-3 (replacement of lost riparian habitat), and BIO-9 (migratory birds), the project is not expected to result in a significant impact on migratory birds. (1,6,8,18,31,32,33,42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO- 1- Mitigation Measures for Erosion and Sedimentation Control

Erosion control measures shall be implemented during construction of the proposed project. These measures shall conform to the provisions in the Caltrans Standard Specifications and the special provisions included in the contract for the project. Such provisions include the preparation of a Storm Water Pollution Prevention Plan (SWPPP), which describes and illustrates the of best management practices (BMPs) in the project site. Erosion control measures to be included in the SWPPP or to be implemented by the County include the following:

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. In channel construction will be conducted from June 15-October 31 and upland construction will likely occur throughout the year as long as work activities comply with the conservation and avoidance and minimization measures identified herein and for the protection of other sensitive or special-status plant or animal species. For upland construction activities (above the top of bank) that must take place during the late fall, winter, or spring, temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.

- Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County. Exclusionary fencing will be installed around areas that do not need to be disturbed.

- At completion of construction and in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, weed-free mulch shall be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day's activities. Soils shall not be left exposed during the rainy season.

- Suitable BMPs, such as silt fences, straw wattles, or catch basins, shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures shall be installed prior to any clearing or grading activities. Further, sediment built up at the base of BMPs will be removed before BMP removal to avoid any accumulated sediments from being mobilized post-construction.

- All dewatering activities will be conducted in compliance with the Caltrans Field Guide for Construction Site Dewatering and Section 13-4.03G of the Caltrans Standard Specifications. Water removed from the excavated area for pier and abutment footings or construction of fishway shall be pumped to a temporary sediment retention basin outside of the channel, through a mechanized water filtration system, or into baker tanks or similar storage system and trucked offsite to an authorized disposal site. If a temporary basin is constructed, it shall be located outside of the active channel and include sediment sock or similar sediment control on the discharge.

- If temporary stock piling is used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a stockpiles drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Stockpiles shall be graded and vegetated with native species, or covered by other means to reduce the potential for erosion.

- Sediment control measures (BMPs) shall be in place prior to the onset of the rainy season and will be monitored and maintained to be in good working condition until disturbed areas have been revegetated with native species.

BIO-2- Mitigation Measures to Prevent Accidental Spills and Pollution

Construction specifications shall include the following measures to reduce potential impacts to vegetation and aquatic habitat resources in the project area associated with accidental spills of pollutants (e.g., fuel, oil, asphalt and grease):

- A site-specific spill prevention plan shall be prepared, approved by the County and implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.

- Where feasible, equipment and hazardous materials shall be stored at least 50 ft away from surface water features.

- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 50 ft away from Big Sulphur Creek or within an adequate fueling containment area.

- Equipment operating within the OHWM shall use non-toxic vegetable oil for operating hydraulic equipment opposed to traditional hydraulic fluids that can contain a wide range of chemical compounds.

- Place plastic materials (or similar) under asphaltic concrete (AC) paving equipment while not in use, to catch and/or contain drips and leaks.

- Minimize sand and gravel from new asphalt from getting into storm drains, streets, and creeks by sweeping. Old or spilled asphalt must be recycled or disposed as approved by the Resident Engineer.

- AC grindings, pieces, or chunks used in embankments or shoulder backing must not be allowed to enter any storm drain or watercourses. Install silt fence until structure is stabilized or permanent controls are in place.

- Collect and remove all broken asphalt and recycle when practical; otherwise, dispose in accordance with Standard Specification 7-1.13 and to an appropriately permitted site.

- During deck pothole patching application and sweeping operations, petroleum or petroleum covered aggregate must not be allowed to enter any storm drain or water courses. Use silt fence until installation is complete.

- Use only non-toxic substances to coat asphalt transport trucks and asphalt spreading equipment.

- Do not allow Portland Concrete Cement (PCC) or slurry to enter storm drains or watercourses.

BIO-3- Mitigation for Lost Riparian Habitat

The following measures shall be implemented to reduce potential impacts to riparian habitat in the action area:

- The width of the construction disturbance zone within the riparian habitat shall be minimized through careful pre-construction planning.

- Exclusionary fencing shall be installed along the boundaries of all riparian areas to be avoided to ensure that impacts to riparian vegetation outside of the construction area are minimized.

- Riparian habitat areas temporarily disturbed shall be replanted using riparian species that have been recorded along Gill Creek in the action area, including willow (*Salix lasiolepis and Salix laevigata*), white alder (*Alnus rhombifolia),* CA Buckeye (*Aesculus californica*), Fremont cottonwood (*Populus fremontii*), coast live Oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*).

- Onsite creation/restoration shall occur in areas that have been disturbed during project construction and within interstitial spaces of the RSP. The amount of habitat created/restored shall be at a 3:1 ratio of new plantings per large (6 in. in diameter at breast height) woody plant removed. This replanting ratio will help ensure successful establishment of at least one vigorous plant for each plant removed to accommodate the project.

- Plant spacing intervals will be determined as appropriate based on site conditions following construction.

- Non-native tree species removed in riparian areas during project construction will be replaced with native riparian (e.g., willow, alder, and cottonwood)

- Revegetation monitoring would be implemented in compliance with regulatory permit conditions (typically 5 years in duration) and be initiated immediately following completion of the planting. The monitoring surveys will consist of a general site walkover evaluating the survival and health of riparian plantings, signs of drought stress, weed or herbivory problems, and the presence or trash or other debris. Within the mitigation area, less than 50 percent total mortality of planted species (including container stock and hardwood cuttings) would be considered a success,

unless other permitting documents require greater survival rates. Volunteer growth of native species would be counted toward the vegetation coverage in the mitigation area. If monitoring results indicate that revegetation efforts are not meeting established success criteria, corrective measures would be implemented.

BIO-4- Mitigation to Prevent of Spread of Invasive Species

The following measures shall be implemented to prevent the spread of invasive species in the action area:

- All equipment used for off-road construction activities will be weed-free prior to entering the construction area.
- If project implementation calls for mulches or fill, they will be weed free
- Any seed mixes or other vegetative material used for re-vegetation of disturbed sites will consist of locally adapted native plant materials.
- Any personal equipment (including boots/waders), construction materials (falsework members, sand bags, etc.) and construction equipment shall be properly disinfected or cleaned according guidance provided by the State of California Aquatic Invasive Species Management Plan (California Department of Fish and Game, (CDFG) 2008; U.S. Bureau of Reclamation 2012) prior to in-channel work to prevent the spread of aquatic invasive species.

BIO-5- Mitigation for Salmonids

- Construction outside of the creek channel may occur any time of the year, provided all BMPs necessary to protect the creek are in place and well maintained.
- Construction below top of bank may occur between June 15 and October 15, provided all BMPs necessary to protect the river are in place and well maintained.
- No work will occur in water, and no dewatering of the active stream channel will occur during construction.
- Regulatory approval will be obtained for all work within potentially jurisdictional areas, including approval form the Corps, RWQCB, and CDFW. All work within these areas will conform to any conditions imposed by the regulating agencies.
- Prior to any clearing, grubbing, pruning, or groundbreaking activity, the limits of construction shall be fenced with temporary high-visibility construction fencing to protect environmentally sensitive areas, protect all riparian vegetation beyond that which must be cleared for construction access, and prevent any equipment from unnecessarily extending the work area or entering the wetted channel. In addition, silt fencing shall be installed at the base of construction fencing to prevent debris from entering the creek. All fencing shall be removed upon project completion.
- Prior to construction, the contractor shall be required to prepare an Accidental Spill Prevention and Cleanup Plan. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.
- To minimize fluid leaks during operation, refueling, and maintenance of stationary equipment spill control absorbent material shall be in place underneath this equipment at all times to capture potential leaks.

- All stockpiling of construction materials, equipment, and supplies, including storage of chemicals, refueling and maintenance, shall occur outside the creek channel. No equipment shall be washed where runoff could enter the creek.

- All refueling and maintenance of equipment, other than stationary equipment, shall occur outside the creek's top-of-bank. Receptacles containing fuel, oil, or any other substance that may adversely affect aquatic resources shall be stored outside of the channel. Any hazardous chemical spills shall be cleaned immediately.

- The County will not allow any motorized equipment to be left within the creek channel (top of bank to top of bank) overnight, unless a container or similar method is securely placed beneath the equipment to catch any fluid leakage. All contained fluids will be disposed of in a permitted manner.

- The County shall require the contractor to use a drilling mud and slurry seal that is nontoxic to aquatic life for all drilling activities related to construction of project. All drilling muds and fluid shall be contained on-site in tanks and disposed of in a permitted manner. Fluids from saw cutting shall be collected and not be allowed to flow into the creek.

- No equipment, including concrete trucks, shall be washed within the channel of the creek, or where wash water could flow into the channel. Prior to project construction, the contract shall establish a concrete washout area for concrete trucks in a location where wash water will not enter Gill Creek. The washout area shall follow the practices outlined in the San Francisco Bay Regional Water Quality Control Board Erosion and Sediment Control Field Manual (page 107-108, July 1999) or equivalent guidelines. Substitution of the designated concrete washout area or methods shall require prior approval of PRMD and the DTPW.

- All water that comes in contact with wet concrete must be pumped directly into tanks and disposed of at a permitted location.

- If work is to occur on the roadway bridge approaches during the period October 15 to June 15, all drainage inlets within the project site shall be protected from receiving polluted storm water through the use of filters such as fabrics, gravel bags, straw wattles, or other appropriate BMPs.

- Water encountered during construction of the bridge foundations will be pumped upslope for disposal on nearby uplands in a way that would prevent it from flowing back into the river, or pumped directly into tanks and disposed of at a permitted location.

- All workers will ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the BSA are deposited in covered or closed trash containers. The trash containers shall not be left open and unattended overnight.

- By October 15, the County will require that all disturbed areas around the permanent and temporary bridge abutments be re-graded to match the surrounding topography. Seed and straw will be placed on these and all other disturbed areas in the project site. A jute mesh type or equivalent matting shall be placed over the straw, installed per the manufacturer's instructions. This matting shall have no plastic incorporated into it. Substitution of materials or erosion control methods shall require prior approval of PRMD and DPTW.

- The project site shall be inspected following the first heavy rain, during the middle of the rainy season following construction. During each visit areas of significant erosion or erosion control device failure shall be noted and appropriate remedial actions taken.

BIO-6- Mitigation measures for Migratory Birds

Mitigation measure BIO-3 (replacement of lost riparian habitat), the project will minimize permanent loss of nesting sites. However, some removal of riparian vegetation and street trees is required. Tree removal during times of nesting could result in negative effects to the young of nesting birds. The following avoidance and minimization measure will reduce any potential impact to breeding birds:

- The County shall only allow trees to be removed from the project site after August 31, and before February 15 of the following year, when bird nesting is most likely avoided, unless a qualified biologist has inspected the site and determined that the tree removal will not affect nesting birds.

- If work is conducted during the nesting season, pre-construction surveys for nesting birds and other special-status birds and appropriate nesting habitat shall be conducted no more than 3 days prior to ground disturbing activities. If an active nest is found, a qualified biologist, in conjunction with CDFW, shall determine the appropriate buffer size and delineate the buffer using fencing, pin flags, yellow caution tape, and etc. During construction, the qualified biologist shall conduct regular monitoring (at CDFW approved intervals) to evaluate the nest(s) for potential disturbances associated with construction activities. Construction within the buffer shall be prohibited until the qualified biologist determines the nest is no longer active. If an active nest is found after the completion of the pre-construction surveys and after construction begins, all construction activities shall stop until a qualified biologist has evaluated the nest and erected the appropriate buffer around the nest. If establishment of the buffer is not feasible, CDFW and/or USFWS shall be contacted for further avoidance and minimization guidelines.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Comment:
The River Road Bridge over Gill Creek and the BSA are directly surrounded by grazed grasslands to the west and undeveloped steep hillsides to the east. The natural communities of concern within the BSA itself include riparian habitat on the banks of Big Sulphur Creek, Waters of the U.S., designated Critical Habitat for the Central California Coast steelhead DPS, and wildlife corridors.

Riparian Habitat

Approximately 0.39 acres of riparian habitat is found within the BSA, and is open/unshaded in the center of the channel. The riparian canopy is composed of native species, is mostly continuous along the upper creek banks, but does not extend across the entire channel. This is an early seral, willow-dominated plant community

Understory herbs are primarily non-native and weedy species common to areas of high disturbance, some of which are known to be invasive and responsible for degradation of native habitat quality.

Potential Impacts to Riparian Habitat from the Project

The proposed project may result in direct permanent impacts on approximately 0.11 acre of intermittent stream, 0.27 acre of riparian habitat, and 0.25 acre of disturbed upland. These permanent impacts would be due to the removal of the weir, RSP placement, and channel grading. The proposed project may result in temporary impacts on approximately 0.01 acre of intermittent stream, 0.06 acre of riparian upland, and 1.17 acre of disturbed upland. These temporary impacts would be due to the construction of the new bridge, temporary crossing, and construction staging. Additionally, 16 trees are proposed to be removed to accommodate the temporary crossing and bridge construction. Four of these trees are located within the riparian habitat and will be replanted at a rate specific to jurisdictional permit requirements. The other twelve trees are located in the disturbed upland and will be replanted at a 3:1 ratio for trees 4” DBH and up.

The project shall be designed and constructed to avoid and minimize removal of riparian vegetation to the maximum extent practicable. Staging areas and construction access routes will avoid encroachment into riparian vegetation where practicable and minimize encroachment where complete avoidance is not practicable. “Avoided” riparian habitat will be clearly identified in the construction drawings and contractor work plans. Exclusionary fencing will be installed to mark boundaries of avoided riparian areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction. Additionally, Impacts to riparian habitat will be compensated for as described in mitigation measure BIO-3 (Replacement of Lost Riparian Habitat).

Waters of the United States

Gill Creek is an intermittent stream that discharges to the Russian River. As such, it is subject to jurisdiction under both federal (ACOE) and state (RWQCB) regulations. The limit of ACOE jurisdiction is the ordinary high water mark (OHWM); RWQCB jurisdiction extends to the top of bank.

Sonoma County Environmental Specialist Robert Aguero conducted a delineation of waters of the United States within the BSA on October 27, 2020. Verification of the delineation by the Corps is pending. Potentially jurisdictional waters include the main Gill Creek Channel and the northwest tributary that connects to Gill Creek just downstream of the bridge. These features occupy a total of 0.41 acre of the BSA. Table 1 provides a summary of permanent construction impacts by activity type above and below the OHWM.

Potential Impacts to Waters of the United States from the Project

Implementation of the project will potentially result in temporary impacts on up to 0.01 acre and permanent impacts on up to 0.11 acre of waters of the United States. Project activities resulting in permanent impacts are channel grading, removal of the weir, and RSP installation. Project activities resulting in temporary impacts are construction of the new bridge and temporary crossing.

Table 1. Construction Activity Permanent Impacts

Activity	Impact Below OHWM (square feet)	Impact Above OHWM (square feet)	Impact Total (square feet)
Grading	4,080	6,650	10,730
Weir Removal	456	294	750
RSP	548	15,562	16,110
Total	5,084	22,506	27,590

Executive Order 11990, Protection of Wetlands (1977), calls for no net loss of habitats referred to as wetlands and established a national policy to avoid adverse effects on wetlands wherever there is a practicable alternative. Any jurisdictional areas impacted by the project would be replaced in kind and on-site at a 1:1 ratio to ensure no net loss. Accordingly, a wetland only practical finding is not required at this time.

Wildlife Corridors

The Gill Creek riparian corridor potentially serves as a migration corridor for both terrestrial and aquatic or semi-aquatic species (See section 4a for detailed discussion of special status species).

Potential Impacts to Wildlife Corridors from the Project

The creek will be partially obstructed and there would be elevated noise level in the area by construction activities. The project site and the BSA will be available for wildlife movement after hours. The project is only expected to require a single working season. Any impact would be temporary as wildlife will still be able to use the site as a migratory corridor both during and after construction. (1,31)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO-7: Mitigation for Riparian Vegetation

The project shall be designed and constructed to avoid and minimize removal of riparian vegetation to the maximum extent practicable. Staging areas and construction access routes will avoid encroachment into riparian vegetation where practicable and minimize encroachment where complete avoidance is not practicable. “Avoided” riparian habitat will be clearly identified in the construction drawings and contractor work plans. Exclusionary fencing will be installed to mark boundaries of avoided riparian areas. The exclusionary fencing shall be inspected and maintained on a regular basis throughout project construction.

BIO-8- Mitigation Measure for Waters of the United States/ Waters of the State

To the extent practicable, the discharge of dredged or fill material into “waters of the United States,” including wetlands shall be avoided (this also includes waters not subject to Corps jurisdiction, but subject to RWQCB jurisdiction). However, complete avoidance is not feasible due to the need for the placement of new piers, thus the following measures shall be implemented to avoid or minimize the potential for project-related impacts on “waters of the United States”:

- To the maximum extent practicable, activities that increase the erosion potential in the project area shall be restricted to the relatively dry summer and early fall period to minimize the potential for rainfall events to transport sediment to surface water features. If these activities must take place during the late fall, winter, or spring, then temporary erosion and sediment control structures shall be in place and operational at the end of each construction day and maintained until permanent erosion control structures are in place.

- Areas where wetland and upland vegetation need to be removed shall be identified in advance of ground disturbance and limited to only those areas that have been approved by the County.

- Within 10 days of completion of construction in those areas where subsequent ground disturbance will not occur for 10 calendar days or more, weed-free mulch shall be applied to disturbed areas to reduce the potential for short-term erosion. Prior to a rain event or when there is a greater than 50 percent possibility of rain within the next 24 hours, as forecasted by the National Weather Service, weed-free mulch shall be applied to all exposed areas upon completion of the day’s activities. Soils shall not be left exposed during the rainy season.

- Suitable BMPs, such as silt fences, straw wattles, or catch basins, shall be placed below all construction activities at the edge of surface water features to intercept sediment before it reaches the waterway. These structures shall be installed prior to any clearing or grading activities.

- If temporary stockpile sites are used, they shall be located such that they do not drain directly into a surface water feature, if possible. If a stockpiles drains into a surface water feature, catch basins shall be constructed to intercept sediment before it reaches the feature. Stockpile sites shall be graded and vegetated to reduce the potential for erosion.

- Sediment control measures shall be in place prior to the onset of the rainy season and will be monitored and maintained in good working condition until disturbed areas have been revegetated.

- Any new or previously excavated gravel material placed in the channel shall washed at least once and have a cleanliness value of 85 or higher based on Caltrans Test No. 227.

- A site-specific spill prevention plan shall be implemented for potentially hazardous materials. The plan shall include the proper handling and storage of all potentially hazardous materials, as well as the proper procedures for cleaning up and reporting any spills. If necessary, containment berms shall be constructed to prevent spilled materials from reaching surface water features.

- Where possible, equipment and hazardous materials shall be stored at least 50 ft away from surface water features.

- Vehicles and equipment used during construction shall receive proper and timely maintenance to reduce the potential for mechanical breakdowns leading to a spill of materials. Maintenance and fueling shall be conducted in an area at least 50 ft away from the Big Sulphur Creek or within an adequate fueling containment area.

- Per Executive Order 11990, Protection of Wetlands (1977), no net loss of habitats referred to as wetlands, any jurisdictional areas impacted by the project would be replaced in kind and on-site at a 1:1 ratio to ensure no net loss.

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:

The Army Corps of Engineers (Corps) regulates "Waters of the United States", including adjacent wetlands, under Section 404 of the federal Clean Water Act. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. Potential wetland areas are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act. Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high water mark (OHWM). The discharge of dredged or fill material into a Waters of the U.S. (including wetlands) generally requires a permit from the Corps under Section 404 of the Clean Water Act.

"Waters of the State" are regulated by the Regional Water Quality Control Board (Water Board) under the State Porter-Cologne Water Quality Control Act. Waters of the State are defined by the Porter-Cologne Act as any surface water or groundwater, including saline waters, within the boundaries of the State. RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by the ACOE under Section 404 (such as roadside ditches). Section 401 of the Clean Water Act specifies that any activity subject to a permit issued by a federal agency must also obtain State Water Quality Certification (401 Certification) that the proposed activity will comply with state water quality standards. If a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to Waters of the State, the Water Board has the option to regulate the dredge and fill activities under its state authority through its Waste Discharge Requirements (WDR) program.

There is not expected to be any impacts to federal wetlands because of the project. A Wetlands

Assessment is not required. It is expected that a 404 permit from the USACE, 401 permit from the RWQCB and 1602 Streambed Alteration Agreement from CDFW will be required. (1,31)

Significance Level:

No Impact

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?

Comment:
Gill Creek is a east-west movement corridor and spawning habitat for Central California coast steelhead, which use the creek for both migration and spawning. Replacement of the bridge will not result in the temporary disruption of fish moving up and downstream due to the project taking place when water is not present. To ensure that hydraulic conditions are suitable and the temporary work platform would not impede the movement of aquatic organisms in the event of a storm, the culverts have been designed within the proposed construction work pad and would be installed according to NMFS' *Guidelines for Salmonid Passage at Stream Crossings* (National Marine Fisheries Service 2001). Other aquatic and terrestrial wildlife undoubtedly move within and through the area in and around the BSA. The creek likely attracts wildlife in the area due to the seasonal presence of water. Amphibians and turtles may move through the creek corridor when wet. Limiting construction to daytime hours, will allow wildlife to move through the area during the hours construction is not actively occurring.

The area surrounding the BSA consist primarily disturbed uplands that is unlikely to be used as core habitat. Upstream of the BSA there is semi continuous hardwood forest that has interspersed residential and grazing land in the upper watershed. In addition, the impacts to wildlife are temporary and will only occur during the duration of construction of the project. (1, 31)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Implementation of Mitigation Measure BIO-5 (salmonids), would reduce potentially significant impacts to special status fish to a less than significant level.

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

Comment:

Regulatory Framework

The following discussion identifies local environmental regulations that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

Tree Protection Ordinance

Chapter 26, Article 88. Sec. 26-08-010 (m) of the Sonoma County Code contains a tree protection ordinance (Sonoma County 2013). The ordinance designates 'protected' trees as well as provides mitigation standards for impacts to protected trees. While this ordinance is not applicable to County Public Works projects, it is used as a guide for determining impacts and appropriate mitigation measures.

Sonoma County General Plan

The *Sonoma County General Plan 2020* (Sonoma County 2008) Land Use Element and Open Space & Resource Conservation Element both contain policies to protect natural resource lands including, but not limited to watershed, fish and wildlife habitat, biotic areas, and habitat connectivity corridors. Policy OSRC-8b establishes streamside conservation areas along designated riparian corridors.

Riparian Corridor Ordinance

The RC combining zone is established to protect biotic resource communities, including critical habitat areas within and along riparian corridors, for their habitat and environmental value, and to implement the provisions of the General Plan Open Space and Resource Conservation and Water Resources Elements. These provisions are intended to protect and enhance riparian corridors and functions along designated 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, floodplain management, wildlife habitat and movement, stream shade, fisheries, water quality, channel stability, groundwater recharge, opportunities for recreation, education and aesthetic appreciation and other riparian functions and values.

The project as proposed will not conflict with the above policies and ordinances. The bridge has been designed so that vegetation removal will be avoided and minimized to the maximum extent feasible. Riparian trees removed having greater than 6 inches diameter breast height will be replaced at a minimum 3:1 ratio. Mitigation measure BIO-3 (Lost Riparian Habitat) will further ensure the project has a less than significant impact on vegetation.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

BIO-3 (Replacement of lost Riparian Habitat)

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

Comment:
Currently, there are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved habitat conservation plans that cover the project area.

Significance Level:

No Impact

5. CULTURAL RESOURCES:

In 2021, Alta Archaeological Consulting was retained to prepare the following cultural resources reports for the proposed bridge replacement project: 1) Historic Resources Evaluation Report (HRER); 2) Archaeological Survey Report (ASR); and 3) Historic Property Survey Report (HPSR). A brief summary of the HRER and ASR is provided below.

Area of Potential Effects (APE)

The APE includes about 1020 linear feet segment of River Road. The project area is roughly centered on the point where River Road crosses Gill Creek. From River Road, the limits of the APE along the stream is defined as about 520 feet southwest and 105 feet northeast of the roadway. The area south of the existing bridge will be the location of the temporary detour. Some ROW acquisition is required for this project. The maximum depth of disturbance is about 30 feet for construction of abutments and will occur within the banks of the stream channel. The staging area includes less than one acre of land. The total project APE includes about 3.94 acres. ***Historical Resources Evaluation Report (HRER)***

Historical Overview

The following historical overview provides background on the themes present for the properties that were surveyed as a part of this Historic Resource Evaluation Report. Themes include agriculture in the Alexander Valley, focusing on the history of prune orchards in the area, which has given way to vineyards today. It also provides some background on the town of Geyserville, the closest town to the subject properties. It also provides information on previous property owners and the property owner who built the 1963 Ranch house that is at 22890 River Road.

The vineyard, prune processing sheds, and garage at 22575 River Road form a cluster of buildings representing the property's earlier use as a prune/plum and possibly pear orchard and its later use as a vineyard. The core site (about 51 acres) was a vineyard by at least 1955, evidenced by a USGS map, while the surrounding area was still in orchard. The property was part of 580 acres purchased in 1918 and farmed and ranched by Remigo Domenichelli and later his sons, until it was sold in the early 1960s. While the two sheds associated with prune processing, one with a prune dehydrator, appear to be intact, they do not represent a particularly good example of a type and are in such poor condition that it is difficult to tell what the various components were used for. The newer building was evidently added after the site was converted to vineyards, judging by its age. The house that was associated with this part of the operation was demolished sometime before the early 1960s, and so the site is no longer a complete example of a working farm/ranch. Further, it represented only a portion of the extended family's operations, which took place over the entire 580 acres. The site does not represent a historic resource.

Cultural Resources

The only resource within the APE is the Geyser Road Bridge, a 130-foot long, pin connected, Pratt through truss bridge. This seven-panel bridge was built by the Phoenix Bridge Company using their patented Phoenix column for the posts, top chords, and struts. Constructed c. 1880, this bridge was part of a railroad bridge that spanned the Russian River at Northwood. It was installed at Northwood in 1909 to replace a washed out bridge. The Northwestern Pacific Railroad abandoned their Santa Rosa to Monte Rio branch in 1935, and in 1937 the three trusses were salvaged by the County for use elsewhere (Healdsburg Tribune 1937). The Haupt Creek Bridge (20C0224) and the Gualala Road Bridge (10C0046) are thought to be the other trusses from Northwood. All were built with Phoenix columns, are roughly 13 feet wide, and were erected in their current locations in 1937 or later.

Resource Significance

The four built environment resources at 22575 River Road (Map Reference #1) were determined not eligible for the NRHP as a result of the current study. The resources were not found to be historical resources under CEQA. Per CEQA Guidelines 15064.5 , because they do not meet the CRHR criteria outlined in PRC 5024.1. A full evaluation of these resources is included

The two built environment resources at 22890 River Road (Map Reference #2) were determined not eligible for the NRHP as a result of the current study. The resources were not found to be historical resources under CEQA. Per CEQA Guidelines 15064.5 , because they do not meet the CRHR criteria outlined in PRC 5024.1.

Archaeological Survey Report (ASR)

Background

Environment

The project area is situated within the Coast Range geologic province. The northern Coast Ranges are a geologic province comprised of numerous rugged north-south trending ridges and valleys that run parallel to a series of faults and folds. Formation of these ranges is generally attributed to events associated with subduction of the Pacific Plate beneath the western border of the North American Plate. The bedrock that underlies the region is a complex assemblage of highly deformed, fractured, and weathered sedimentary, igneous, and metamorphic rocks. The bedrock geology of the project area consists of Jurassic-Cretaceous age Franciscan Formation rock (Jennings and Strand 1967; Schoenherr 1995:7). Rocks of this formation, the oldest in the area, are often weakly metamorphosed, and consist of greywacke shale interspersed with discontinuous bodies of ultramafic rock such as greenstone, schist, and serpentine. The repeated folding and faulting is reflected in the complex structure of Franciscan rocks and area topography (Schoenherr 1995:265).

A Mediterranean climate prevails within the project area with an average of 60 inches of rainfall annually. Winters are cool and wet, while summers are hot and dry. Annual temperatures range from about 30 to 95 degrees Fahrenheit (Schoenherr 1995:261). The area is considered foothill woodland, and is largely defined by true oak species such as Valley Oak (*Quercus lobata*), Blue Oak (*Quercus douglasii*) and Coast Live Oak (*Quercus agrifolia*) (Schoenherr 1995:270). Other hardwoods such as California Bay Laurel (*Umbellularia californica*) and Pacific Madrone (*Arbutus menziesii*) are present, as well as coniferous trees such as Douglas-fir (*Pseudotsuga menziesii*) and Gray Pine (*Pinus sabiniana*). Low lying brush such as members of the manzanita family (*Arctostaphylos*) thrive outside of canopies.

Soils in the APE consist of Mansanita gravely silt loam. Soils of this series are typically grayish brown, slightly acidic and very gravely loam. The A horizon extends to approximately 5 inches below surface and consists of greyish brown loam. An underling AB horizon continues to approximately 26 inches below surface, and consists of a mixture of greyish brown gravely clay loam (USDA 2003).

The project is located in northern Sonoma County with elevations varying from about 200 to 240 feet above mean sea level. The project is situated within the eastern foothills of the Northern Coast Ranges. The nearest source of water is Gill Creek which runs through the center of the boundary of the project area. The project APE consists of developed agricultural farmland.

Prehistory

Over half a century of archaeological investigations in the North Coast Ranges has revealed a record of hunter-gatherer occupation spanning 12,000 years. The cultural chronology of this area is best described as part of the overall cultural chronology for the central North Coast Ranges. A number of cultural chronologies have been developed for this region (cf. Basgall 1982; Fredrickson 1974; Fredrickson and White 1988; Hildebrandt and Hayes 1984; Jones and Hayes 1993; Layton 1990; Meighan 1955; White and King 1993; and White et al. 2002).

In his 1974 doctoral dissertation, David A. Fredrickson proposed five chronological periods and related cultural patterns to summarize the North Coast Ranges. Decades of research have built upon this foundation, and are summarized below. The published volume *Cultural Diversity and Cultural Change in Prehistoric Clear Lake Basin: Final Report of the Anderson Flat Project* (White et al. 2002) provides the most synthetic summary of relevant research themes and the current state of knowledge concerning prehistoric hunter-gatherer studies in the North Coast Ranges.

Ethnography

The Wappo peoples formerly lived on lands within Napa, Lake, and Sonoma Counties. The following ethnographic summary is not intended as a thorough description of Wappo culture but instead is meant to provide a background to the present cultural resource investigation with specific references to the project area. In this section, the past tense is sometimes used when referring to native peoples because this is a historical study. This convention is not intended to suggest that Wappo people only existed in the past. To the contrary, the Wappo have strong cultural and social identities today.

Within the North Coast Ranges, networks of trade and exchange developed to meet the various ceremonial, religious, economic, political and subsistence needs of Wappo society. The Wappo received many items of their material culture through trade, namely clamshell disk beads and magnesite tube beads. Sometimes trading with outside groups was incidental while other times it was preconceived and regularized. Pure barter was occasionally practiced and trade goods were generally exchanged using fixed prices measured in clamshell disc bead money. Obsidian, a valuable resource throughout northern California, was obtained within Wappo territory at Glass Mountain, near present day Calistoga. (Sawyer 1978:260).

Field Methods

ALTA staff archaeologist Dean Martorana conducted a field survey of the APE on October 13, 2020. Project design drawing, project maps and aerial imagery were used to correctly identify the APE. Ground surface visibility was good, varying from about 50-60%, throughout the survey area with minimal low and high-lying grasses. Cut banks were closely inspected as well as the underside of the bridge. The flat graded area north of the bridge (proposed staging area) was surveyed. The entire APE and surrounding was surveyed, totaling 7.31 acres of land. The APE was surveyed using intensive survey coverage with transects no greater than 10-meter intervals. A shovel was used to periodically probe the ground surface. Mineral soils were inspected for evidence of cultural materials.

ASR Findings

During the field survey, no archaeological resources were observed within the APE.

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Comments:

The HRER prepared by Alta Archaeological Consulting determined that there were no eligible resources that could be considered historical in the APE.

Significance Level:

No Impact

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

Comment:
There are no known archaeological resources on the site based on the project level archaeological investigations. Additionally, per AB-52 requirements, local tribes have been notified of the project. Initial responses from the tribes suggest no concerns.

The project has potential to uncover previously unknown materials during construction. Mitigation Measure CUL-1 would reduce this potentially significant impact to a less-than-significant level. (1, 34)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Mitigation Measure CUL-1: Cultural Resources

If archaeological or paleontological materials are discovered during project construction, construction shall cease in the immediate vicinity of the find until a qualified archaeologist is consulted to determine the significance of the find, and has recommended appropriate measures to protect the resource. Further disturbance of the resource shall not be allowed until those recommendations deemed appropriate by the County have been implemented.

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

Comment:
No burial sites are known in the vicinity of the project, and most of the project site has already been disturbed by past construction. Implementation of Mitigation Measure CUL-2 would reduce potentially significant impacts to human remains to a less-than-significant level. (34)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Mitigation Measure CUL-2: Human Remains

In the event that human remains are unearthed during construction, state law requires that the County Coroner be notified to investigate the nature and circumstances of the discovery. At the time of discovery, work in the immediate vicinity would cease until the Coroner permitted work to proceed. If the remains were determined to be prehistoric, the find would be treated as an archaeological site and the mitigation measure CUL-1 would apply.

6. ENERGY

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Comment:
The project will not change the operational capacity of River Road and such would not cause wasteful, inefficient or unnecessary consumption of energy resources.

During construction, the use of heavy equipment running on diesel fuel will be required. Standard construction best management practices (BMPs) will be included in the project construction specifications and be required project condition to be adhered to by the selected contractor. These construction phase BMPs include restricting the idling time for all construction vehicles and limiting construction times to Monday through Friday, from 7 AM to 7PM. Consumption of energy is necessary, but will the conditions proposed wasteful and inefficient consumption of energy would be less than significant. (1)

Significance Level:
Less than Significant Impact

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

Comment:
The replacement of a bridge structure on an existing roadway will not conflict or obstruct any plans for renewable energy or energy efficacy standards. (1)

Significance Level:
No Impact

7. GEOLOGY AND SOILS:

In 2019, Earth Mechanics, Inc. was retained to prepare a Foundation report for the proposed project. This report was used in the following discussion of the environmental setting and impacts analysis for geology and soils.

The project site is generally underlain by Holocene-age alluvial sediments. Beneath the surficial Holocene-age alluvium are Pleistocene to Pliocene-age fluvial deposits of the Glen Ellen formation. The formation generally consists of clay-rich deposits of sand, silt, and gravel, interbedded with minor beds of conglomerate and silicic tuffs derived from the Sonoma Volcanics. Based on local well data, alluvial sediments are estimated to extend to approximately 100 ft below surface near the project site. The Sonoma Volcanics are exposed in outcrops in the foothills to the south of the study area where they lie unconformably on rocks of the Franciscan Complex.

The Sonoma Volcanics consist of a thick, highly variable sequence of basalt, andesite, and rhyolite lavas interbedded with tuffs, lahar deposits, avalanche deposits, mudflow units, hyaloclastites, reworked tuffs, sedimentary deposits derived from volcanic rocks, and lacustrine deposits.

In the eastern and northern parts of the Alexander Valley watershed, exposed basement rocks are predominantly Franciscan Complex but include a few minor outcrops of Coast Range Ophiolite. The Franciscan Complex, includes sandstone, graywacke, shale, mélange, conglomerate, chert, greenstone, and serpentinite. Franciscan sandstone (Kfss) outcrops along the northern and southern banks of Gill Creek.

Would the project:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Comment:
The project site is near (approximately 1.7 miles away), but outside of the fault hazard zone as defined by the Alquist-Priolo fault maps. Earth Mechanics, Inc provided a Foundation Report, dated June 2019. The report found that there is little potential for fault rupture to impact project facilities because the project area is outside of any designated Alquist-Priolo Earthquake Fault Zones, and no known fault crosses the project site.

Significance Level:

No Impact

ii. Strong seismic ground shaking?

Comment:
All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, Maacamas and other faults. Predicting seismic events is not possible, nor is providing mitigation that can entirely reduce the potential for injury and damage that can occur during a seismic event. The design of the bridge structure will follow the Caltrans Seismic Design Criteria. Using accepted geotechnical evaluation techniques and appropriate engineering practices, potential injury and damage can be diminished, thereby exposing fewer people and less property to the effects of a major earthquake. Project conditions of approval require that bridge designs for construction meet all standard seismic and soil test/compaction requirements. The project would therefore not expose people to substantial risk of injury from seismic shaking. (9, 37)

Significance Level:

Less than Significant Impact

iii. Seismic-related ground failure, including liquefaction?

Comment:
Strong ground shaking can result in liquefaction, the sudden loss of shear strength in saturated sandy material, resulting ground failure. Areas of Sonoma County most at risk of liquefaction are along San Pablo Bay and in alluvial valleys. There is a very low to moderate potential for liquefaction at the project site. The bridge has been designed to meet Caltrans Seismic Design Code 2.0, which requires the investigation of liquefaction potential at the site. The bridge design has been analyzed and designed to minimize the risk of adverse effects to the structure due to liquefaction. (37)

Significance Level:

Less than Significant Impact

iv. Landslides?

Comment:
The Gill Creek watershed is an area that is not highly susceptible to landslides. The project site has a low rating for landslide susceptibility in the Sonoma County Hazard Mitigation Plan. The project has been designed with foundations drilled deep into underlying rock. The project would therefore not expose people to substantial risk of injury from landslides.

Significance Level:

Less than Significant Impact

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

Soils at the project site consist of the following types, as mapped by the Natural Resource Conservation Service: Yolo silt loam, Manzanita gravelly silt loam, Riverwash. Riverwash soils consist of unconsolidated alluvium, composed primarily of gravel and cobbles with some sandier deposits. These types of soils are found in river valleys. Adjacent upland soils include Yorkville clay loam and Suther loam. Exposed soils as a result of construction activities will be stabilized post-construction.

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:
The project site is subject to seismic shaking as described in item 6.a.ii. Above. No further mitigation is required. However, the design of the bridge structure will follow the Caltrans Seismic Design Criteria.

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 risks to life or property?

Comment:
Table 18-1-B of the Uniform Building Code is an index of the relative expansive characteristics of soil as determined through laboratory testing. The project site is underlain by Riverwash (RnA) soils. The site is not known to have expansive soil conditions or soils with high shrink and swell potential. No substantial risks to life or property would be created from soil expansion at the proposed project.(37)

Significance Level:

Less than Significant Impact

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

Comment:
The proposed project would not include the addition or removal of septic tanks or alternative wastewater disposal systems. Therefore, there would be no impact.

Significance Level:

No Impact

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

Comment:
A Cultural Resources Survey was prepared for the project by professional archaeologists on in 2021. There are no known paleontological resources on the site, but the project could uncover such materials during construction. Mitigation measure CUL-1 (cultural resources) will further mitigate in the even previously unknown resources are discovered during construction activities. No unique geologic features have been identified in the project action area.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation
CUL-1: Cultural Resources

8. GREENHOUSE GAS EMISSIONS:

Would the project:

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

Comment:
The Northern Sonoma County Air Pollution Control District (NSCAPCD) currently does not have adopted Greenhouse Gas (GHG) thresholds of significance for CEQA review projects (NSCAPCD, 2010). Therefore, as the lead agency for the project, the DTPW has elected to use an approach for the determination of significance of GHG emissions based on the GHG significance thresholds adopted by the BAAQMD. While BAAQMD does not have any adopted GHG thresholds for construction-related emissions, their GHG operational threshold of significance is 1,100 metric tons MT) of CO2e/yr. (BAAQMD Air Quality CEQA Thresholds of Significance - Table 2-1).

GHG contributions of this magnitude are not anticipated with the proposed replacement of the Gill Creek bridge because the project would not generate new traffic and traffic volumes are expected to be similar to the existing traffic volumes on River Road.

It is expected that the replacement of the existing bridge would generate the same baseline GHG emission levels because no additional travel lanes are proposed and no traffic controls (e.g., stop signs or signalization) are proposed. River Road would continue to operate as a “Local Road” with an A-Level-of-Service (LOS), as specified in the Sonoma County General Plan 2020 Circulation and Transit

Element. The estimated total Average Daily Trips (ADTs) volume of 284 along River Road is not expected to change as a result of the proposed project. Consequently, the proposed bridge replacement would operate at current GHG emission levels associated with the existing bridge. Based on these assumptions a less than significant impact to GHGs is anticipated with the operational phase of the proposed bridge replacement.

The construction phase of the proposed project is not subject to thresholds of significance. Nevertheless, BMPs are applied by DTPW during the construction phase to assist in lowering GHGs pursuant to AB 32 GHG reduction goals and ensure that construction-related GHG emissions are minimized to the extent feasible. These construction phase BMPs include:

- Restricting the idling time for all construction vehicles
- Limiting construction times to Monday through Friday, from 7 AM to 7PM

Overall, the proposed project would not result in a cumulatively considerable contribution of GHG emissions or a cumulatively significant impact to global climate change. (1, 4, 5, 21)

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 County does not have an adopted Climate Action Plan but has established GHG reduction goals. The project, by implementing current county codes would be consistent with local or state plans, policies, or regulations adopted for the purpose of reducing emissions of greenhouse gases.

Significance Level:

No Impact

9. HAZARDS AND HAZARDOUS MATERIALS:

Would the project:

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

Comment:
Construction of the proposed project would require use of fuels and other hazardous materials. Improper storage or handling of these materials could result in spills. Mitigation measures BIO-2 (Prevent Accidental Spills and Pollution), and HAZ-1 (Storage of Hazardous Materials) will reduce severity in the event of accidental spills. Potential impacts from spills into the creek can be reduced to a less-than-significant level by requiring standard approved construction methods for handling hazardous materials.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

HAZ-1- Storage of Hazardous Materials

The construction contract shall require that any storage of hazardous materials be in compliance with all applicable local, state and federal laws for the protection of surface waters. In the event of a spill of hazardous materials the contractor shall immediately call the emergency number 9-1-1 to report the spill, and shall take appropriate actions to contain the spill to prevent further migration of the hazardous materials to stormwater drains or surface waters.

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:

Replacement of the existing bridge would involve using equipment that has a potential to release hazardous materials near Gill Creek. Without adequate BMPs, accidental spills or falling debris could occur, causing potential contamination of the water body and adverse impacts on terrestrial and aquatic life forms.

Implementation of mitigation measure BIO-2 (accidental spills) and HAZ-1 (Storage of Hazardous materials) would reduce potential impacts to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure BIO-2 (accidental spills) and HAZ-1 (Storage of 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 existing or proposed schools within 0.25 miles of the project site. (1)

Significance Level:

No Impact

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

Comment:
The project site was not identified on, or in the vicinity of, any parcels on lists compiled by the California Environmental Protection Agency, Regional Water Quality Control Board, California

Department of Toxic Substances, and the California Integrated Waste Management Board (CalRecycle). The area immediately surrounding the bridge site is undeveloped grassland, and hazardous materials are unlikely to be present. Therefore, no impact from hazardous materials is anticipated with the implementation of the proposed project.

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

Comment:

No public airstrips are located in the vicinity of the proposed project. Therefore, no impacts to public airstrips would occur with the implementation of the proposed project. (1)

Significance Level:

No Impact

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

Comment:
The project would not impair implementation of, or physically interfere with the County's adopted emergency operations plan. There is no separate emergency evacuation plan for the County. However, there is the potential for construction activities to slow emergency response times. Implementation of Mitigation Measure TRANS-2 would reduce potentially significant impacts related to any potential delays to a less-than-significant level.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-2

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

Comment:
The project is partially located in an area of high fire hazard. However, the project would not expose people to increased risk from wildland fires beyond existing conditions. It would not construct buildings that would be occupied by people or structures that would be affected by wildland fires. The proposed project consists of replacing an existing bridge and would not increase the vehicle capacity of the bridge. The bridge would be designed to current American Association of State Highway and Transportation Officials Standards to adequately accommodate emergency vehicles. Therefore, no impacts to people or structures from wildland fires are anticipated with the implementation of the proposed project. (1, 13)

Significance Level:

Less than Significant Impact

10. HYDROLOGY AND WATER QUALITY:

Would the project:

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

Comment:
Gill Creek is a tributary of the Russian River. The "Total Maximum Daily Load" (TMDLs) regulations for pollutants, excluding sediment and temperature, have not been established for this watershed. Sediment impacts in Russian River and its tributaries prompted listing entire Russian River watershed for sediment. The most sensitive beneficial uses supported by the Russian River includes uses associated with the cold water fishery and municipal and domestic supply.

The project will require construction activities within the banks of Gill Creek. These activities have the potential to violate water quality standards or waste discharge requirements. A 404 Clean Water Act permit from the Corps, 401 Clean Water Act certification from the Water Board, , and a 1602 Streambed Alteration Agreement from CDFW will all be obtained prior to project implementation. Typical conditions contained in these permits regulate discharges to Waters of the State, Waters of the U.S., and discharges that may impact fish and wildlife. Mandatory compliance with the conditions set forth by these permits, along with mitigation measures BIO-1 (Erosion and Sediment Control), BIO-2 (Accidental Spills), BIO-3 (Riparian Habitat), BIO-11 (Waters of the US? Waters of the State), HAZ-1 (Storage of Hazardous Materials), HYD-1 (Surface Water), HYD-2 (Storm Water), HYD-3 (Ground Water) contained in this Initial Study, will ensure that water quality standards are not violated.

The project will incorporate post-construction BMPs to retain and treat runoff from new impervious surfaces. Drainage shall be designed to limit post-development soil and other pollutant discharges to pre-development levels in compliance with the Sonoma County's best management practices for construction grading and drainage.(1, 42)

*Total Maximum Daily Load – On a broad level, the TMDL process leads to a "pollution budget" designed to restore the health of a polluted body of water. The TMDL process provides a quantitative assessment of water quality problems, contributing sources of pollution, and the pollutant load reductions or control actions needed to restore and protect the beneficial uses of an individual water body impaired from loading of a particular pollutant.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

The County will implement the following mitigation measures during project construction to minimize water quality impacts to Big Sulphur Creek**.**

Mitigation Measure HYD-1- Surface Water

- No work shall occur between October 15 and June 15 below Gill Creek top-of-bank.

- By October 15, the County shall require that all disturbed areas around the permanent and temporary bridge abutments and piers be re-graded to match the surrounding topography. Seed and straw will be placed on disturbed areas above channel banks, and all other disturbed areas in the project site, with a jute mesh type or equivalent matting placed over the straw and on disturbed banks, installed per the manufacturer's instructions. This matting shall have no plastic in it. Substitution of materials or erosion control methods shall be required prior approval from PRMD and the DTPW.

- No work will occur in water and no dewatering of the active stream channel will occur during construction.

- The project site shall be inspected following the first heavy rain, during the middle of the rainy season and at the end of the rainy season following construction. During each visit, areas of significant erosion or erosion control device failure shall be noted and appropriate remedial actions taken.

- Prior to any clearing, grubbing, pruning, or groundbreaking activity, the limits of construction shall be fenced with temporary high-visibility construction fencing to protect environmentally sensitive areas, protect all riparian vegetation beyond that which must be cleared for construction access, and prevent any equipment from unnecessarily extending the work area or entering the wetted channel. In addition, silt fence shall be installed at the base of the construction fencing to prevent debris from entering the creek. All fencing shall be removed upon project completion.

- All stockpiling of construction materials, equipment, and supplies, including storage of chemicals, refueling and maintenance, shall occur outside the creek channel. No equipment shall be washed where wash runoff could enter the creek.

- All refueling and maintenance of equipment, other than stationary equipment, shall occur outside the channel of Gill Creek, top-of-bank to top-of-bank. Receptacles containing fuel, oil, or any other substance that may adversely affect aquatic resources shall be stored outside of the channel. Any hazardous chemical spills shall be cleaned up immediately.

- Equipment and vehicles operated in the project area will be checked daily to prevent leaks of fuels, lubricants or other fluids to the creek.

- To minimize fluid leaks during operation, refueling, and maintenance of stationary equipment, spill control absorbent material shall be in place underneath this equipment at all times to capture potential leaks.

- Prior to construction, the contractor shall be required to prepare an Accidental Spill Prevention and Cleanup Plan. This plan shall include required spill control absorbent material, for use beneath stationary equipment, to be present on site and available at all times.

- The County shall require the contractor to use a drilling mud and slurry seal that is non-toxic to aquatic life for all drilling activities related to the permanent or temporary bridges. All drilling muds and fluid within all drilled holes shall be contained on site in tanks, removed from the project area, and disposed of in a permitted manner.

- No equipment, including concrete trucks, shall be washed within the channel of the creek, or where wash water could flow into the channel. Prior to project construction, the contractor shall establish a concrete washout area for concrete trucks in a location where wash water will not enter Gill Creek. The washout area shall follow the practices outlined in the North Coast Regional Water Quality Control Board Erosion and Sediment Control Field Manual (page 107-108, July 1999) or equivalent guidelines. Substitution of the designated concrete washout area or methods shall require prior approval from PRMD and the DTPW.

Mitigation Measure HYD-2 Storm Water

- If work is to occur on the roadway and bridge approaches during the period between October 15 to June 15, all drainage inlets within the project limits shall be protected from receiving polluted storm water through the use of filters such as fabrics, gravel bags, straw wattles, or other appropriate BMPs.

- Construction grading and drainage shall be designed and constructed to maintain natural and existing drainage patterns.

Mitigation Measure HYD-3 Groundwater

- Water encountered during construction of the bridge foundations shall be pumped to an upland location where it cannot flow back into water courses or to storage tanks or trucks for disposal to a permitted upland location (not within the banks of any waterway).

Mitigation Measure HYD-4- Projects disturbing greater than 1 acre (General Construction Permit)

- Construction activities which involve disturbing 1 or more acres of ground, are subject to the requirements of the State Water Resources Control Board (SWRCB) NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction Permit). Construction activities include clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement. Applicants of construction projects must file for coverage under the General Construction Permit by submitting a complete Notice of Intent (NOI) package to the SWRCB, and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP must contain a site map that shows the construction site perimeter; existing and proposed buildings, lots, roadways, and storm water collection and discharge points; general topography both before and after construction; and drainage patterns across the project site. The SWPPP must include the Best Management Practices (BMPs) that the applicant will use to protect the quality of storm water runoff and the placement of those BMPs.

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

Comment:
The proposed project would involve minimal use of water during and following construction, including for dust control and for watering plants during revegetation. Based on the small disturbance and revegetation areas, the amount of water use would not substantially deplete groundwater supplies. The addition of a very small amount of additional impervious surfaces would not substantially interfere with groundwater recharge. (1, 42)

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, in a manner which would result in substantial erosion or siltation on- or off-site?

i. would result in substantial erosion or siltation on- or off-site?

Comment:
There will be minor alterations to the Gill Creek stream channel as a result of channel grading operations and removal of the downstream weir. This would leave much of the sediment build-up, originally trapped by the weir, in place and would rely upon future storm flows to restore the new equilibrium conditions of the creek. Modeling conducted as part of the Location Hydraulic Study suggests that this is likely to result in erosive velocities within the channel and at the proposed bridge structure. In order to reduce these impacts, bank protection using rock slope protection will be installed as part of the project design. The bridge abutments will be protected using riprap and/or guide banks. The west bank that is just downstream of the bridge where the confluence of the Northwest tributary and Gill Creek meet was identified as an area that would be at risk of erosion. This area will have rock slope protection installed to reduce erosion impacts. With the incorporation of mitigation measure BIO-1 (Erosion and Sediment Control), a less-than-significant impact from erosion is anticipated. (1, 42)

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

Comment:
Existing drainage into the project site will remain unchanged. Re-grading of the roadway to allow construction of the temporary crossing would be stabilized using erosion control BMPs and would not result in a loss of area or linear feet of drainage. (1, 10, 44, 45)

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:
The area surrounding the project site is comprised of gentle or flat slopes, where drainages flow into Gill Creek. Within the BSA drainage from a small, flat stream drains into Gill Creek just downstream of the bridge, called the Northwest tributary. Flows are intermittent. These drainages will be improved within the BSA but largely unchanged in location. (1, 42, 44, 45)

iv. Impede or redirect flood flows?

Comment:
The bridge has been designed so that the structure does not impede or redirect flood flows within Gill Creek. A Location Hydraulic study has been completed for the proposed project, where hydraulic analyses were performed for the existing and proposed conditions using the U.S. Army Corps of Engineers Hydrologic Engineering Centers River Analysis (HEC-RAS) modeling software. The proposed construction design would result in a slight decrease in the water surface elevation (WSE). The proposed new bridge and existing structure would meet the criteria to pass the 100 year storm flows with adequate freeboard (min. 1 ft.).

(1, 10, 44, 45)

Significance Level:

Less than Significant Impact

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

Comment:
The project site is not located in an area subject to seiche or tsunami. The drainage patterns in the project area will be slightly altered as a result of channel grading activities, but the changes will not

increase surface runoff and cause flooding. Flooding has not occurred at the project site even after large storm events, and the minor alteration of drainage patterns associated with the proposed project will not add to the frequency of flooding at the project site. (1, 10)

Significance Level:

No Impact

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

Comment:

The larger, wider new bridge structure and roadway approaches would increase the amount of impervious surface in the project area. The additional surface area would result in a slight, but less-than-significant, increase in storm water runoff and the potential for polluted runoff (e.g., lubricants). Roadway and bridge deck drainage for this project would be diverted away from the approach fills and directly into designed and natural drainage swales. Once the water is within the sediment treatment facilities per the project NPDES requirements, it is expected to infiltrate into the ground following typical rainfall events. Resource protection measures BIO-1, BIO-2, BIO-3, HYD-1, HYD-2, HYD-3 will be incorporated into the construction contract specifications for project construction to ensure this potential impact to a less-than-significant level. (1, 42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:
BIO-1, BIO-2, BIO-3, HYD-1, HYD-2, HYD-3

11. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Comment:
The project would not divide a community, because it would only replace an existing bridge. The existing single lane bridge would be left in place to maintain traffic during construction, and then closed to traffic after the new bridge is completed and opened to traffic. Therefore, no impact from dividing an established community would occur with the implementation of the proposed project. (1)

Significance Level:

No Impact

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Comment:
Section 65402 of the California Government Code of Regulations 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 has reviewed the proposed project and found it to be consistent with the Sonoma County General Plan.

The project would not conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect, including in the Sonoma County General Plan and zoning ordinance. (1, 7)

Significance Level:

Less than Significant Impact

12. MINERAL RESOURCES:

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Comment:
The project site is not located within a known mineral resource deposit area (Sonoma County Aggregate Resources Management Plan, as amended 2010). Sonoma County has adopted the Aggregate Resources Management Plan that identifies aggregate resources of statewide or regional significance (areas classified as MRZ-2 by the State Geologist). Consult California Geologic Survey Special Report 205, Update of Mineral Land Classification: Aggregate Materials in the North San Francisco Bay Production-consumption region, Sonoma, Napa, Marin, and Southwestern Solano Counties, California (California Geological Survey, 2013). (1, 7)

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:
The project site is not located within an area of locally-important mineral resource recovery site and the site is not zoned MR (Mineral Resources) (Sonoma County Aggregate Resources Management Plan, as amended 2010 and Sonoma County Zoning Code). No locally-important mineral resources are known to occur at the site. (1, 7)

Significance Level:

No Impact

13. NOISE:

Would the project:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the

vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Comment:

The Noise Element of the Sonoma County General Plan establishes goals, objectives and policies including performance standards to regulate noise affecting residential and other sensitive receptors. The general plan sets separate standards for transportation noise and for noise from non-transportation land uses.

The closest receptor is a residence about 0.1 mile away. Construction will occur during daytime hours (7am-7pm) only. The project construction noise will cease at the completion of the project and would not expose receptors to on-going noise that would require attenuation.

The project will not increase transportation noise at the site, because the project will not generate a permanent increase in traffic volumes or shift travel lanes closer to any sensitive noise receptors.(1)

Significance Level:

Less than Significant Impact

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

Comment:

The project includes construction activities that may generate minor ground borne vibration and noise. These levels would not be significant because they would be short-term and temporary, and would be limited to daytime hours. There are no other activities or uses associated with the project that would expose persons to or generate excessive ground borne vibration or ground borne noise levels. (1)

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:

The site is not within an airport land use plan as designated by Sonoma County.

The project would not result in a permanent increase in ambient noise levels, because it would not increase traffic, nor shift travel lanes closer to any sensitive receptors. (1, 7)

Significance Level:

No Impact

14. POPULATION AND HOUSING:

Would the project:

a) **Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

Comment:
The project would have no direct or indirect effect on population. It would consist of replacing an existing bridge without any housing or growth inducing development. Nor would the project new access to undeveloped areas. There are no new permanent employment opportunities associated with the project. Therefore, no impacts to population growth, housing or road extensions would occur. (1)

Significance Level:

No Impact

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

Comment:
No housing would be displaced by the project. Therefore, no impacts caused by displacing existing housing or the need to construct new housing would occur. (1)

Significance Level:

No Impact

15. PUBLIC SERVICES:

Would the project:

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service rations, response times or other performance objectives for any of the public services:

Comment:
Construction of the project would not involve substantial adverse physical impacts associated with provision of public facilities or services and the impact would be less than significant. (1, 7)

Significance Level:

Less than Significant Impact

i. Fire protection?

Comment:
North Sonoma County Fire District would continue to serve this area with implementation of the project. There would be no increased need for fire protection resulting from the replacement of the existing bridge and the project would not require the provision of new or physically altered police protection facilities. The temporary crossing will be available for emergency responders during

project construction. However, there is the potential for construction activities to slow emergency response times. Implementation of Mitigation Measure TRANS-2 would reduce potentially significant impacts related to any potential delays to a less-than-significant level. (1, 42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure TRANS-2

ii. Police?

Comment:
The Sonoma County Sheriff will continue to serve this area. There will be no increased need for police protection resulting from the project. No housing or jobs are included as a part of this project. (1)

Significance Level:

No Impact

iii. Schools?

Comment:
Replacement of the bridge would not increase the capacity of River Road, nor would it increase the surrounding population. As such, no impacts would result from project implementation related to increased demands for schools, parks, or other public facilities. (1)

Significance Level:

No Impact

iv. Parks?

Comment:
No parks will be impacted by the project. (1)

Significance Level:

No Impact

v. Other public facilities?

Comment:
There are no other public facilities near or in the vicinity of the project that will be impacted by the project. (1)

Significance Level:

No Impact

16. RECREATION:

Would the project:

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Comment:
Replacement of the bridge would not increase the capacity of River Road, nor would it increase the surrounding population resulting in an increased demand for public recreation facilities. The proposed project would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities. The project will have no impact on the use of existing neighborhood and regional parks or other recreational facilities. (1, 7)

Significance Level:

No Impact

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

Comment:
The proposed project does not involve construction of recreational facilities. See item 16.a. above. (1)

Significance Level:

No Impact

17. TRANSPORTATION:

Would the project:

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

Comment:
River Road is a local rural road in Sonoma County located north of the City of Geyserville. The portion of River Road in the project area is rural and narrow, consisting of two-lanes with no shoulders. The road traverses Gill Creek, a tributary to the Russian River, between Fox Ridge Road and Vineyard Road which is approximately 2 miles northwest of State Route 128. It is the only route available to residents and facilities west of the bridge.
Average daily traffic on River Road is 284 vehicles per day (County of Sonoma, 2021). River Road is not designated a bikeway in the Sonoma County Bicycle and Pedestrian Plan (2010), and bicyclist/pedestrian use is limited. There is no transit service.

A temporary crossing will installed to maintain traffic during construction and then closed to traffic

after the new bridge is completed and opened to traffic. The new bridge would not increase the vehicle carrying capacity compared to the existing bridge and would not generate any new vehicle trips during the operational phase. Most construction operations would not require any roadway closures. Some may require brief closures of 15 minutes or less, but provisions would be made so that emergency vehicles would be subject to delays of 5 minutes or less. Therefore, it would not conflict with any applicable plan, ordinance or policy. (1, 42)

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation Measure TRANS-1- Notification of Closure

- The County shall notify property owners along Geysers Road at least 7 days in advance of the proposed temporary closure.
- Signage shall be placed at both ends of Geysers road notifying motorists of the planned closure.

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

Comment:
CEQA Guidelines Section 15064.3, subdivision (b) states that for transportation projects that have no impact on vehicle miles traveled (VMT) should be presumed to cause less than significant transportation impact. Replacement of an existing bridge will not increase roadway capacity and will no induce population growth in the project area. No increase to operational VMT would occur with project implementation; therefore, the impact is less than significant. (1, 42)

Significance Level:

Less than Significant Impact

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

Comment:

The existing single span bridge is a reinforced concrete slab haunched rigid frame with reinforced concrete abutments and wingwalls. The structure carries two lanes of traffic for a total width of 23 feet between barriers. The new bridge will consist of two 11 foot wide travel lanes and two five foot dual purpose shoulder/bike lanes for a total 32 foot traveled way. The project will not result in any hazardous geometric design features. The project is not expected to change the current use of the bridge for residential and agricultural related travel.

Significance Level:

Less than Significant Impact

d) Result in inadequate emergency access?

Comment:

The Northern Sonoma County Fire Protection District (NSCFPD) provides fire and emergency response in the vicinity. The closest station is the Geyserville station, approximately 2.9 miles away and seven minutes travel time (without lights and sirens). The NSCFPD uses the River Road bridge when responding to incidents north and west of the bridge.

The Sonoma County Sheriff's Department provides police response in the area. Ambulance service is typically provided by Bell's Ambulance in Healdsburg and Windsor. Construction activities may result in traffic delays as there are no available detours. This is a short term construction related impact that will cease upon project completion.

The contractor will require access below the existing bridge to assist with demolition, and will provide a graded work pad in the dry creek bed to facilitate construction vehicle movement. This work would involve excavators and back hoes grading the channel. Although the dry creek bed crossing will provide equipment access to and from the work area beneath the existing bridge, an additional access road for construction vehicles can be constructed adjacent to the northeast approach of the existing bridge. This road would be constructed in a manner similar to the temporary detour, and would fall within the footprint of the proposed bridge. This access road would serve to separate construction traffic from residential traffic without additional environmental impacts.

This approach will allow traffic to continue throughout construction, although it is anticipated there will be delays. It is expected that construction crews will also be using the temporary crossing to access the work site, and flagging crews will be necessary on site to ensure that vehicular traffic does not interfere with construction activities and vice versa.

No detour routes are available. River Road terminates northwest of the bridge crossing into a small rural subdivision called the Vineyard Subdivision.

Emergency access will be maintained through the temporary crossing while bridge replacement occurs.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation

Mitigation Measure TRANS-2 - Emergency Access

- Emergency response organizations will be notified of the project construction schedule and any closure in advance. The County will require the contractor to provide passage of emergency vehicles through the project site at all times. The Contractor shall make plans for emergency vehicle staging on the easterly approach if complete closure is determined necessary at any point in the construction schedule.

e) Result in inadequate parking capacity?

Comment:

There is only parking on the road shoulder and this will not change due to the project. During construction activities parking at the site may not be available but would be just slightly down the road. (1)

Significance Level:

No Impact

18. TRIBAL CULTURAL RESOURCES:

Would the project:

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5030.1(k), or

Comment:
There are no known tribal cultural resources on the site. Additionally, per AB-52 requirements, local tribes have been notified of the project. Initial responses from the tribes suggest no concerns.

The project has potential to uncover previously unknown materials during construction. Mitigation Measure CUL-1 would reduce this potentially significant impact to a less-than-significant level. (1, 34, 36)

Significance Level:
Less than Significant with Mitigation Incorporated

Mitigation:
Mitigation Measure CUL-1: Cultural Resources, CUL-2: Human Remains

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:
There are no known tribal cultural resources on the site. See 18.a. above. (1, 34, 36)

Significance Level
Less than Significant with Mitigation Incorporated

Mitigation:
Mitigation Measure CUL-1: Cultural Resources, CUL-2: Human Remains

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:
The project would not generate any septic effluent or wastewater discharge to contribute to the need for construction of water treatment facilities. The project will not require the construction of wastewater treatment facilities or expansion of existing facilities. The site will be graded to match adjacent slopes to ensure proper storm water drainage. Storm water drainage will adhere to conditions of project permits in compliance with the Clean Water Act and CA Department of Fish and Wildlife. Therefore, no impacts resulting from exceeding wastewater treatment standards would occur. (1)

Significance Level:

No 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 proposed project would not include any buildings or structures requiring new or expanded water supplies. Therefore, impacts would be less than significant. (1)

Significance Level:

No 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 generate any wastewater discharge. Therefore, no impacts relating to wastewater treatment facility's capacity would occur. (1)

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:

Disposal of the waste that would result from the temporary construction phase of the proposed project would not exceed state or local standards. Therefore, impacts would be less than significant. (1)

Significance Level:

Less than Significant Impact

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

Comment:
Sonoma County has access to adequate permitted landfill capacity to serve the proposed project. Sonoma County has a solid waste management program in place that provides solid waste collection and disposal services for the entire County. The program can accommodate the permitted collection and disposal of the waste that would result from the temporary construction phase of the proposed project. Therefore, impacts would be less than significant. (1)

Significance Level:

Less than Significant Impact

20. WILDFIRE

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

The project splits Local Responsibility Area and State responsibility area, and is land classified as a very high fire severity zone upstream of the bridge. (1, 7)

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

The project will not substantially impair emergency response. The structure has been design to better accommodate large vehicles. This will enhance the ability to evacuate the area in the event of emergency.

Emergency response access will be mitigated to less than significant with mitigations incorporated. See 17(d). TRANS-2 (Emergency Assess) (1, 7, 42)

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?

The project is located in a very high Fire Hazard Severity Zone. Conditions in the surrounding area will remain unchanged compared to existing. The project will not expose occupants to wildfire. (1)

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 of that may result in temporary or ongoing impacts to the environment?

The roadway alignment will change slightly. The new section of roadway will require less short-term maintenance compared to the existing infrastructure. This change will not exacerbate fire risk at the project site nor in the surrounding areas. (1)

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?

The project will not expose people to significant risk. The project will remove the downstream weir and minimally excavate the channel to build the new bridge. Bank protection will be installed on the west bank of Gill Creek downstream of the bridge to reduce the effects of increased velocities as a result of channel grading.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

TRANS-2 (Emergency Assess)

21. MANDATORY FINDINGS OF SIGNIFICANCE

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, 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?

The incorporation of the mitigation measures included in Section 4 (Biological Resources) would reduce potential impacts to fish, wildlife, plants, to a less-than-significant level.

The project site does not contain any object, building, structure, site, area, place, record, or manuscript that a lead agency determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. However, cultural resources could potentially be uncovered during construction. Mitigation measures included in Section 5 (Cultural Resources and Human Remains) would reduce potential impacts to a less-than-significant level.

Less than Significant with Mitigation Incorporated

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)?

Cumulative impacts are impacts on the environment that result from the incremental impacts of a proposed project when added to other past, present, and reasonably foreseeable future actions (State CEQA Guidelines Section 15355[b]). The replacement of River Road over Gill Creek is not anticipated to intensify development within the Alexander Valley area. There are no other similar projects that are planned to take place in the region that could contribute to cumulative impacts. Given that the proposed project's potentially significant impacts can also be completely mitigated, any

potential cumulative impacts would be less than significant and the project's contribution to cumulative impacts would not be cumulatively considerable.

Less than Significant Impact

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

The proposed bridge replacement would reduce the safety hazards associated the existing bridge crossing Gill Creek, which has a low seismic sufficiency rating and been determined to be functionally obsolete.. Because the proposed project represents a net decrease in environmental effects that could adversely impact human beings, either directly or indirectly, project impacts to human beings would be less than significant.

Less than Significant Impact

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7. Permit and Resources Management Department (PRMD), Sonoma County General Plan 2020 (as amended), September 23, 2008.

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18. Manual of Standards for Erosion and Sediment Control Measures, Association of Bay Area Governments; May, 1995.

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24. Sonoma County Permit and Resource Management Department and Department of Transportation and Public Works Traffic Guidelines, 2014

25. Sonoma County Permit and Resource Management Department, Visual Assessment Guidelines, (no date)

26. Sonoma County Permit and Resource Management Department Noise Guidelines, 2017

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