Mitigated Negative Declaration

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

Publication Date: November 23, 2016
Adoption Date: December 28, 2016
State Clearinghouse: 2016112053

Pursuant to Section 15071 of the State CEQA Guidelines, this summary of findings and the attached Initial Study and mitigations constitute the Mitigated Negative Declaration as proposed for or adopted by the County of Sonoma for the project described below:

Project Title: Rancheria Creek Restoration Project

PRMD File #: UPE16-0070 **APN:** 131-050-004

Project Location Address:

Lead Agency: Sonoma County Permit and Resource Management Department
(Permit Sonoma)

Decision Making Body: Sonoma County Permit and Resource Management Department

Project Applicant: Dry Creek Rancheria Band of Pomo Indians

Project Description: Request for a Use Permit for construction of ecological improvements and restoration on reaches of Rancheria Creek and the Russian River plus flow stabilization on Rancheria Creek located on fee-titled property owned by the Tribe.

Environmental Finding:

Based on the attached Initial Study, the project described above will 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, call Georgia McDaniel at 565-4919.

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

INTRODUCTION

The Dry Creek Rancheria Band of Pomo Indians (Tribe) proposes to implement restoration of Rancheria Creek, which will include physically re-shaping portions of the existing creek, removing non-native vegetation, improving culverts, and introducing supplemental flows to the creek. A referral letter was sent to the appropriate local, State and Federal agencies and interest groups who may wish to comment on the project.

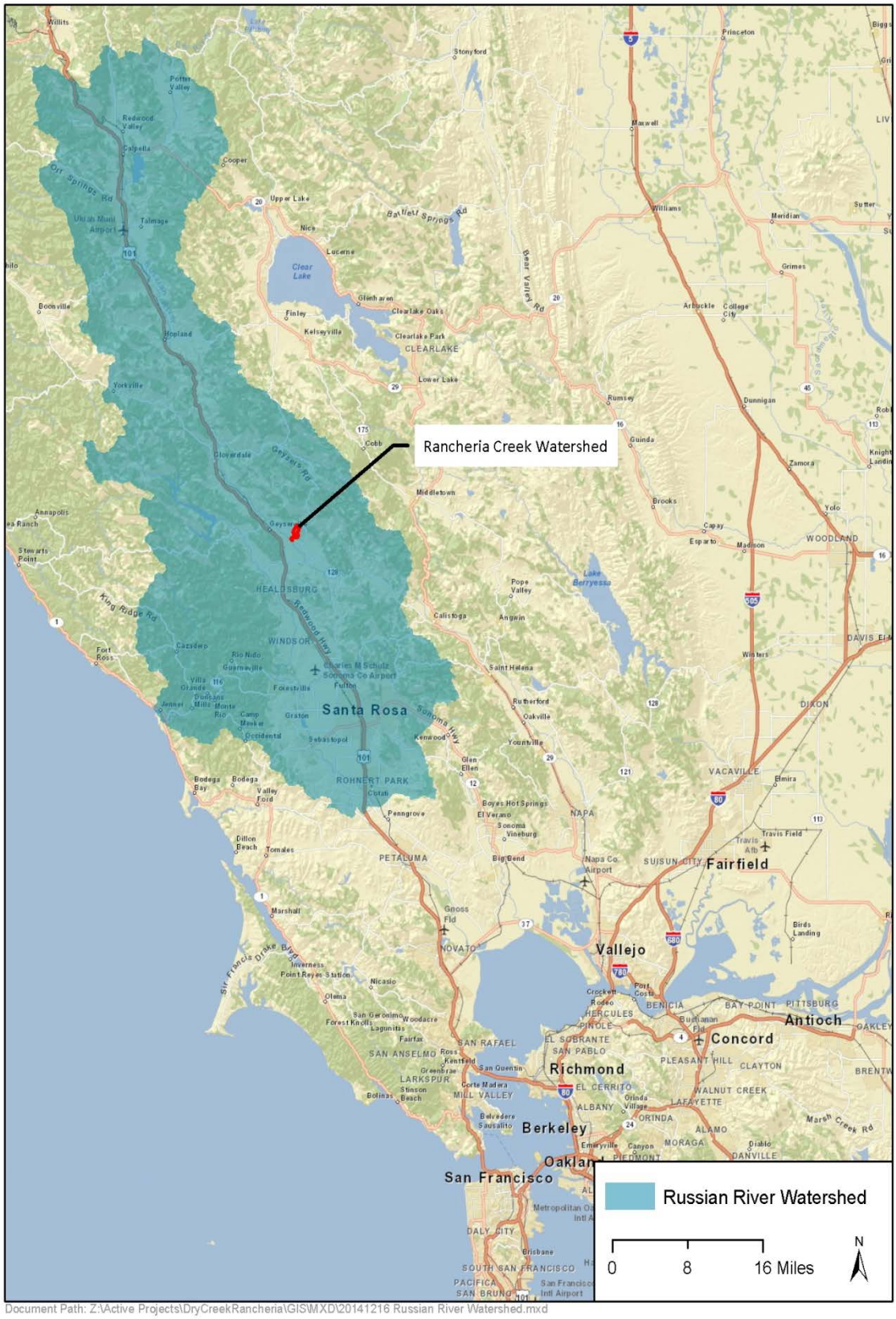
This report is the Initial Study required by the California Environmental Quality Act (CEQA). The report was prepared by Georgia McDaniel, Project Review Planner with the Permit Sonoma, Project Review Division. Information on the project was provided by the Project Applicant and FlowWest, project consultant. Technical studies referred to in this document are available for review at the Permit and Resource Management Department.

Please contact Georgia McDaniel, Planner III at (707) 565-4919, for more information.

SITE CHARACTERISTICS

The Project Site is located northeast of the Russian River and in the northeastern portion of Sonoma County, California (Figure 1). This region is characterized by rolling hills with instances of steep, rugged slopes that are densely vegetated with native grasses, trees, and brush. Regional natural plant communities in the project vicinity include those that are common to the Central Franciscan subsection of the Northern California Coast Ranges, such as mixed oak, mixed conifer forest, and needlegrass grassland (Miles and Goudey, 1997). Climate is typically temperate and humid. Typical elevations within this ecological subsection range from 300 feet above sea level up to 6,175 feet at Big Signal Peak. Mean annual precipitation is approximately 35 to 110 inches. Mean annual temperature ranges from 40 to 58 degrees Fahrenheit (Miles and Goudey,1997).

Figure 1: Location of Dry Creek Rancheria in the Russian River Watershed.



The approximately 90.6 acre project site (or study area) is located within and adjacent to Dry Creek Rancheria along the existing road BIA-93; north and south of State Highway 128 (Figure 1) and east of Highway 101. Elevation in the study area ranges from approximately 178 to 673 feet above mean sea level. The local area topography varies from the flat Russian River floodplain to the steeply sloped foothills of the Mayacamas mountain range. Topography at the project site is characterized by both steep slopes on the Rancheria (Figure 2) and the flat vineyard on the Russian River floodplain. Rancheria Creek is a collector of numerous ephemeral channels within the Rancheria that drains southwest for approximately 3,300 feet where it joins the Russian River.

All water rights associated with Rancheria Creek reside with the Tribe. Originally, the Rancheria Creek was envisioned as the life sustaining component for the Rancheria that would provide salmon for the Tribe. Historically Rancheria Creek, was a perennial tributary to the Russian River, but is now intermittent. Flow in the Rancheria Creek has decreased from historical observations possibly due to groundwater pumping reducing the flow of the natural spring feeding the creek in the upper watershed and sediment that has filled the channel vineyard reach. Springs in the upper watershed of Rancheria Creek provide cool water for steelhead, but land use changes have left the vineyard reach without any riparian vegetation cover and surface water temperatures have warmed. Although, Rancheria Creek supports steelhead, the resident population in Rancheria Creek is close to being lost without immediate action. The Russian River is home to three species of salmonids: Coho salmon, Chinook salmon and Steelhead trout. All three species have experienced serious population declines and are listed as threatened under the federal Endangered Species Act. Additionally, Coho are listed as endangered under the California Endangered Species Act.

Since Federal laws apply to Tribe-owned land held in trust, an agreement that the Tribe will monitor Rancheria Creek including the pools located on Dry Creek Rancheria (tribal trust land) to prevent poaching of all three federally-listed species of salmoids will be a condition of approval. Land use changes have also contributed to bank erosion and poor water quality including high turbidity and low dissolved oxygen. The Russian River has been designated as a site of special interest for NOAA Fisheries while the North Coast Regional Water Quality Control Board has included the Russian River watershed on the 303(d) list for temperature and sediment.

PROJECT DESCRIPTION

The project includes ecological improvements/restoration and flow stabilization components. Ecological improvements and restoration would occur on fee-title property owned by the Rancheria. Flow stabilization efforts would occur on Rancheria lands and would supplement restoration efforts that would occur on the fee-title property.

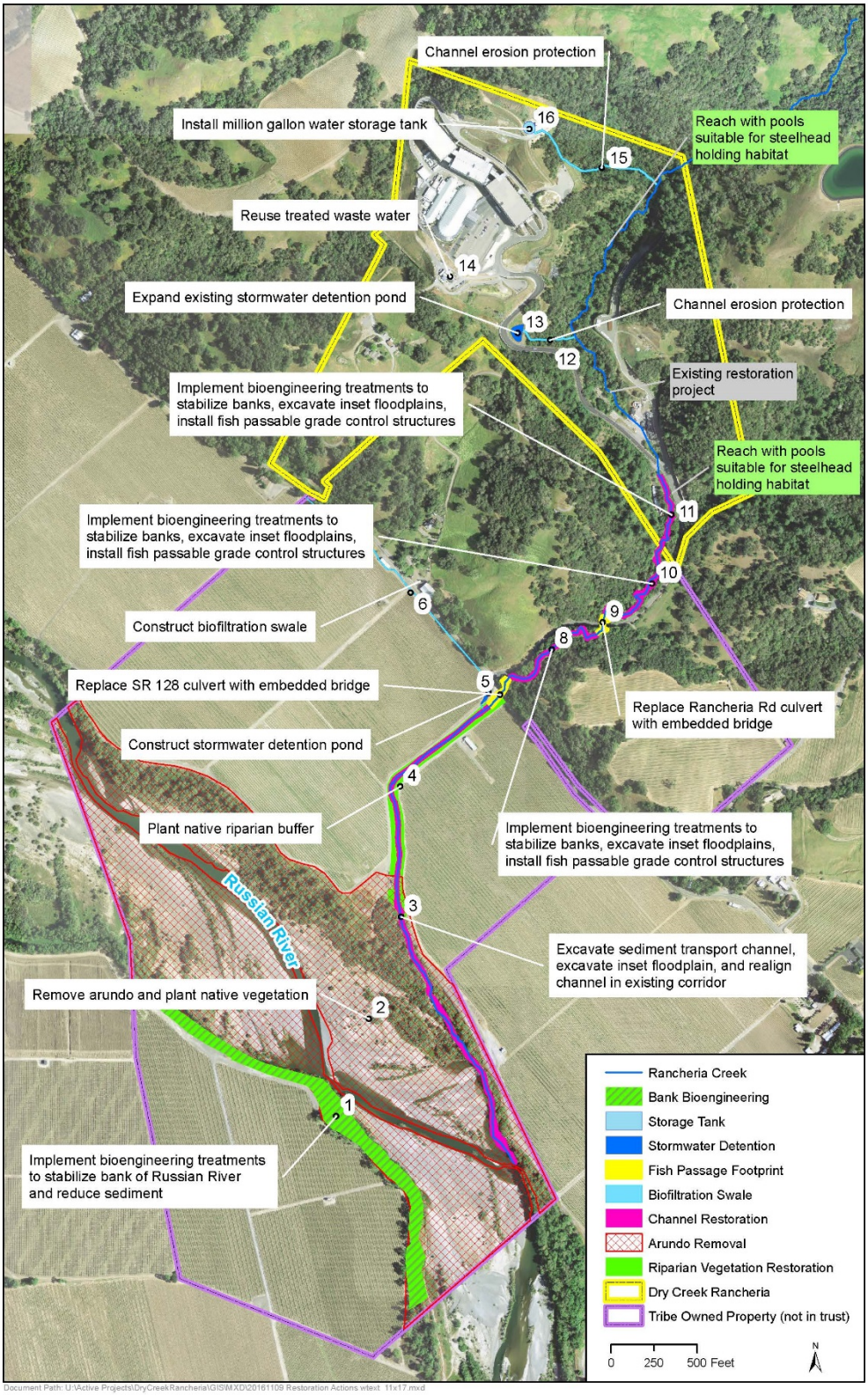
Ecological improvements would include excavation of floodplain benches in an existing incised channel to restore floodplain function and hydrology conditions, channel realignment to restore habitat complexity in the channelized reach of the creek, replacement of culverts that restrict fish passage, planting of riparian vegetation along the channelized portion of the creek to create cover to shade the creek and create a riparian buffer from the existing vineyard operations, and removal of invasive, non-native arundo, and bank stabilization along the Russian River. Riparian restoration along the creek would remove invasive species and re-vegetate with native shade and cover producing plants and trees.

Flow stabilization from the Rancheria would include installation of an off stream storage tank to supplement flow in the creek during the critical summer period for steelhead and Coho. A detention basin would also contribute to flow stabilization by capturing storm runoff and releasing it more gradually to the creek. Both the tank and the detention basin would include bank stabilization to facilitate discharge to the creek.

The proposed Rancheria Creek Water Enhancement Project consists of 16 discrete restoration actions (outlined below) encompassing a total project area of 90.6 acres designed to improve ecological conditions and geomorphic processes on Tribe-owned land on and adjacent to Rancheria Creek and its confluence with the Russian River (Figure 2). The Project would be phased from the downstream end of Rancheria Creek at the confluence with the Russian River, moving upstream. The restoration actions summarized below follow the downstream to upstream alignment of Rancheria Creek.

The project would be phased from downstream to upstream and temporary construction staging areas would be established adjacent to the limits of construction for each phase, starting from the downstream limits of the project, and relocating as the work progresses upstream. The staging areas would be used to store equipment and supplies and be isolated from the stream with temporary plastic fencing and best management practices (BMPs) would be placed in accordance with the stormwater pollution prevention plan (SWPPP). These BMPs would include temporary rock placed at the entrance to existing roadways, and coir rolls placed around any material stockpiles or equipment staging areas in order to isolate any runoff from rain events in the construction period from entering the stream.

Figure 2: Location of flow enhancement and restoration actions on the Dry Creek Rancheria and adjacent Tribe owned property.



To avoid impacts to fish construction activities would occur from June through October during the summer low flow period. The lower reach of Rancheria Creek would be dry during this period and would have no impact on salmonids. Construction on the Russian River would be confined to one bank and the construction area would be blocked off from the main channel and should not affect fish migration. Construction activities on the Russian River will occur early in the early portion of the chinook salmon run and instream work would be complete before the peak migration period. On Rancheria Creek, pools that provide cool water refugia for resident steelhead and other potential species such as Russian River tule perch, and hardhead are located within the Rancheria upstream of the channel construction areas during this period. Upstream of the Rancheria property, there is a natural barrier to fish passage.

The following 16 restoration actions on Rancheria Creek and the Russian River are proposed as project components and described in more detail below. All activities would be conducted with applicable permits and permission from local, state and federal agencies.

- Action 1. Implement bioengineering treatments to stabilize the west bank of the Russian River and reduce sediment
- Action 2. Remove arundo and plant native vegetation
- Action 3. Excavate sediment transport channel, excavate inset floodplain, and realign channel in the existing corridor
- Action 4. Plant native riparian buffer
- Action 5. Construct stormwater detention pond
- Action 6. Construct bio-filtration swale
- Action 7. Replace SR 128 culvert with embedded bridge
- Action 8. Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures
- Action 9. Replace Rancheria Road culvert with open-bottom concrete arch culvert
- Action 10. Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures
- Action 11. Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures
- Action 12. Channel erosion protection
- Action 13. Expand existing stormwater detention pond
- Action 14. Reuse treated waste water
- Action 15. Channel Erosion Protection
- Action 16. Install million gallon water storage tank

Table A. Restoration Action Summary

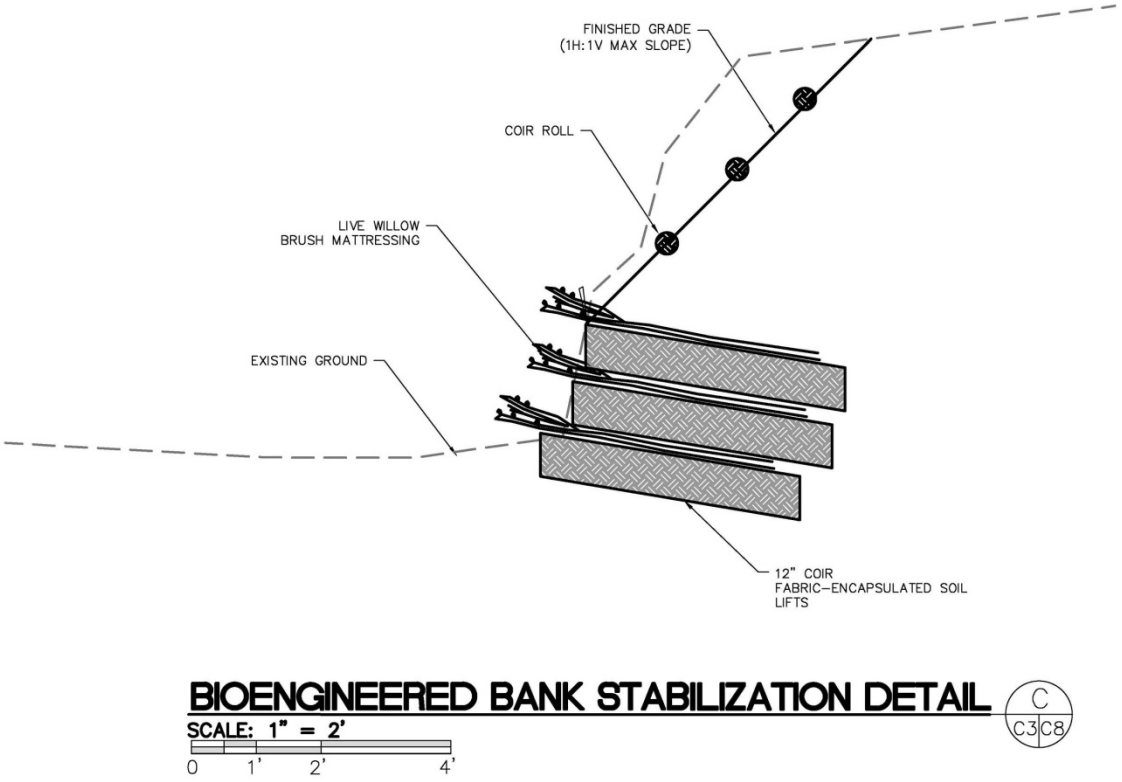
Action	Area (ac)	Cut/Fill (cy)	Linear Feet	Notes
1. West Bank of Russian River	4.7	5,500	2,640	Soil lifts and lie willow brush mattressing
2. Arundo removal	8.9			Vegetation removal and planting of natives
3. Excavation of sediment transport channel	2.2	495	3,300	Plus excavation of inset floodplain
4. Revegetation of riparian buffer	1.2		1,600	Planting only
5. Detention pond		168		33,939-gallon capacity
6. Bio-filtration swale		222	1,500	44,840-gallon capacity
7. SR 128 culvert replacement				Gradient upstream and downstream would be graded
8. Bioengineering treatments		185	800	Boulder step pool weirs
9. Rancheria Rd. culvert replacement				Channel would be re-graded to shallower slope
10. Bioengineering treatments		185	800	Boulder step pool weirs
11. Bioengineering treatments		115 weirs 775 bench	500	Boulder step pool weirs
12. Channel erosion protection		38	340	Rock slope protection
13. Expansion of existing detention pond		790		159,560-gallon capacity
14. Treated waste water				Capacity to treat 140 gallons per minute
15. Channel erosion protection		98	880	Rock slope protection
16. Water storage tank		390		Million gallon

Action 1. Implement bioengineering treatments to stabilize the west bank of the Russian River and reduce sediment

The purpose of the bioengineered bank stabilization work on the west bank of the Russian River is to reduce bank erosion and improve water quality. The bank would be isolated from the flowing river by diverting the flow around the work area with a temporary cofferdam, consisting of sandbags or a proprietary flow diversion product like an Aquadam or Portadam. Live willow cuttings would be harvested from existing willows in the immediate project vicinity, and stored in water in the bank staging area until they would be placed in the bank stabilization work. The contractor would remove the existing rumble and debris dumped at the edge of the bank and the existing over-steepened bank would be stabilized by placing stacked coir fabric-encapsulated soil lifts, live willow brush mattressing would be placed along the toe of the slope between the lowest

two soil lifts. The soil lifts would be stacked approximately two thirds of the vertical distance up the bank, and the upper third of the bank would be excavated to a stable 2:1 (horizontal:vertical) slope using an excavator (Figure 3). Biodegradable coir fabric would be placed over the slope, and secured in place with wood stakes. The lower portion of the bank would be re-vegetated with native riparian plantings, and the upper slope of the bank would be re-vegetated with native upland plant species. An estimated 2,640 linear feet of the bank would be repaired based on field observations. The work area would cover 4.7 acres and construction staging would be located on existing vineyard operation pads adjacent to the west bank of the Russian River. The balanced cut and fill volume would be approximately 5,500 cubic yards.

Figure 3: Example of bioengineered bank stabilization detail for the Russian River (Action 1).

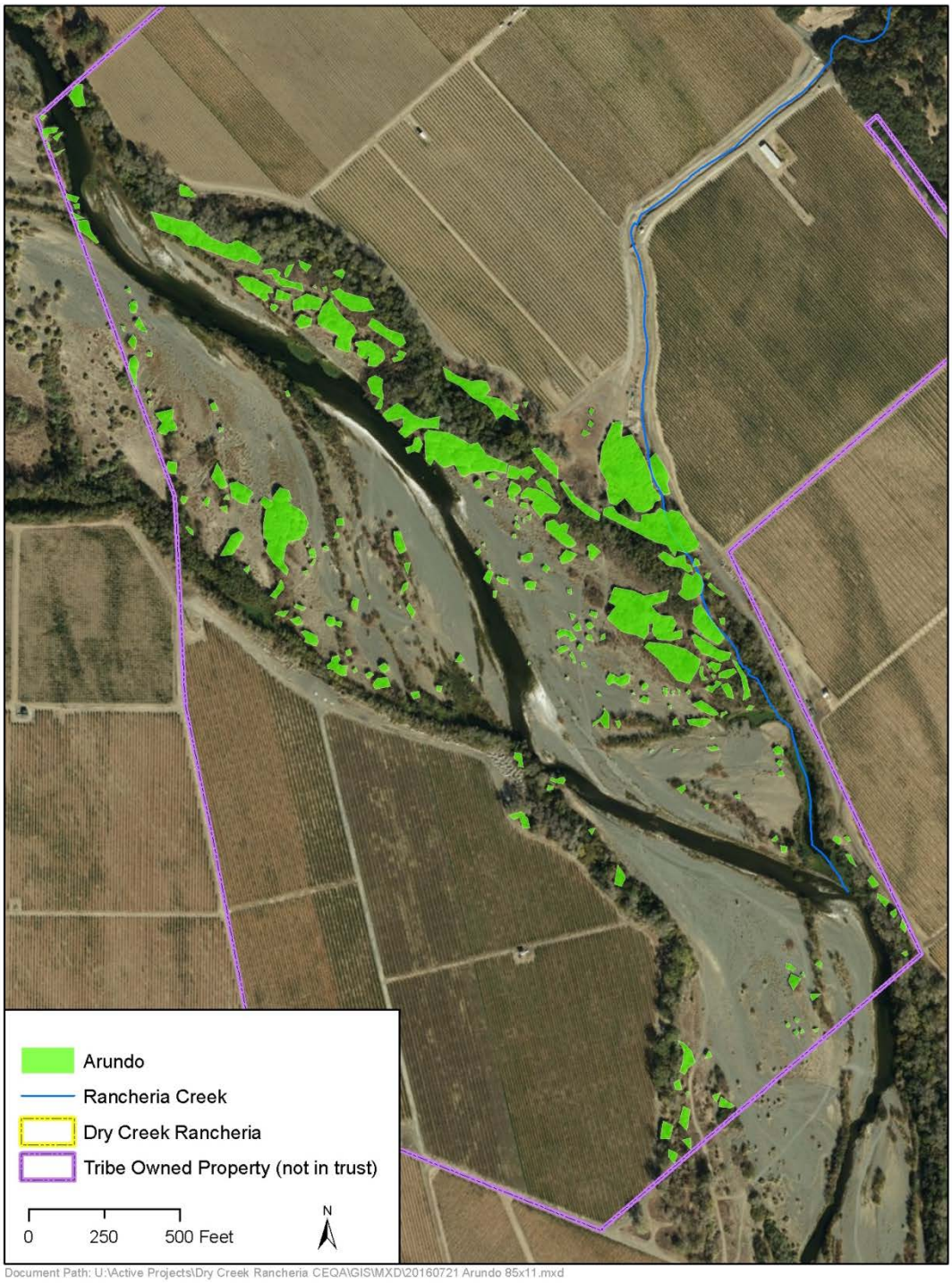


Action 2. Remove arundo and plant native vegetation

The Russian River floodplain covers 80.1 acres in the project site and 8.9 acres of existing invasive arundo vegetation has been mapped and would be removed from the site (Figure 4). The existing arundo would be cut at the base of the stalks using hand tools or chain saws. The stems would be sprayed with herbicide, and the removed portion of the plants would be chipped and spread in locations on the Rancheria away from flowing water to prevent redistribution. Herbicides with glyphosate or imazapyr active ingredients would be used to spray cut stalks. Rodeo® and Habitat® products are both approved by the EPA for application in wetland and riparian areas. The stalks would be monitored two weeks after cutting to check for new sprouts.

Herbicide would be reapplied on new sprouts. Quarterly monitoring of the floodplain and stalks treated with herbicide would be conducted for three years. New clumps of arundo that are deposited on the floodplain in the treatment area from upstream would be cut with hand tools and the stalks treated with herbicide (USDA 2014).

Figure 4: Arundo mapped for removal in the Russian River Riparian corridor (Action 2).

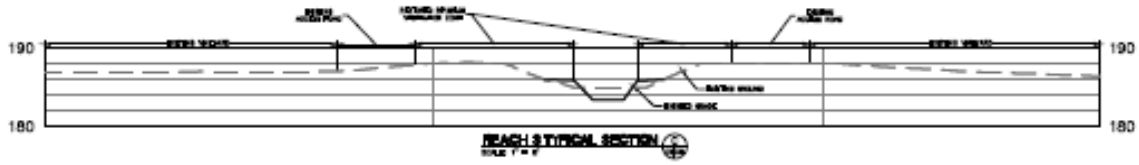


Action 3. Excavate sediment transport channel, excavate inset floodplain, and realign channel in the existing corridor

All construction in the reach of Rancheria Creek downstream of SR 128 would be performed when the channel is dry and when flows are not expected. A dewatering plan would be implemented in the event that flows from rain events during the construction period can be isolated from the construction area. Rancheria Creek would be dewatered using a sandbag or proprietary cofferdam at the upstream and downstream limits of the reach, and flow would be diverted around the construction area in temporary plastic bypass pipes. Limited pumping may be required to maintain a dry construction area.

The existing active channel of the vineyard reach of Rancheria Creek (from the Russian River confluence up to SR 128) is perched due in part to deposition of sediment from a landslide upstream of the reach that has been a chronic source of sediment and active bank and bed erosion upstream. Surface flow from the upstream reach infiltrates into the deposited sediment that fills the channel downstream of SR 128. In order to re-establish hydraulic surface connection, this reach of the channel would be excavated an average of 4 feet using an excavator and loader to reshape the channel bed and banks. The excavated material would be used to place a bench adjacent to the low flow channel and used in channel reconfiguration in upstream reaches. Gravel and cobble excavated from the channel would be used on site in the construction of biofiltration swales and rocked stormwater channels. Earthwork would be conducted in the 3,300 linear feet of Rancheria Creek between SR 128 and the confluence with the Russian River. The alignment of the Rancheria Creek would be confined to the existing channel corridor, but the excavated sediment transport channel would migrate within the existing corridor, forming riffles and runs in the stream. The active channel area in this reach covers 2.2 acres and the volume of earthwork would be approximately 495 cubic yards. The contractor would remove the existing trash debris and tires that line Rancheria Creek for off-site disposal at an active landfill or transfer station.

Figure 5: Cross-section of existing and proposed creek channel in Reach 3 (Action 3).



Action 4. Plant native riparian buffer

The reach of Rancheria Creek that passes through the vineyard would be re-vegetated with native riparian plants to provide a buffer from agricultural runoff and shade the stream to enhance habitat and reduce surface water temperature. Native plants would be planted with hand tools, and temporarily watered through the three year establishment period with a temporary irrigation system. The irrigation system would tap into the existing vineyard water source, and a network of plastic pipes, controllers, emitters, and sprinklers would water the plants during the establishment period. Native plants would be selected for cultural significance by tribal members. Native plants would be collected on the Rancheria and propagated at the Tribe's native plant nursery. Weeding would be conducted by nursery staff for the three years of the establishment period. The riparian

buffer would cover 1.2 acres of both sides of Rancheria Creek from SR 128 downstream 1,600 feet to the existing riparian corridor at the end of the vineyard.

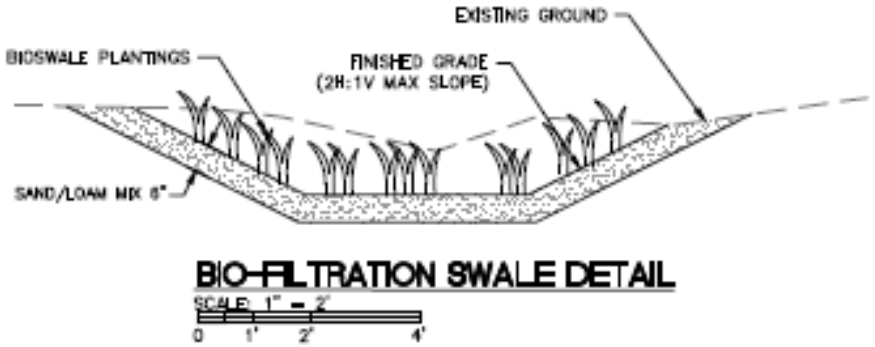
Action 5. Construct stormwater detention pond

A stormwater detention basin will be excavated to collect runoff from SR 128. The existing roadside ditch along SR 128 ends at the northern extent of the Tribe's vineyard. Runoff from SR 128 flows across the vineyard, washing fine sediment, herbicides, pesticides, and fertilizers directly into Rancheria Creek and the Russian River. The proposed stormwater detention pond would be fed by a new bio-filtration swale (Action 6) along SR 128 and store runoff in a detention pond adjacent to Rancheria Creek. Retained runoff would be released slowly into Rancheria Creek to reduce the peak discharge, erosive forces, and reduce pollution from the vineyard operations. The bio-filtration swale would treat road runoff and reduce roadway pollutants entering the stream. The detention basin would be excavated with an excavator, and an approximately 6 inch diameter pipe would connect flows from bio-filtration swale to the detention basin and to Rancheria Creek. The stormwater detention pond volume would be approximately 168 cubic yards and would have the capacity to store 33,930 gallons. Maintenance of the detention pond would occur infrequently as stormwater directed into the detention pond will consist of runoff from impervious surfaces and likely would have a low sediment load. Every five years the detention pond would be assessed for sediment deposition and sediment will be removed if necessary.

Action 6. Construct bio-filtration swale

The bio-filtration swale would be excavated with an excavator, and planted with a mix of bio-filtration plants specifically selected to improve water quality for flows entering the stream. The vegetation would be established with temporary irrigation for the first three years as part of the same temporary irrigation system described in the riparian re-vegetation section above (Restoration Action 4). The bio-filtration swale would extend 1,500 feet along SR 128 and the volume of earthwork would be approximately 222 cubic yards and during peak flow events can store an additional 44,840 gallons of stormwater. Maintenance of the bio-filtration swale would include monthly trash removal and annual inspection and repair if needed to the bed or banks of the swale.

Figure 6: Example of grading and planting for bio-filtration swale (Action 6).



Action 7. Replace SR 128 culvert with embedded bridge

The existing Rancheria Creek SR 128 concrete box culvert is a barrier to fish passage because of velocity through the culvert and the jump from the scour pool downstream of the culvert. The existing culvert would be replaced with a larger open-bottom CONSPAN arch precast concrete culvert with a natural streambed. The gradient upstream and downstream of the culvert would be re-graded with an excavator to reduce velocity and to eliminate the scour pool at the base of the existing culvert that creates a barrier to fish passage. The site would be dewatered with bypass piping, if needed. During the construction window, this reach of Rancheria Creek would likely be dry. Grade control rock would be placed with an excavator at the downstream end of the culvert to protect the proposed culvert from potential erosion. The existing concrete culvert would be excavated and recycled. The channel would be re-graded to a shallower slope with better connectivity to the up-and downstream reaches. Reinforced concrete spread footings would be poured in place by the contractor. The proposed precast concrete culvert would be delivered to the site in 8-foot long segments, and installed using a crane. The roadway would be rebuilt by placing compacted soil fill, aggregate base rock, and asphalt. Construction is expected to take 4 to 6 weeks and traffic would be diverted around the construction site by temporarily filling the channel immediately downstream of the culvert and building a temporary roadway. The temporary crossing of Rancheria Creek would maintain the existing level of service, but would require reduced speed through the construction area. Temporary road closure would be required to connect and disconnect the temporary roadway. The temporary roadway would be excavated and fill used on site for other phases of the project. Asphalt would be recycled. The channel banks and bed would be matched to the existing grade. Currently the banks are bare or grouted. Post-construction, the bank would be planted with riparian vegetation as specified in the Action 4 above.

Action 8. Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures

The reach of Rancheria Creek upstream of SR 128 to the Rancheria Road culvert (800 feet) would be restored with bioengineered treatments. The reach would be dewatered with temporary cofferdams and bypass piping. The existing channel is incised and a series of boulder step pool weirs would be placed with an excavator and loader to reestablish the channel grade and prevent further channel incision. The boulder weir volume would be approximately 185 cubic yards. An inset floodplain bench with an average width of ten feet would be constructed from streambed material. Existing unstable streambanks would be repaired with bioengineered bank stabilization techniques. Where pre-existing hard-armored banks are protected by riprap, old car bodies, tires, or concrete rubble, the armoring would be removed from the banks with an excavator and hauled off site to a designated landfill or waste transfer station. Banks requiring protecting would be stabilized with biodegradable coir erosion control fabric held in place with wooden stakes. The slopes would be re-vegetated with native seeding to develop roots that would strengthen the banks. Where needed, boulders or large woody debris would l be placed along the toe of the bank to protect the bank from erosion (Figure 8).

Figure 7: Cross-section of existing and proposed creek channel in Reach 2 (Action 8).

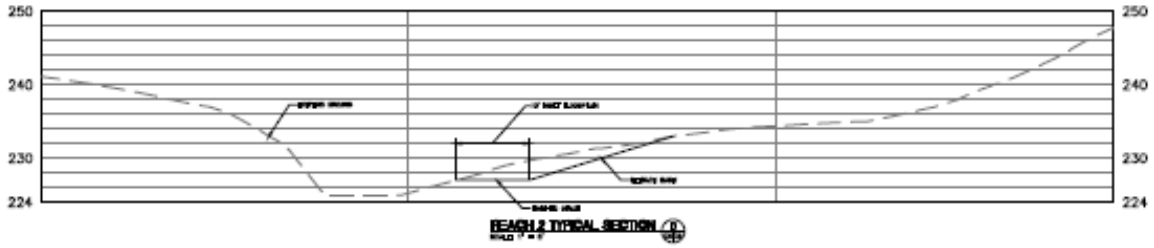
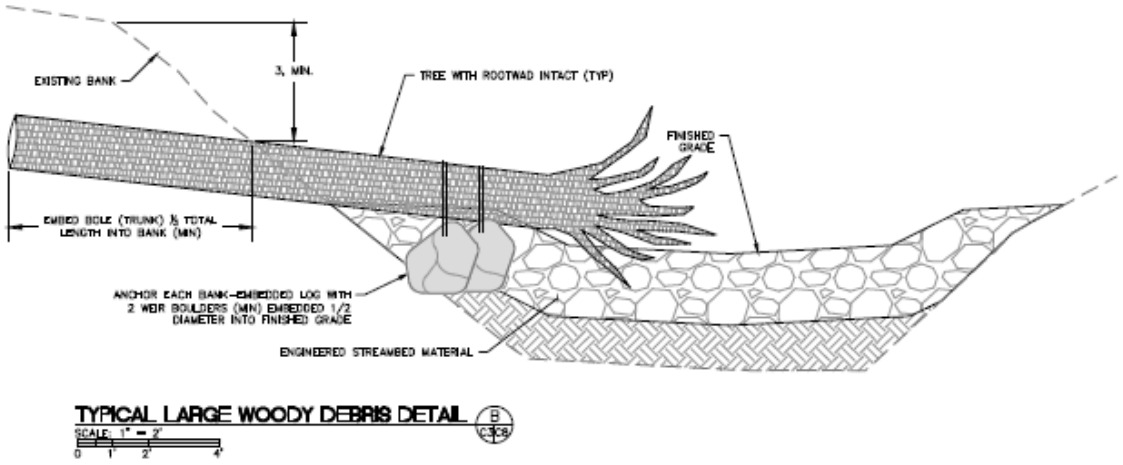


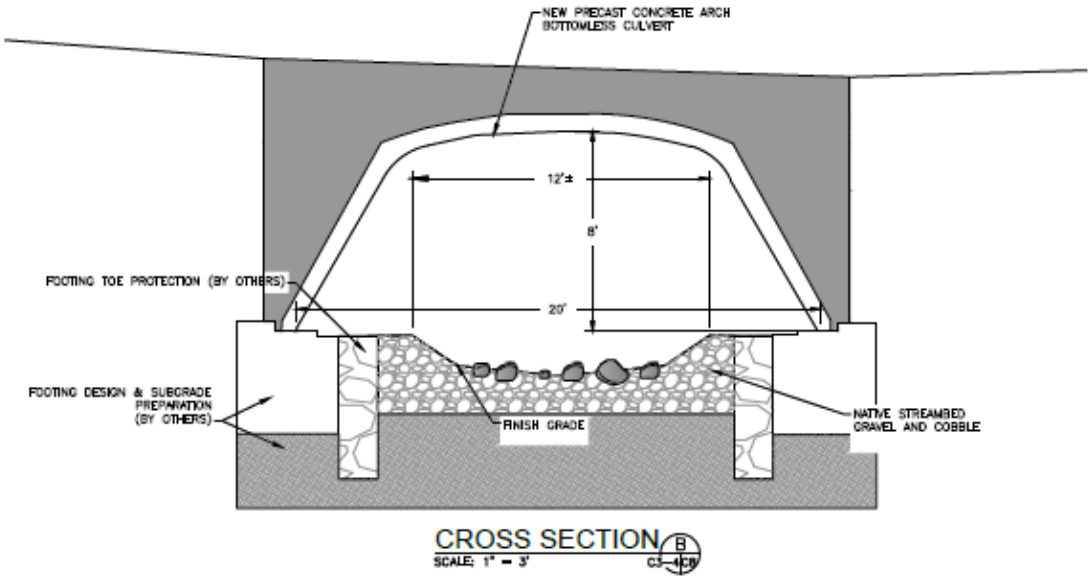
Figure 8: Example of large woody debris to protect the bank from erosion (Actions 8, 10 and 11).



Action 9. Replace Rancheria Road culvert with open-bottom concrete arch culvert

The existing undersized Rancheria Road culvert would be removed with an excavator and disposed off site at a designated landfill or waste transfer station. The reach would be dewatered with temporary cofferdams and bypass piping. Grade control rock would be placed with an excavator at the downstream end of the culvert to protect the proposed culvert from potential erosion. The channel would be re-graded to a shallower slope with better connectivity to the upstream and downstream reaches. Reinforced concrete spread footings would be poured in place. The proposed CONSPAN precast concrete culvert would be delivered to the site in 8-foot long segments, and installed using a crane. The roadway would be rebuilt by placing compacted soil fill, aggregate base rock, and asphalt. A temporary bus bridge would be used to maintain access to the River Rock Casino using a secondary access road or construction would be phased in such a way to have one lane traffic at all times under flagging. The four to six week period of construction would reduce the level of service of Tribe's owned and operated access roads to the River Rock Casino.

Figure 9: Embedded bridge detail for Rancheria Road (BIA 93) (Action 9).



Action 10. Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures

The reach of Rancheria Creek upstream of Rancheria Road culvert to the boundary with the Dry Creek Rancheria would be restored with bioengineered treatments (800 feet). The existing channel in the reach is incised. Boulder step pool weirs would be placed with an excavator to reestablish the channel grade. The boulder weir volume would be approximately 185 cubic yards. An inset floodplain bench with an average width of ten feet would be constructed from streambed material where feasible. The benching excavation volume would be approximately 1,250 cubic yards in this reach. Existing unstable streambanks would be repaired with bioengineered bank stabilization techniques. Banks requiring protecting would be stabilized with biodegradable coir erosion control fabric held in place with wooden stakes. The slopes would be re-vegetated with native seeding to develop roots that would strengthen the banks. Where needed, some boulders or large woody debris would be placed along the toe of the bank to protect the bank from erosion.

Figure 10: Example of boulder step pool weirs (Actions 8, 10 and 11).

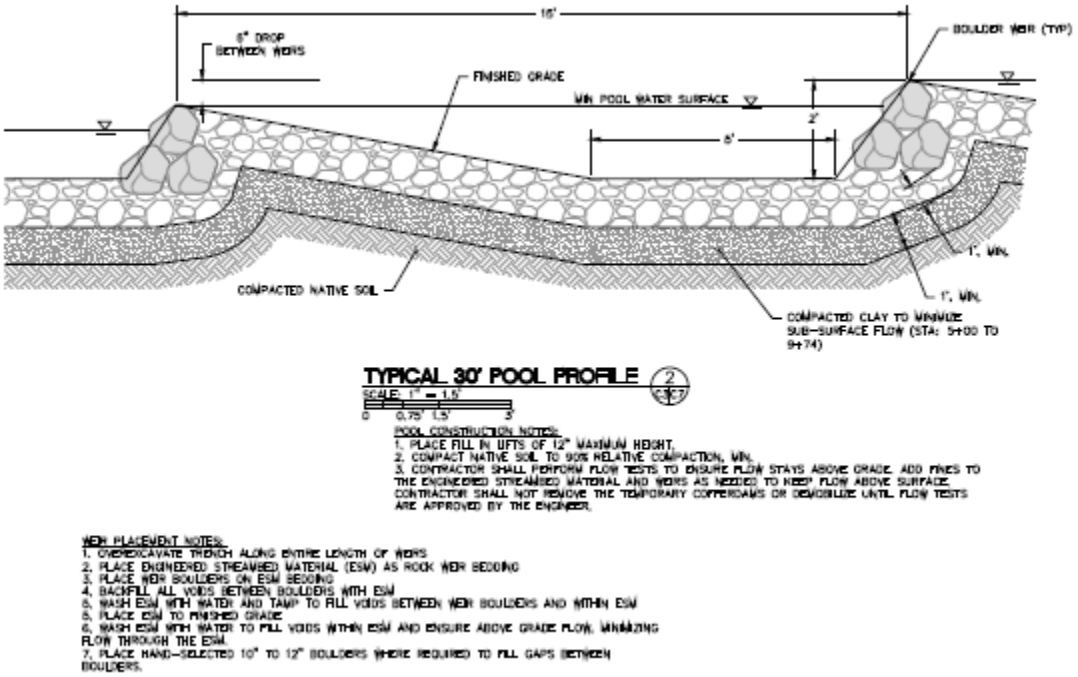


Figure 11: Example of boulder weir section across the creek channel (Actions 8, 10 and 11)

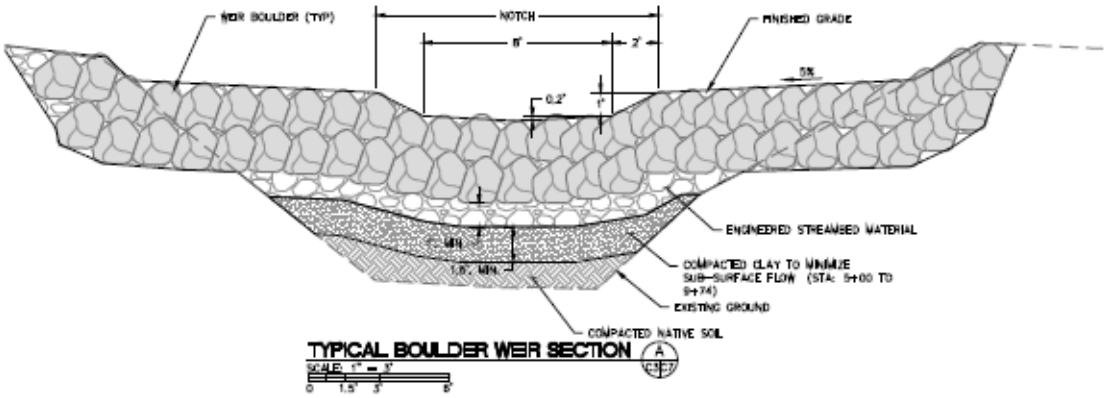
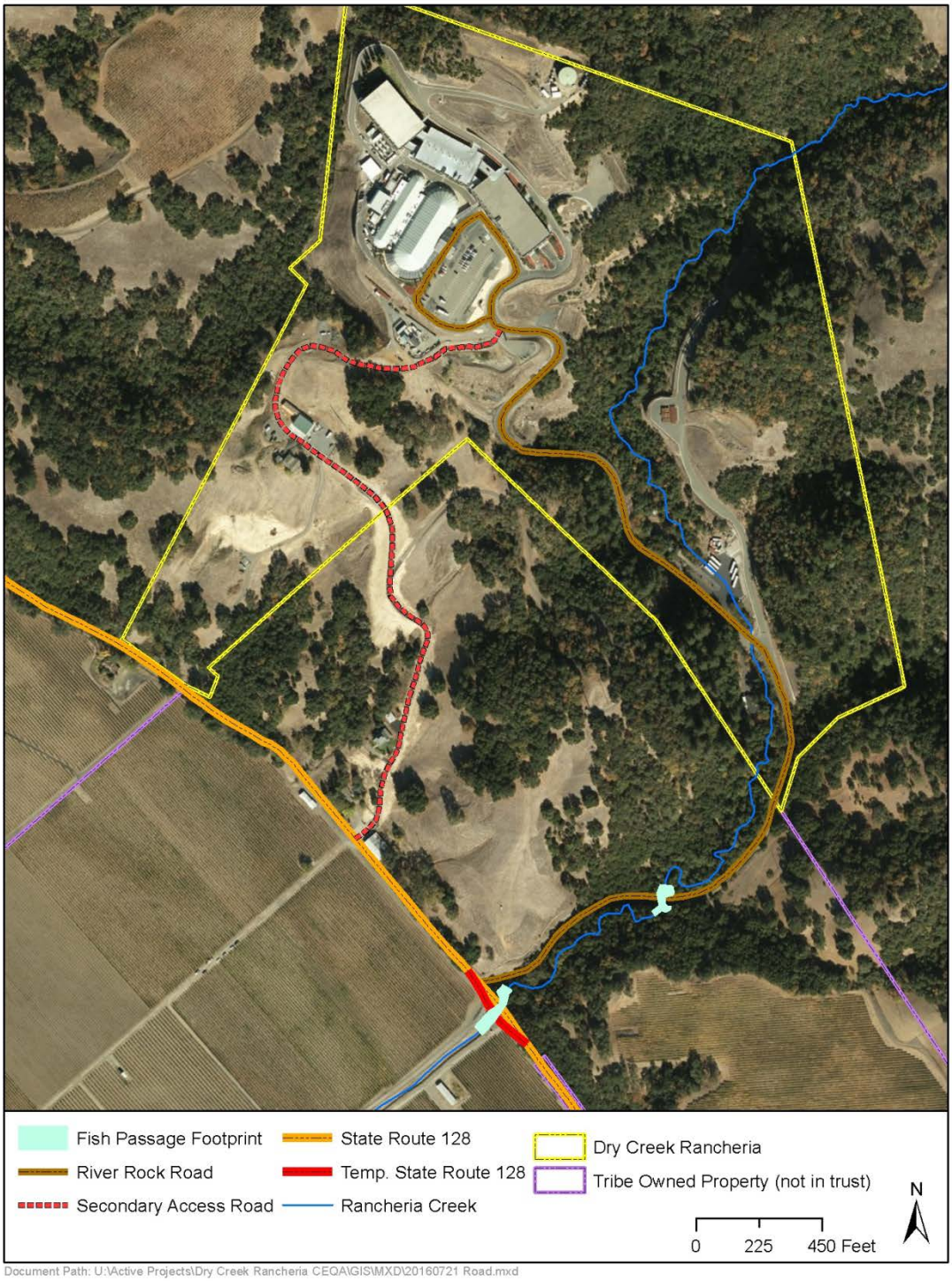


Figure 12: Existing and temporary roads for culvert removal and replacement (Actions 7 and 9).



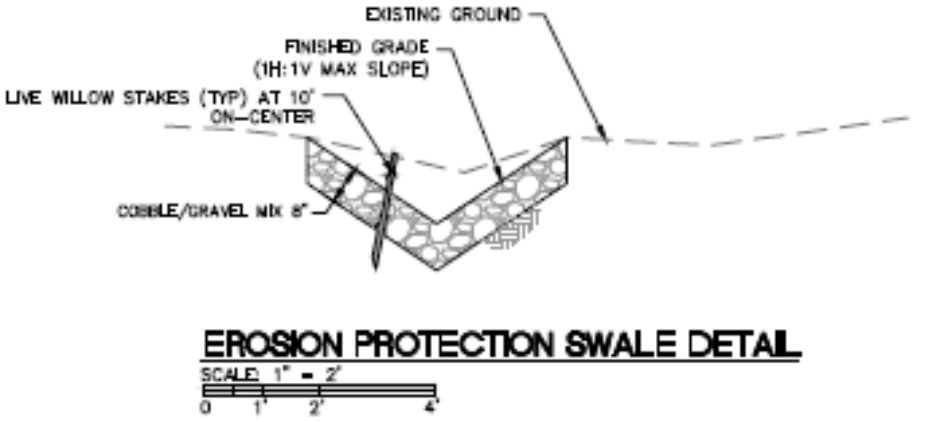
Action 11. Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures

The reach from the boundary with the Dry Creek Rancheria to the existing channel restoration project (500 feet) would be dewatered with temporary cofferdams and bypass piping. The existing channel in the reach is incised and a series of boulder step pool weirs would be placed with an excavator and loader to reestablish the channel grade. The boulder weir volume would be approximately 115 cubic yards in this reach. An inset floodplain bench with an average width of ten feet would be constructed from streambed material where feasible. The benching excavation volume would be approximately 775 cubic yards. Banks vulnerable to erosion would be stabilized with biodegradable coir erosion control fabric held in place with wooden stakes. The slopes would be re-vegetated with native seeding to develop roots that would strengthen the banks. Where needed, some boulders or large woody debris would be placed along the toe of the bank to protect the bank from further erosion.

Action 12. Channel erosion protection

The existing incised small tributary channel from the existing sediment detention basin feeding into Rancheria Creek would be protected with rock to prevent erosion in the channel and to reduce the fine sediment supply to Rancheria Creek and the Russian River. In addition, portions of the channel would be planted with a mix of bio-filtration plants specifically selected to improve water quality for flows entering the stream. The vegetation would be established with temporary irrigation for the first three years using treated waste water stored in the million gallon tank (Restoration Action 16). The tributary channel would be lined with a 12-inch layer of rock slope protection. The rock would be imported from the vineyard reach or off site, if necessary, by dump truck, and placed in the channel by excavator, sluice, or by hand. The length of the channel erosion protection would be 340 feet, and the volume of rock would be approximately 38 cubic yards.

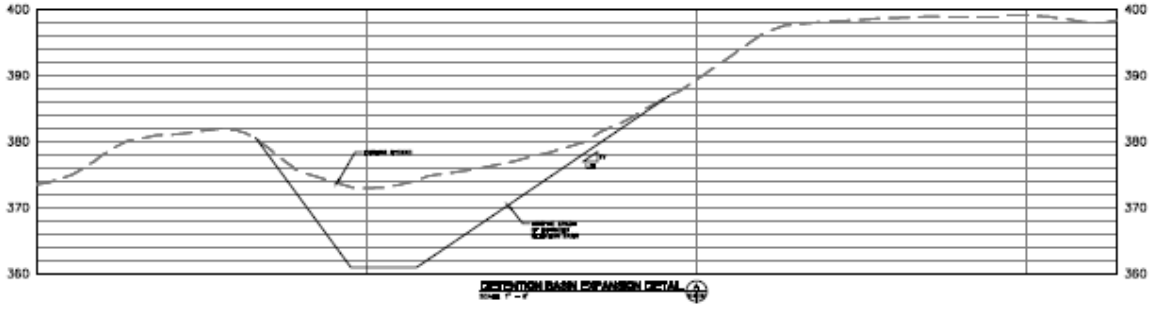
Figure 13: Example of channel erosion protection (Actions 12 and 15).



Action 13. Expand existing stormwater detention pond

The existing stormwater detention pond would be excavated with an excavator to remove the accumulated sediment and expand the capacity of the detention basin to capture a large volume of stormwater runoff. The excavated material would be hauled off by dump truck and reused on site. The downstream end of the detention basin would be reinforced with compacted native fill and rock protection. An outlet pipe would release flows from the detention pond into a bio-filtration swale (Action 12). The excavation volume would be approximately 790 cubic yards and the stormwater detention pond would have the capacity to detain 159,560 gallons.

Figure 14: Cross-section of detention basin expansion (Action 13).



Action 14. Reuse treated waste water

Treated waste water would be piped to a new water storage tank for release into Rancheria Creek to restore stream flows during critically dry periods. The water would be routed by existing pipe from the waste water treatment facility to the storage tank. A gated outlet pipe would route flows from the tank into an existing tributary, where it would flow down to the stream. To connect the new storage tank to the waste water treatment plant, a shallow, approximately 2-foot deep temporary trench would be excavated with an excavator, the pipe would be placed, and the earthwork would be replaced to cover the pipe. The flow from the treatment plant would be controlled with a valve at the existing waste water treatment facility. Discharge of treated waste water to Rancheria Creek is currently regulated under the Tribe's existing NPEDS permit. The waste water treatment plant has the capacity to treat 140 gallons per minute.

Action 15. Channel erosion protection

An existing tributary channel would be used as the flow path to deliver treated waste water from the million gallon storage tank to Rancheria Creek. The existing incised small tributary channel to Rancheria Creek would be protected with rock to prevent erosion in the channel and reduce fine sediment delivered to Rancheria Creek and the Russian River. The tributary channel would be lined with a 12-inch layer of rock slope protection. The rock would be imported from the vineyard reach or off site, if necessary, by dump truck, and placed in the channel by excavator, sluice, or by hand. The length of the channel erosion protection would be 880 feet, and the volume of rock would be approximately 98 cubic yards.

Action 16. Install million gallon water storage tank

The proposed water tank would be used to supply water to Rancheria Creek during critically dry

periods of low stream flow. The tank would be located adjacent to the existing spring-fed water storage tank on a concrete slab foundation. In order to provide a level surface for the tank, some grading would be performed with a dozer and excavator. An existing retaining wall would be removed, and approximately 390 cubic yards of balanced cut and fill would be graded to prepare the site for the foundation. The tank would be delivered to the site in segments, and assembled on the concrete foundation with the aid of a crane. A continuous flow of water from the tank to Rancheria can be released to maintain base flow in the creek during critical dry periods or a pulse flow can be released to provide migration flows for the steelhead or coho when downstream pools start to dry out. Treated waste water stored in the tank could also be used for emergency fire suppression.

SETTING

This project site, consisting of 2 parcels, is unique in that it spans both the Dry Creek Rancheria (trust land) and property owned by the Dry Creek Rancheria, but not held in trust (Figure 2 and 7). As a federally recognized tribe, The Dry Creek Rancheria Band of Pomo Indians has governmental authority over the Dry Creek Rancheria. In general, state and local environmental regulations do not apply to reservation lands and tribal trust land. Although both properties are owned by the Dry Creek Rancheria, they are subject to different laws and regulations and are permitted separately. Components of the project that are located on the Dry Creek Rancheria will be permitted under NEPA, if federal funds are contributed to the project. Components of the proposed project located on property owned by the Dry Creek Rancheria, but not held in trust, will be evaluated under CEQA with Sonoma County as the lead agency. In this document we address all components of the project in the project description, but potential benefits and impacts are only analyzed for the components located on the fee property where Sonoma County has jurisdiction (Table B). This approach follows guidance developed by the California Department of Transportation (Caltrans, 2008) for tribal development projects. Using this framework, Caltrans uses the Tribe's environmental analysis if it is determined to be adequate, or Caltrans could complete its own environmental document for the portion of the project that falls in Caltrans jurisdiction. For the proposed project, Sonoma County will consider issuance of a Use Permit for a Conservation Plan in accordance with the Riparian Corridor Ordinance and serve as the lead agency for CEQA on the components of the project that occur on the fee property. The table below summarizes the proposed project actions and the permitting jurisdiction.

Table B. Project flow enhancement and restoration actions and property ownership by the Dry Creek Rancheria.

Restoration Component Number	Flow Enhancement / Restoration Action	Property Ownership	Environmental Compliance Document
1	Implement bioengineering treatments to stabilize the west bank of the Russian River and reduce sediment	Fee	CEQA
2	Remove arundo and plant native vegetation	Fee	CEQA
3	Excavate sediment transport channel, excavate inset floodplain, and realign	Fee	CEQA

	channel in existing corridor		
4	Plant native riparian buffer	Fee	CEQA
5	Construct stormwater detention pond	Fee	CEQA
6	Construct biofiltration swale	Fee	CEQA
7	Replace SR 128 culvert with embedded bridge	Fee	CEQA
8	Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures	Fee	CEQA
9	Replace Rancheria Rd culvert with open-bottom concrete arch culvert	Fee	CEQA
10	Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures	Fee	CEQA
11	Implement bioengineering treatments to stabilize banks, excavate inset floodplains, install fish passable grade control structures	Trust	NEPA
12	Channel Erosion Protection	Trust	NEPA
13	Expand existing stormwater detention pond	Trust	NEPA
14	Reuse treated waste water	Trust	NEPA
15	Channel Erosion Protection	Trust	NEPA
16	Install million gallon water storage tank	Trust	NEPA

The project will improve creek and riparian conditions for the Russian River and Rancheria Creek by enhancing flows, improving habitat, reducing sediment, and improving water quality. The impacts from the project are temporary and the benefits of the project will exceed the temporary impacts related to the construction of channel and riparian improvements.

ISSUES RAISED BY THE PUBLIC OR AGENCIES

The Dry Creek Rancheria sent a project summary to the following list of agencies and stakeholders.

Sonoma County Board of Supervisors
United States Army Corps of Engineers (USACOE) Warm Springs Fish Hatchery

United States Fish and Wildlife Service (USFWS)

Comments on the project have only been positive and has facilitated discussions of collaboration on future channel restoration projects on the Russian River and salmonid genetic enhancement projects in the Russian River Watershed. There have been no issues raised by agencies or stakeholders to date. The USFWS is the NEPA lead for the existing channel restoration and landslide stabilization project on the Dry Creek Rancheria and is excited to continue restoration efforts on Dry Creek Rancheria.

Letters of support for the project have been submitted to the California Wildlife Conservation Board by:
North Coast Regional Water Quality Control Board
United States Fish and Wildlife Service, Habitat Restoration Office
Sonoma Resource Conservation District
Sonoma County Agricultural Preservation and Open Space District
Russian River Watershed Associates
Sonoma Land Trust
Sonoma County Water Agency
County of Sonoma Supervisor James Gore, 4th District
Permit Sonoma

OTHER RELATED PROJECTS

The Dry Creek Rancheria is currently completing a landslide stabilization and channel restoration project on the Rancheria Creek within the boundary of the Dry Creek Rancheria. NEPA permitting for the project was completed by the USFWS. The remaining components of the project include culvert replacement and re-vegetation maintenance. The proposed project would be a continuation of the existing channel restoration effort.

RESPONSIBLE AND TRUSTEE AGENCIES

The U. S. Army Corps of Engineers (ACOE) will require a Nationwide Permit/or Individual Permit under Section 404 of the Clean Water Act for impacts to the Russian River and Rancheria Creek.

The North Coast Regional Water Quality Control Board (NCRWQCB) will require either a Section 401 Water Quality Certification or Waiver of Waste Discharge Requirements, Waiver of Waste Discharge Requirements with Additional conditions or Waste Discharge Requirements for impacts to the Russian River and Rancheria Creek.

The California Department of Fish and Wildlife (CDFW) will require a Lake and Streambed Alteration Agreement under Section 1601 of the California Fish and Wildlife Code and a Consistency Determination with the California Environmental Quality Act (CEQA) for impacts to the Russian River and Rancheria Creek.

The ACOE will consult with the U. S. Fish and Wildlife Service (USFWS). USFWS will draft a Biological Opinion and an Incidental Take Permit for listed species to satisfy the Federal Endangered Species Act.

The ACOE will consult with NOAA Fisheries (NMFS). NMFS will draft a Biological Opinion and an Incidental Take Permit for listed fish species to satisfy their responsibility as a Trustee Agency

under the Federal Endangered Species Act.

If the project disturbs more than one acre, then:
The State Water Resources Control Board (SWRCB) requires filing a Notice of Intent (NOI) with their agency to be covered under the National Pollutant Discharge Elimination system (NPDES) General Construction Stormwater Permit and preparation of a Storm Water Pollution Prevention Plan (SWPPP).

Grading and building permits – Permit Sonoma requires that a grading permit be obtained. The Tribe and Sonoma County Department of Transportation and Public Works (DTPW) will coordinate to submit a grading plan and obtain the permit prior to construction of the project.

Permit Sonoma will require a 3836R Streambed Roiling Permit to perform construction work on riparian property when water is present in Rancheria Creek and the Russian River.

The Sonoma County Water Agency (SCWA) will require a Revocable License for improvements within the channel of the Russian River and Rancheria Creek.

A Caltrans Encroachment Permit will be required for the replacement of the culvert under SR 128.

INITIAL STUDY CHECKLIST

This checklist is taken from Appendix G of the State CEQA 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 on the checklist was answered by evaluating the project as proposed, that is, without considering the effect of any added mitigation measures. The checklist includes a discussion of the impacts and mitigation measures that have been identified. Sources used in this Initial Study are numbered and listed on page 53. Following the discussion of each checklist item one or more sources used are noted in parentheses.

The Project Applicant has agreed to accept all mitigation measures listed in this checklist as

conditions of approval of the proposed project and to obtain all necessary permits.

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 by the checklist on the following pages.

Table C: CEQA topics identified as having "Potentially Significant Impact" or "Less than Significant with Mitigation"

CEQA Topic	Yes	No
Aesthetics		No
Agricultural & Forest Resources		No
Air Quality	Yes	
Biological Resources	Yes	
Cultural Resources	Yes	
Geology and Soils	Yes	
Greenhouse Gas Emission		No
Hazards and Hazardous Materials	Yes	
Hydrology and Water Quality	Yes	
Land Use and Planning		No
Mineral Resources		No
Noise	Yes	
Population and Housing		No
Public Services		No
Recreation		No
Transportation and Traffic	Yes	
Utility and Service Systems		No
Mandatory Findings of Significance	Yes	

Incorporated Source Documents

In preparation of the Initial Study checklist, the following documents were prepared or referenced, and are hereby incorporated as part of the Initial Study. All documents are available in the project file or for reference at the Permit and Resource Management Department.

Source Document	Yes	No
Project Application and Description	Yes	
Initial Data Sheet	Yes	
County Planning Department's Source and Criteria Manual	Yes	
Sonoma County General Plan and Associated EIR	Yes	
Specific Plan or Area Plan		No
Sonoma County Zoning Code	Yes	
Sonoma County Rare Plant Site Identifications Study		No
Project Referrals from Responsible Agencies	Yes	
State and Local Environmental Quality Acts (CEQA)	Yes	
Full Record of previous hearings on project in File		No
Correspondence received on project	Yes	
Other technical reports (see Other Technical Reports in the Sources section at the end of this initial study	Yes	

1. AESTHETICS:

Would the project:

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

Significance Level:

No Impact

Comment:

The project would restore open space to a more natural condition, and would enhance the scenic value of the landscape.

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

Significance Level:

No Impact

Comment:

The parcel is not located on a site visible from a state scenic highway. The project does not include removal of historic trees or redwoods and would not involve removal of unique rock outcroppings and therefore is not expected to result in any significant impacts to scenic resources. The project site is not included in the Historic District (HD) overlay zone.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Significance Level:

No Impact

Comment:

.

The project would restore the riparian corridor in open space to a more natural condition, and would enhance the scenic value of the landscape.

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

Significance Level:

No Impact

Comment:

Additional light sources are not included in the proposed project.

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?

Significance Level:

No Impact

Comment:

Existing vineyards near the project site will not be affected by the project. Some project elements may enhance vineyard operation through better management of stormwater.

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

Significance Level:

No Impact

Comment:

The project site is in Cloverdale/Northeast County zoning district 2 which allows restoration activities, and is included in a Williamson Act Type I contract.

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)?

Significance Level:

No Impact

Comment:

The proposed project in not located in a timber production district. No forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) are located on or in the vicinity of the project area.

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

Significance Level:

No Impact

Comment:

The proposed project in not located in a timber production district. No forestland (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) are located on or in the vicinity of the project area.

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

Significance Level:

No Impact

Comment:

The project does not involve other changes in the environment that could result in conversion of farmland to non-agricultural use or forest land to non-forest use.

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?

Significance Level:

No Impact

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 the District is in attainment for all state and federal criteria pollutants. (1,5)

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

State and Federal standards have been established for the “criteria pollutants”: ozone,

carbon monoxide, nitrogen dioxide, sulfur dioxide and particulates (PM10 and PM2.5).

No existing or projected air quality violations have been identified in the area. Because it will not cause significant long-term emissions of criteria pollutants, the project will not violate any air quality standard. The project will require temporary use of construction equipment, but long term state of the project will not. Therefore the effect on air quality will be limited to the project construction period and would be less than significant with the following mitigation measures incorporated into the project

Mitigation:

Mitigation Measure AIR-1

The use of diesel equipment will be minimized by turning machinery off when not in us, and equipment will be properly maintained. All portable equipment with independent generation capacity on site will be registered with the California Air Resources Board.

Mitigation Monitoring:

Mitigation Monitoring AIR-1

PRMD staff shall ensure that the measures are listed on all site alteration or grading plans, prior to issuance of grading permits.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

The project will not have a cumulative effect on ozone because it will not generate traffic which would result in new emissions of ozone precursors (hydrocarbons and NOx).

PM10 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 PM10 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 PM10, because all surfaces will be paved or landscaped, and dust generation will be insignificant.

In either case, construction dust control is recommended. However, there could be a significant short-term emission of dust (which would include PM10) during construction. These emissions could be significant at the project level, and would also contribute to a cumulative impact. (5,2)

Mitigation:

The impact could be reduced to less than significant by including dust control measures as described in the following mitigation measure:

Mitigation Measure AIR-2

The following dust control measures will be included in the project:

i. Water or alternative dust control method shall be sprayed to control dust on construction areas, soil stockpiles, and staging areas during construction as directed by the County.

ii. Trucks hauling soil, sand and other loose materials over public roads will cover the loads, or will keep the loads at least two feet below the level of the sides of the container, or will wet the load sufficiently to prevent dust emissions.

iii. Paved roads will be swept as needed to remove soil that has been carried onto them from the project site.

Mitigation Monitoring:

Mitigation Monitoring AIR-2

PRMD staff shall ensure that the measures are listed on all site alteration, grading, or improvement plans, prior to issuance of grading permits.

d) Expose sensitive receptors to substantial pollutant concentrations?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

There will be no long term increase in emissions, but during construction there could be significant dust emissions that would affect nearby residents. Dust emissions can be reduced to less than significant by the mitigation measure described in item 3c above. (5,2)

Construction equipment will generate diesel emissions during the construction period, diesel emissions can reduced to less than significant by the mitigation measures described in the item 3.c above.

Mitigation:

Mitigation Measure AIR-3

The use of diesel equipment will be minimized by turning machinery off when not in use, and equipment will be properly maintained. All portable equipment with independent generation capacity on site will be registered with the California Air Resources Board.

Mitigation Monitoring:

Mitigation Monitoring AIR-3

PRMD staff shall ensure that the measures are listed on all site alteration or grading plans, prior to issuance of grading permits.

e) Create objectionable odors affecting a substantial number of people?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Construction equipment may generate odors during project construction. The impact would be less than significant and it would be a short-term impact that ceases upon completion of the project. (5,2)

Mitigation:

Mitigation Measure AIR-4

The use of diesel equipment will be minimized by turning machinery off when not in use, and equipment will be properly maintained. All portable equipment with independent generation capacity on site will be registered with the California Air Resources Board.

Mitigation Monitoring:

Mitigation Monitoring AIR-4

PRMD staff shall ensure that the measures are listed on all site alteration or grading plans, prior to issuance of grading permits

4. BIOLOGICAL RESOURCES:

Special-Status Species

Special status species are afforded special recognition and protection under state and federal regulations. Special Status species are defined as those plants and animals that are listed by federal, state, or local resource conservation agencies and organizations, such as U.S. Fish and Wildlife Service (USFWS), NOAA's National Marine Fisheries Service (NMFS), California Department of Fish and Wildlife (CDFW), or the California Native Plant Society (CNPS). At the Federal level, species are officially listed as Threatened (FT) or Federally Endangered (FE), or are considered candidates for listing by the USFWS or NMFS. At the State level, species are officially listed as Rare (CR), Threatened (CT), Endangered (CE), or Species of Special Concern (CSC) by the CDFW. Also included are species recognized by CNPS as rare, endangered or threatened in California and elsewhere (1B); rare, threatened or endangered in California but more common elsewhere (2); plant species for which additional information is required to make a determination (3); or plants of limited distribution that are considered vulnerable and potential candidates for special status (4). (CNPS 2016).

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?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Listed species of special concern within the proposed project area include the following: federally endangered (California freshwater shrimp), California species of special concern (Russian River tule perch, Navarro roach), federally threatened (coho salmon central California coast ESU, steelhead central California coast ESU, chinook salmon California coast ESU), federally threatened and California species of special concern (California red-legged frog), California species of special concern (Foothill yellow-legged frog, Northwestern pond turtle, burrowing owl, Sonoma tree vole). The project would be scheduled to avoid impacts to these species. Vegetation removal would not occur between February 15 and September 1 to avoid impacts to migratory birds. Long term implementation of the project will result in benefits to listed species of concern.

The list of species of special concern was compiled through multiple environmental assessments completed on the Rancheria specific to the watershed and through the NEPA procedures followed for the Tribe's current creek restoration project - a landslide stabilization and channel restoration project on the Rancheria Creek within the boundary of the Dry Creek Rancheria. A list of the technical reports for the project is provided in the Sources section under Other Technical Reports following the Initial Study.

Impacts to any listed species would be reduced to less than significant with the following mitigation measures incorporated into the project.

Mitigation:

Mitigation Measure BIO-1:

In addition to conservation measures and conditions for required permits, the project includes limitations on construction periods to avoid impacts to sensitive habitats. Vegetation removal shall not occur between February 15 and September 1 to avoid impacts to migratory birds. No heavy equipment shall be allowed in the Russian River until June 15. All large woody debris shall be redwood with rootball intact and rootballs shall be sterilized to remove any New Zealand Mud Snail following the guidance developed by NOAA.

In addition, the Tribe would monitor Rancheria Creek, including the pools located on Dry Creek Rancheria (tribal trust land), to prevent poaching of all three federally-listed species of salmoids as a condition of approval. Documentation of environmental permits under Section 404 permit from the ACOE, a Section 401 water quality certification from the NCRWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW must be provided prior to Permit Sonoma issuance of the Use Permit.

Mitigation Monitoring:

Mitigation Monitoring BIO-1:

Mitigation monitoring would be required by the environmental regulatory agencies as part of the environmental permitting process.

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?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Rancheria Creek is a designated riparian corridor in the Sonoma County General Plan. The project is specifically designed to restore and improve ecological function in Rancheria Creek and downstream into the Russian River. Removal of vegetation must comply with General Plan policies that govern riparian corridors for a distance of 100 ft. from the top of the highest bank.

The purpose of the project is to increase the number of trees to shade Rancheria Creek to cool stream temperatures and increase habitat quality. A tree removal and planting plan will be provided when the project plan set is completed. Trees that remain will be isolated from construction activities with construction fencing. The removal of non-native trees will be limited to trees adjacent to culverts to be replaced to improve fish passage and to stabilize failing banks to reduce the supply of sediment to the sediment impaired Russian River. Any native trees removed will be replaced with trees of the same species. There will be a net increase in the number of trees that will be planted as part of this project.

The mitigation measures below are designed to ensure project consistency with Sonoma County General Plan policies for designated riparian corridors. Since the General Plan defines riparian corridors as areas along streams with native vegetation, any non-native acacia trees will be excluded from protective or compensatory mitigation measures. (7)

Mitigation:

Mitigation Measure BIO-2

Only the minimum amount of vegetation will be pruned or removed that is necessary to construct the project. Where possible, vegetation will be tied back in lieu of cutting. Native vegetation that must be removed will be cut at or above grade to facilitate re-growth. Any pruning that is done, including for utility line clearance, will conform to the American National Standard for Tree Care Operation Tree, Shrub, and Other Woody Plant Maintenance Standard Practices, Pruning (ANSI A300 Part 1)-2008 Pruning), and the companion publication Best Management Practices: Tree pruning (ISA 2008). Roots will only be unearthed when necessary. All SOD host species plants and plant parts that are pruned or cut at the project site as part of this project must be disposed of within the limits of Sonoma County. Foliage that is chipped on site shall not be placed where it can enter Rancheria Creek.

If SOD host species are to be removed, then include: Trees to be removed in the project area are included on the list of host species for the plant pathogen Phytophthora ramorum more commonly known as Sudden Oak Death. Sudden Oak Death (SOD) is a plant disease that is becoming a serious threat to many native tree and shrub species within California and southern Oregon. Section 3700 of the California Code of Regulations has established a quarantine that restricts the movement of potential hosts and host material of SOD. Sonoma County is considered to be an infected county and known infected trees occur within one mile of the project site, increasing the chance that trees within the project limits may be infected. The spread of this pathogen as a result of this project could result in significant impacts to the resources listed under this question. With the implementation of the following mitigation measures, the potential impact of spreading SOD would be reduced to less than significant. (2, 7)

Mitigation Monitoring:

Mitigation monitoring described in item 4.a above would apply.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

The project may generate surplus soils for disposal off-site, and improper disposal of this material could affect off-site wetlands or other sensitive habitats. The impact can be reduced to less than significant by controlling the disposal of surplus soils, as required in the following mitigation measure. (1,2)

Mitigation:

Mitigation Measure BIO-2

All surplus soils that cannot be used on the project site will be disposed of at an acceptable disposal site. If any areas outside the project site are used for disposal or stockpiling of soil or other materials, the contractor will be required to demonstrate that the site has all the required permits, including, if applicable, a grading permit. The contractor will notify the California Department of Fish and Wildlife of the intent to use the site, and the Permit Sonoma to determine if a grading permit is required. The contractor will be required to provide evidence to the County that the site does not affect wetlands under the jurisdiction of the Army Corps of Engineers, or that the site has the appropriate permit from the Army Corps of Engineers.

Surplus concrete rubble or pavement will either be disposed of at an acceptable and legally permitted disposal site or taken to a permitted concrete and/or asphalt recycling facility.

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?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Construction elements of the project have the potential to temporarily affect movement of the fish or wildlife species, however, project completion would provide substantial improvements to wildlife migration. The project is designed to include construction during the dry season to avoid disturbance to aquatic habitat.

Mitigation:

Mitigation Measure described in item 4.a above would apply.

Mitigation Monitoring:

Mitigation Monitoring described in item 4.a above would apply.

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

Significance Level:

No Impact

Comment:

The proposed project does not conflict with any local policies or ordinances protecting biological resources.

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?

Significance Level:

No Impact

Comment:

There are no adopted Habitat Conservation Plans or Natural Community Conservation Plans applicable to the project site. (1)

5. CULTURAL RESOURCES:

On August 30, 2016, Assembly Bill 52 Project Notifications were sent to the Lytton Rancheria of California, Middletown Rancheria Band of Pomo Indians, Mishewal Wappo Tribe of Alexander Valley, The Federated Indians of Graton Rancheria, Cloverdale Rancheria Band of Pomo Indians and Kashia Pomos Stewarts Point Rancheria. These Native American tribes were invited to consult on the project pursuant to Public Resources Code sections 21080.3.1 and 21080.3.2. None of the tribes had any comments or requested consultation.

Would the project:

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

Significance Level:

No Impact

Comment:

The project would not cause an adverse change in a historical resource.

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

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

There are no known archaeological resources on the site, but the project could uncover such materials during construction. The following measure will reduce the impact to less than significant.

Mitigation:

Mitigation Measure CUL-1

If archaeological resources are found, all earthwork in the vicinity of the find shall cease, and Permit Sonoma staff and the Tribe shall be notified so that the find can be evaluated by a qualified paleontologist. When contacted, a member of Permit Sonoma Project Review staff and the Tribe plus the project archaeologist shall visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. No further excavations in the vicinity of the find shall commence until a mitigation plan is approved and completed subject to the review and approval of the archaeologist, Project Review staff and the Tribe. Any appropriate Federal agencies shall be contacted.

Mitigation Monitoring:

Mitigation Monitoring CUL-1

PRMD staff shall verify that all permits issued for this project include the above note on the plans.

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

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

The project would not directly or indirectly destroy a unique paleontological resource or unique geologic feature. However, the project could potentially uncover previously undiscovered paleontological resources during project construction. The following mitigation measure will reduce the impact to less than significant.

Mitigation:

Mitigation Measure CUL-2

If paleontological resources are found, all earthwork in the vicinity of the find shall cease, and Permit Sonoma staff shall be notified so that the find can be evaluated by a qualified paleontologist. When contacted, a member of Permit Sonoma Project Review staff and the paleontologist shall visit the site to determine the extent of the resources and to develop proper mitigation measures required for the discovery. No further excavations in the vicinity of the find shall commence until a mitigation plan is approved and completed subject to the review and approval of the paleontologist and Project Review staff. Local tribes and the appropriate Federal agencies shall be contacted.

Mitigation Monitoring:

Mitigation Monitoring CUL-2

Permit Sonoma staff shall verify that all permits issued for this project include the above

note on the plans.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Significance Level:

Less than Significant with Mitigation Incorporated

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. 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 described in item 5(b) above would apply. (1, 6)

Mitigation:

Mitigation measure described in item 5.b above would apply. (1, 6)

Mitigation Monitoring:

Mitigation monitoring described in item 5.b above would apply.

6. GEOLOGY AND SOILS:

Would the project:

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

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.

Significance Level:

No Impact

Comment:

The project site is not within a fault hazard zone as defined by the Alquist-Priolo fault maps. The project does not involve structures which will be occupied by people. (11)

ii. Strong seismic ground shaking?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

All of Sonoma County is subject to seismic shaking that would result from earthquakes along the San Andreas, Healdsburg-Rodgers Creek, 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. However, 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 damaging earthquake. The project does not include structures that require building permits nor would it bring more people to the area. The project would therefore not expose people to substantial risk of injury from seismic shaking.

Mitigation:

Mitigation GEO-1

Earthwork, grading, trenching, backfilling and compaction operations shall be conducted in accordance with the erosion control provisions of the Drainage and Storm Water Management Ordinance (Chapter 11, Sonoma County Code and Building Ordinance (Chapter 7, Sonoma County Code).

Construction activities shall meet the California Building Code regulations for seismic safety. All work shall be subject to inspection by Permit Sonoma and must conform to all applicable code requirements.

Mitigation Monitoring

Mitigation Monitoring GEO-1

The grading permit for ground disturbing activities shall not be approved for issuance by Project Review staff until the above notes are printed on applicable grading and improvement plans. The applicant shall be responsible for notifying construction contractors about code requirement.

Mitigation GEO-2:

The design of earthwork, cuts and fills, drainage, pavements, utilities, foundations and structural components shall conform with the specifications and criteria contained in the project geotechnical report. The geotechnical engineer shall submit an approval letter for the engineered grading plans prior to issuance of the grading permit. Prior to final of the grading permit the geotechnical engineer shall also inspect the construction work and shall certify to PRMD, prior to the acceptance of the improvements that the improvements have been constructed in accordance with the geotechnical specifications.

Mitigation Monitoring GEO-2

Permit Sonoma Plan Check staff will ensure plans are in compliance with geotechnical requirements. Permit Sonoma inspectors will ensure construction is in compliance with geotechnical requirements.

iii. Seismic-related ground failure, including liquefaction?

Comment:

Significance Level:

No Impact

The project is not located on the Report 120 map detailing areas at risk to ground failure or liquefaction.

iv. Landslides?

Significance Level:

Less than Significant Impact

Comment:

The project is designed to increase stability in Rancheria Creek, so although parts of the project are located in areas prone to landslides, the project is specifically designed to alleviate landslides, therefore the impact is less than significant.

The existing restoration project was completed to stabilize a historical landslide that was a chronic source of sediment to Rancheria Creek and the Russian River. Geotechnical analysis was completed for the existing project. However, additional geotechnical analysis conducted in the design process and construction details incorporated in the final design plan set for this project.

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

Comment:

The project includes grading, cuts and fills which require the issuance of a grading permit. Any cut material not utilized as part of the creek restoration project will be utilized on the Rancheria away from the waterways. The project also includes specific elements designed to reduce erosion. Unregulated grading, both during and post construction, has the potential to increase the volume of runoff from a site which could have adverse downstream flooding and further erosional impacts, and increase soil erosion on and off site which could adversely impact downstream water quality.

Release of treated wastewater is not expected to increase soil erosion on and off site. During critically dry periods, treated wastewater will be released to maintain pool habitat in Rancheria Creek in an attempt to maintain connection to the Russian River through the vineyard reach, while avoiding mobilization of sediment into the Russian River. The preliminary design for connection channels between the treated waste water storage tank and Rancheria Creek have been stabilized with appropriately sized rock and vegetation to prevent any soil erosion. The treated wastewater to be released to Rancheria Creek after treatment is obtained from groundwater wells located on the Dry Creek Rancheria.

In regard to potential water quantity impacts, County grading ordinance design and adopted BMPs require that storm water facilities be engineered to treat storm events and associated runoff to the 85 percentile storm event. Adopted flow control BMPs must be designed to treat storm events and associated runoff to the channel forming discharge storm event, which is commonly referred to at the two year storm event. Required inspection by County inspectors insures that all work is constructed according to the approved plans. These ordinance requirements and adopted best management practices are specifically designed to maintain potential project water quantity impacts at a less than significant level during and post construction.

County grading ordinance design requirements, adopted County grading standards and

BMPs (such as silt fencing, straw wattles, construction entrances to control soil discharges, primary and secondary containment areas for petroleum products, paints, lime and other materials of concern, etc.), mandated limitations on work in wet weather, and standard grading inspection requirements, are specifically designed to reduce or eliminate potential water quality impacts to a less than significant level during project construction.

For post construction water quality impacts, adopted grading permit standards and best management practices require creation of areas that allow storm water to be detained, infiltrated, or retained for later use. Other adopted water quality best management practices include storm water treatment devices based on filtering, settling or removing pollutants. These construction standards are specifically designed to maintain potential water quality grading impacts at a less than significant level post construction.

The County adopted grading ordinances and standards and related conditions of approval which enforce them are specific, and also require compliance with all standards and regulations adopted by the State and Regional Water Quality Control Board, such as the Standard Urban Stormwater Mitigation Plan (SUSMP) requirements and any other adopted BMPs. Therefore, no significant adverse soil erosion or related soil erosion water quality impacts are expected given the mandated conditions and standards that need to be met. See further discussion of related issues (such as maintenance of required post construction water quality facilities) under section 8 Hydrology and Water Quality.

There is a possibility that erosion control measures could fail. This impact could be reduced to less than significant by the mitigation measures below.

Significance Level:

Less than Significant with Mitigation Incorporated

Mitigation:

Mitigation Measure GEO-3

The project site will 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.

Mitigation Monitoring:

Mitigation Monitoring GEO-3

The project site shall be inspected by County staff after storm events that produce 1 inch of rain or greater within 24 hour period in the Santa Rosa area. During every inspection, areas of significant erosion or erosion control device failure shall be noted and appropriate remedial actions will be taken as soon as practical. If erosion control measures appear to be effective for three consecutive site inspections following 1-inch storm events, then site inspections will only be required following storm events that result in 2 inches of rain, or greater, within a 24-hour period in the Santa Rosa area.

At the end of the rainy season, County staff will re-inspect the site and evaluate the effectiveness of the erosion control measures that were used. If there were problem areas at the site, recommendations will be made to improve methods used in subsequent projects.

Mitigation:

Mitigation Measure GEO-4

The applicant shall submit an Erosion and Sediment Control Plan prepared by a registered professional engineer as an integral part of the grading plan. The Erosion and Sediment Control Plan shall be subject to review and approval of the Permit Sonoma prior to the issuance of a grading permit. The Plan shall include temporary erosion control measures to be used during construction of cut and fill slopes, excavation for foundations, and other grading operations at the site to prevent discharge of sediment and contaminants into the drainage system. The Erosion and Sediment Control Plan shall include the following measures as applicable:

i. Throughout the construction process, ground disturbance shall be minimized and existing vegetation shall be retained to the extent possible to reduce soil erosion. All construction and grading activities, including short-term needs (equipment staging areas, storage areas and field office locations) shall minimize the amount of land area disturbed. Whenever possible, existing disturbed areas shall be used for such purposes.

ii. All drainage ways, wetland areas and creek channels shall be protected from silt and sediment in storm runoff through the use of silt fences, diversion berms and check dams. Fill slopes shall be compacted to stabilize. All exposed surface areas shall be mulched and reseeded and all cut and fill slopes shall be protected with hay mulch and /or erosion control blankets as appropriate.

iii. All erosion control measures shall be installed according to the approved plans prior to the onset of the rainy season but no later than October 15th. Erosion control measures shall remain in place until the end of the rainy season, but may not be removed before April 15th.

Mitigation Monitoring:

Mitigation Monitoring GEO-4

Grading permits for ground disturbing activities shall not be approved for issuance by Project Review staff until the above notes are printed on applicable building, grading and improvement plans. The applicant shall be responsible for notifying construction contractors about erosion control requirement.

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?

Significance Level:

Less than Significant Impact

Comment:

The project site is subject to seismic shaking as described in item 6.a.ii above. No further mitigation is required.

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?

Significance Level:

No Impact

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. For the proposed project, soils at the site have not been tested for their expansive characteristics. No substantial risks to life or property would be created from soil expansion at the proposed project, even if it were to be affected by expansive soils.

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?

Significance Level:

No Impact

Comment:

The project site is not in an area served by public sewer, nor would it require sewer service.

7. GREENHOUSE GAS EMISSIONS:

Would the project:

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

Significance Level:

Less than Significant Impact

Comment:

Construction of the project would result in temporary generation of greenhouse gases through the use of construction equipment. However, long-term operation of the project would include improvements to riparian vegetation and would constitute an increase in carbon-sequestration. Depending on the length of operation, this could result in a carbon-neutral project - although it is impossible to calculate exact equivalences between construction and operation. Accordingly, this impact is considered less than significant.

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

Significance Level:

No Impact

Comment:

This project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases.

8. 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?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Construction will require use of fuels and other hazardous materials. Improper storage or handling of these materials could result in spills. Much of the work associated with the project will occur in sensitive aquatic areas. The potential spill of hazardous materials will be reduced to less than significant level through the incorporation of specific mitigation.

Mitigation:

Mitigation Measure HAZ-1

The construction contract will require that any storage of flammable liquids be in compliance with the Sonoma County Fire Code and section 7-1.01G of the Caltrans Standard Specification (or the functional equivalent) for the protection of surface waters. In the event of a spill of hazardous materials the Contractor will immediately call the emergency number 9-1-1 to report the spill, and will take appropriate actions to contain the spill to prevent further migration of the hazardous materials to storm water drains or surface waters.

Mitigation:

Mitigation Measure HAZ-2

During construction, hazardous materials shall be stored away from drainage or environmentally sensitive areas, on non-porous surfaces. Storage of flammable liquids shall be in accordance with Sonoma County Fire Code.

A concrete washout area, such as a temporary pit, shall be designated to clean concrete trucks and tools. At no time shall concrete waste be allowed to enter waterways, including creeks and storm drains.

The project would include use of approved pesticides to enhance the effectiveness of invasive species removal. All pesticides shall be properly used and stored.

Vehicle storage, fueling and maintenance areas shall be designated and maintained to prevent the discharge of pollutants to the environment. Spill cleanup materials shall be kept on site at all times during construction, and spills shall be cleaned up immediately. In the event of a spill of hazardous materials, the applicant shall call 911 to report the spill and take appropriate action to contain and clean up the spill.

Portable toilets shall be located and maintained to prevent the discharge of pollutants to the environment.

Mitigation Monitoring:

Mitigation Monitoring HAZ-2

Grading permits shall not be approved for issuance by Project Review staff until the above notes are printed on the grading and improvement plans. The applicant shall be responsible for notifying construction contractors about the requirement for responsible storage and spill cleanup of hazardous materials.

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

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

During construction there could be spills of hazardous materials. See Item 8.a. above.

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

Significance Level:

No Impact

Comment:

There are no existing or proposed schools within 0.25 miles of the project site (1)

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?

Significance Level:

No Impact

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. (8)

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

Significance Level:

No Impact

Comment:

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

f) For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

Significance Level:

No Impact

Comment:

There are no known private airstrips within the vicinity of the proposed project.

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

Significance Level:

No Impact

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. In any case, the project would not change existing circulation patterns significantly, and would have no effect outside the area.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas of where residences are intermixed with wildlands?

Comment:

The project would not expose people to risk from wildland fires. It will not construct buildings that would be occupied by people or structures that would be affected by wildland fires (1, 3)

9. HYDROLOGY AND WATER QUALITY:

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

The majority of the project will involve restoration of wetlands and riparian areas along Rancheria Creek, including minor drainages into Rancheria Creek. Additionally, Rancheria Creek is a tributary to the Russian River, which is a 303d listed impaired waterway (sediment and temperature). The project would have a beneficial impact to the Russian River through reduced sediment loads and reduced temperatures. However, during construction, the project will be subject to requirements of the State Water Resources Control Board to reduce the possibility of spills or other deleterious impacts to Rancheria Creek and the Russian River.

Since projects with an acre or more of ground disturbance overall, including the project site and any off site staging area and disposal area, construction of the project is subject to the requirements of the State Water Resources Control Board General Permit for Construction Projects.

The project would include use of approved pesticides to enhance the effectiveness of invasive species removal. Herbicides with glyphosate or imazapyr active ingredients will be used to spray cut stalks. Rodeo® and Habitat® products are both approved by the EPA for application in wetland and riparian areas. The stalks will be monitored two weeks after cutting to check for new sprouts. Herbicide will be reapplied on new sprouts. Quarterly monitoring of the floodplain and stalks treated with herbicide will be conducted for three years. All pesticides will be properly used and stored consistent with Mitigation Measure HAZ-2, above.

Mitigation:

Mitigation HYD-1

This project is subject to the National Pollution Discharge Elimination System (NPDES) requirements, and coverage under the State General Construction Permit, as adopted by the State Water Resources Control Board (SWRCB). A copy of the Notice of Intent (NOI) filed with the SWRCB, as well as the Waste Discharge Identification Number (WDID) issued by that agency must be submitted to the Drainage Review Section of the Permit and Resource Management Department.

Mitigation Monitoring:

Mitigation Monitoring HYD-1

The Permit and Resource Management Department shall not issue the Building Permit until the NOI and the WDID have been received.

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

Significance Level:

Less than Significant Impact

Comment:

Implementation of the project does not include use of groundwater, beyond the temporary irrigation of the riparian area in the vineyard portion of the project. This irrigation is temporary and within the normal use of the existing vineyard irrigation, therefore this impact is less than significant.

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?

Significance Level:

Less than Significant Impact

Comment:

The project would not alter the existing drainage pattern. Improvements to the Rancheria Creek channel would improve the management of base flows and reduce peak flows into Rancheria Creek.

The project was reviewed by the Sonoma County PRMD Storm Water and Grading Section and a condition of approval requires that grading and drainage improvement plans be reviewed and approved by Permit Sonoma prior to the issuance of any development permits. Erosion and sediment control measures are required to be included in the plans.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Significance Level:

Less than Significant Impact

Comment:

The project would not alter the existing drainage pattern. Improvements to the Rancheria Creek channel would improve the management of base flows and reduce peak flows into Rancheria Creek.

e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Significance Level:

Less than Significant Impact

Comment:

The project would not alter the existing drainage pattern. Improvements to the Rancheria Creek channel would improve the management of base flows and reduce peak flows into Rancheria Creek.

f) Otherwise substantially degrade water quality?

Significance Level:

Less than Significant Impact

Comment:

The project would better manage runoff water by better managing base flows and reducing peak flows into Rancheria Creek.

g) Place housing within a 100-year hazard area as mapped on a federal Flood hazard Boundary of Flood Insurance Rate Map or other flood hazard delineation map?

Significance Level:

No Impact

Comment:

The project site is not located in a flood hazard area. No housing is proposed as part of this project and therefore none will be placed within the 100-year hazard.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
Significance Level:

No Impact

Comment:

The project site is not located in a flood hazard area. The proposed culvert replacements will improve creek flows as they move towards the Russian River.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

Significance Level:

No Impact

Comment:

The project site is not located in an area subject to flooding as a result of dam failure. The project would not expose people or structures to significant risk of loss, injury or death involving flooding including flooding as a result of the failure of a levee or dam.

j) Inundation by seiche, tsunami, or mudflow?

Significance Level:

No Impact

Comment:

The project is not subject to seiche or tsunami. The project will not increase the possibility of mudflows moving from upstream or higher elevations during major storm events. Improvements to existing culverts and dimensions will improve sediment continuity between Rancheria Creek and the Russian River and maintain passage for salmon and steelhead through the vineyard reach.

10. LAND USE AND PLANNING:

Would the project:

a) Physically divide an established community?

Significance Level:

No Impact

Comment:

The project would not divide a community.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Significance Level:

No Impact

Comment:

The General Plan land use designations are Land Intensive Agriculture (LIA) 20 and Resources and Rural Development (RRD) 20. The zoning of the property is LIA B6 20 Z (Second Dwelling Unit Exclusion), RRD B6 20, RRD B6 20 Z, F1 (Floodway Combining District), F2 (Floodplain Combining District), MR (Mineral Resource), RC (Riparian Corridor Combining Zone) 50/50, RC200/100, SR (Scenic Resource), VOH (Valley Oak Habitat) [Under Review]. The project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Significance Level:

No Impact

Comment:

See item 4.f. above. Habitat conservation plans and natural community conservation plans are site-specific plans to address effects on sensitive species of plants and animals. The project site is not located in an area subject to a habitat conservation plan or natural community conservation plan

11. 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?

Significance Level:

No Impact

Comment:

There is no known mineral resource on the project site.

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?

Significance Level:

No Impact

Comment:

The project site is not a mineral resource recovery site.

12. NOISE:

Would the project:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Significance Level:

Less than Significant with Mitigation Incorporated

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 following mitigation measure will ensure that the completed project will not result in excessive noise generation or expose persons to noise levels in excess of County standards.

Mitigation:

Mitigation NOI-1

Noise shall be controlled in accordance with Table NE-2 (or an adjusted Table NE-2 with respect to ambient noise as described in General Plan 2020, Policy NE-1c,) as measured at the exterior property line of any affected residential or sensitive land use:

Hourly Noise Metric[1], dBA	**Daytime (7 a.m. to 10 p.m.)**	**Nighttime (10 p.m. to 7 a.m.)**
L_{50} (30 minutes in any hour)	50	45
L_{25} (15 minutes in any hour)	55	50
L_{08} (5 minutes in any hour)	60	55
L_{02} (1 minute in any hour)	65	60

[1] The sound level exceeded n% of the time in any hour. For example, the L_{50} is the value exceeded 50% of the time or 30 minutes in any hour; this is the median noise level. The L_{02} is the sound level exceeded 1 minute in any hour.

Mitigation Monitoring:

Mitigation Monitoring NOI-1

Any noise complaints will be investigated by Permit Sonoma staff. If such investigation indicates that the appropriate noise standards have been or may have been exceeded, the permit holders shall be required to install, at their expense, additional professionally designed noise control measures. Failure to install the additional noise control measure(s) will be considered a violation of the use permit conditions. If noise complaints continue, Permit Sonoma shall investigate complaints. If violations are found, Permit Sonoma shall seek voluntary compliance from the permit holder and thereafter may initiate an enforcement action and/or revocation or modification proceedings, as appropriate. (Ongoing)

Mitigation:

Mitigation NOI-2:

Construction activities for this project shall be restricted as follows:

i. All internal combustion engines used during construction of this project will be operated with mufflers that meet the requirements of the State Resources Code, and, where applicable, the Vehicle Code. Equipment shall be properly maintained and turned off when not in use.

ii. Except for actions taken to prevent an emergency, or to deal with an existing emergency, all construction activities shall be restricted to the hours of 7:00 a.m. and 7:00 p.m. on weekdays and 9:00 a.m. and 7:00 p.m. on weekends and holidays. If work outside the times specified above becomes necessary, the applicant shall notify the Permit Sonoma Project Review Division as soon as practical.

iii. There will be no start-up of machines nor equipment prior to 7:00 a.m, Monday through Friday or 9:00 am on weekends and holidays; no delivery of materials or equipment prior to 7:00 a.m nor past 7:00 p.m, Monday through Friday or prior to 9:00 a.m. nor past 7:00 p.m. on weekends and holidays and no servicing of equipment past 7:00 p.m., Monday through Friday, or weekends and holidays. A sign(s) shall be posted on the site regarding the allowable hours of construction, and including the developer=s phone number for public contact.

iv. Pile driving activities shall be limited to 7:30 a.m. to 7:00 p.m. weekdays only.

v. Construction maintenance, storage and staging areas for construction equipment shall avoid proximity to residential areas to the maximum extent practicable. Stationary construction equipment, such as compressors, mixers, etc., shall be placed away from residential areas and/or provided with acoustical shielding. Quiet construction equipment shall be used when possible.

vi. The applicant shall designate a Project Manager with authority to implement the mitigation prior to issuance of a building/grading permit. The Project Manager=s phone number shall be conspicuously posted at the construction site. The Project Manager shall determine the cause of noise complaints (e.g. starting too early, faulty muffler, etc.) and shall take prompt action to correct the problem.

Mitigation Monitoring:

Mitigation Monitoring NOI-2

Permit Sonoma staff shall ensure that the measures are listed on all site alteration, grading, or improvement plans, prior to issuance of grading permits. Any noise complaints will be investigated by Permit Sonoma staff. If violations are found, Permit Sonoma shall seek voluntary compliance from the permit holder and thereafter may initiate an enforcement action and/or revocation or modification proceedings, as appropriate. (Ongoing)

b) Exposure of persona to or generation of excessive ground borne vibration or ground borne noise levels?

Significance Level:

Less than Significant Impact

Comment:

The project includes construction activities that may generate 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. The project does not include blasting activities.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Significance Level:

No Impact

Comment:

See item 12.a above.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Significance Level:

Less than Significant with Mitigation Incorporation

Comment:

There will be potentially significant noise impacts from the construction activities. This impact will cease when construction is finished. Standard heavy equipment associated with similar construction efforts include dump trucks, excavators, jackhammers, chainsaws, water trucks, and cranes. The following mitigation measure will reduce the noise impact from construction activities and hauling to less than significant. (1) See also item 12.a above.

Mitigation:

Mitigation Measure NOI-3

Construction activities for this project shall be restricted as follows:

All internal combustion engines used during construction of this project will be operated with mufflers that meet the requirements of the State Resources Code, and, where applicable, the Vehicle Code.

Except for actions taken to prevent an emergency, or to deal with an existing emergency, all construction activities shall be restricted to the hours of 7:00 am and 7:00 pm on weekdays and 9:00 am and 7:00 pm on weekends and holidays. Only work that does not require motorized vehicles or power equipment shall be allowed on holidays (1). If work outside the times specified above becomes necessary, the resident engineer shall notify the Permit Sonoma Environmental Review Division as soon as practical.

(1) Note - the need for a holiday restriction is to be reviewed for each project.

Mitigation Monitoring:

Mitigation Monitoring NOI-3

Permit Sonoma staff shall ensure that the measures are listed on all site alteration, grading, or improvement plans, prior to issuance of grading permits. Any noise complaints will be investigated by Permit Sonoma staff. If violations are found, PRMD shall seek voluntary compliance from the permit holder and thereafter may initiate an enforcement action and/or revocation or modification proceedings, as appropriate. (Ongoing)

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

Significance Level:

No Impact

Comment:

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

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

Significance Level:

No impact

Comment:

There are no known private airstrips within the project area (1)

13. POPULATION AND HOUSING:

Would the project:

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

Significance Level:

No Impact

Comment:

The project would not include construction of a substantial amount of homes, businesses or infrastructure and therefore would not induce substantial population growth.

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

Significance Level:

No Impact

Comment:

No housing will be displaced by the project.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Significance Level:

No Impact

Comment:

No people will be displaced by the project.

14. 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:

Significance Level:

No Impact

Comment:

Construction of the project would not involve substantial adverse physical impacts associated with provision of government facilities and the impact would be less than significant.

i. Fire protection?

Significance Level:

No Impact

Comment:

Construction of the project would not impact provision of fire protection services.

ii. Police?

Significance Level:

No Impact

Comment:

The Sonoma County Sheriff will continue to serve this area. There will be no increased need for police protection resulting implementation of this project.

iii. Schools, parks, or other public facilities?

Significance Level:

No Impact

Comment:

Construction of the project would not impact schools, parks, or other public facilities.

iv. Parks?

Significance Level:

No Impact

Comment:

Construction of the project would not impact parks.

v. Other public facilities?

Significance Level:

No Impact

Comment:

Construction of the project would not impact other public facilities.

15. 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?

Significance Level:

No Impact

Comment:

The proposed project would not involve activities that would cause or accelerate substantial physical deterioration of parks or recreational facilities.

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?***

Significance Level:

No Impact

Comment:

See item 15.a above.

16. TRANSPORTATION / TRAFFIC:

Would the project:

a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Installation of culverts will require temporary traffic delays. Implementation of the following Mitigation Measure will reduce impacts to less than significant.

Mitigation:

Mitigation Measure T/T-1

If lengthy delays are anticipated, signs shall be placed at all entrances to the project site and on major intersecting roads to notify motorists that traffic will be subject to delay.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Significance Level:

Less than Significant Impact

Comment:

The project includes installation of two culverts (one under SR 128, and one on Rancheria Road) that will require temporary re-routing of traffic. Each re-routing effort will comply with standard Caltrans requirements, will include appropriate signage, and will affect traffic for less than four weeks.

c) Result in change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Significance Level:

No Impact

Comment:

The project would have no effect on air traffic patterns.

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

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

The project includes two temporary changes to traffic flow during the installation of culverts underneath road crossings of Rancheria Creek. These temporary traffic bypasses will be designed to appropriate traffic safety standards and will be in place for four to six weeks each. Implementation of Mitigation will reduce this impact to less than significant.

Mitigation:

Mitigation Measure T/T-2

Traffic safety guidelines compatible with Section 12 of the Caltrans Standard Specifications, “Construction Area Traffic Control Devices” shall be followed during construction. Project plans and specifications shall also require that adequate signing and other precautions for public safety be provided during project construction.

e) Result in inadequate emergency access?

Significance Level:

Less than Significant with Mitigation Incorporated

Comment:

Construction activities may result in traffic delays possibly slowing emergency response vehicles or restricting access to residences or nearby businesses. This is a short term construction related impact that will cease upon project completion. The following mitigation measures will reduce this impact to a level of less than significant.

Mitigation:

Mitigation Measure T/T-3

i. Local emergency services shall be notified prior to construction to inform them that traffic delays may occur, and also of the proposed construction schedule.

ii. The County will require the contractor to provide for passage of emergency vehicles through the project site at all times.

iii. The County will require the contractor to maintain access to all parcels during project construction.

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Significance Level:

Less than Significant Impact

Comment:

The project includes installation of two culverts that will require temporary re-routing of traffic during construction. The temporary nature of this effort would be less than significant to adopted plans, policies, or programs regarding public transit, bicycle or pedestrian facilities. Safety standards during construction will assure performance during construction.

g) Result in inadequate parking capacity?

Significance Level:

No Impact

Comment:

The project will not affect parking capacity.

17. UTILITIES AND SERVICE SYSTEMS:

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Significance Level:

No Impact

Comment:

The project will not impact wastewater treatment.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Significance Level:

No Impact

Comment:

The project will not result in construction of new water or wastewater treatment facilities or the expansion of existing facilities.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Significance Level:

No Impact

Comment:

The project includes elements that will result in slight improvements to drainage from the site.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Significance Level:

Less than Significant Impact

Comment:

The project includes provision of a supplemental water supply for in-stream flows. These in-stream flows would provide a benefit to fish resources in the project area.

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

Significance Level:

No Impact

Comment:

The project would not require wastewater treatment.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Significance Level:

Less than Significant Impact

Comment:

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 will result from the proposed project. (1)

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Significance Level:

No Impact

Comment:

Sonoma County has access to adequate permitted landfill capacity to serve the proposed project.

18. 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?

Significance Level:

No Impact

Comment:

The project is a fishery restoration project, and as such will result in environmental benefit upon completion.

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)?

Significance Level:

Less than Significant Impact

Comment:

The project is a fishery restoration project, and as such will result in environmental benefit upon completion. There will be some short-term environmental impacts during implementation, but long-term effects will be beneficial.

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

Significance Level:

No Impact

Sources

1. Permit Sonoma staff evaluation based on review of the project site and project description.

2. Permit Sonoma staff evaluation of impact based on past experience with construction projects.

3. Sonoma County Important Farmland Map 1996. California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program.

4. Assessor's Parcel Maps

5. BAAQMD CEQA Guidelines; Bay Area Air Quality Management District; April 1999; California Air Resources Board (CARB) http://www.arb.ca.gov/

6. California Natural Diversity Database, California Department of Fish & Game.

7. Sonoma County General Plan 2020 (as amended), Sonoma County Board of Supervisors, September 23, 2008.

8. California Environmental Protection Agency - http://www.calepa.ca.gov/SiteCleanup/corteseList/default.htm; California Regional Water Quality Control Board - http://geotracker.swrcb.ca.gov/; California Dept of Toxic Substances Control http://www.dtsc.ca.gov/database/calsites/cortese_list.cfm, and Integrated Waste Management Board - http://www.ciwmb.ca.gov/SWIS/Search.asp

9. Alquist-Priolo Special Studies Zones; State of California; 1983.

10. Flood Insurance Rate Maps, Federal Emergency Management Agency.

11. Special Report 120, California Division of Mines and Geology; 1980.

12. General Plan Consistency Determination, (65402 Review), Sonoma County Permit & Resource Management Department.

13. Standard Specifications, State of California Department of Transportation, available online: http://www.dot.ca.gov/hq/esc/oe/specs_html

14. American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices, Pruning (ANSI A300 (Part 1)-2008 Pruning), American National Standard Institute (ANSI) and National Arborist Association (NAA), 2008;

15. Best Management Practices: Tree Pruning, International Society of Arboriculture (ISA), 2008.

16. Tree Protection and Replacement Ordinance (Ordinance No. 4014); Sonoma County.

17. Valley Oak Protection Ordinance (Ordinance No. 4991); Sonoma County, December 1996.

18. Heritage or Landmark Tree Ordinance (Ordinance No. 3651); Sonoma County.

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

20. Soil Survey of Sonoma County, California, Sonoma County, U.S. Department of Agriculture; 1972.

21. Evaluation of Groundwater Resources, California Department of Water Resources; 1975.

22. Sonoma County Congestion Management Program, Sonoma County Transportation Authority; December 18, 1995.

23. Sonoma County Aggregate Resources Management Plan and Program EIR, 1994.

24. Sonoma County Bikeways Plan, Sonoma County Permit and Resource Management Department, August 24, 2010.

Other Technical Reports

25. US Department of Agriculture (USDA). 2014. Field Guide for Managing Giant Reed in the Southwest. Southwest Region. TP-R3-16-11.September.

26. California Department of Transportation (Caltrans), 2008. Statewide local development-intergovernmental review program guide, tribal development projects, Office of transportation planning, Sacramento, July.

27. ESA. 2012. Dry Creek Rancheria Stream Restoration Project: Biological Assessment. Prepared for Dry Creek Rancheria Band of Pomo Indians for US Fish & Wildlife Service and National Marine Fisheries Service, November.

28. ESA. 2012. Dry Creek Rancheria Stream Restoration Project: Revegetation Plan. Prepared for Dry Creek Rancheria Band of Pomo Indians.

29. ESA. 2012. Dry Creek Rancheria Stream Restoration Project: Wetland Delineation Report. Prepared for Dry Creek Rancheria Band of Pomo Indians, October.

30. Nation Marine Fisheries Service. 2006. Biological Opinion. Permitting of Fisheries Restoration Projects within the Geographic Boundaries of NMFS' Santa Rosa, California, Field Office. US Department of Commerce, National Oceanic and Atmospheric Administration, June.

31. ESA. 2012. Memorandum: Cultural Resources Survey for the Dry Creek Rancheria Channel I-1 Stream Restoration Project, Dry Creek Rancheria, Sonoma County, California. Prepared for the Dry Creek Rancheria Band of Pomo Indians.

32. US EPA. 2011. Standard Federal NPDES Permit Conditions. Region IX, CWA Standards and Permits Office (WTR-2-3). Reference: 40 CFR Parts 100 to 135, July 1, 2009.

33. US EPA. 2012. Permit No CA 0005241, Authorization to discharge under the National Pollutant Discharge Elimination System. September.

34. US EPA. 2012. Permit No CA 0005241, Fact Sheet, National Pollutant Discharge Elimination System Permit.

35. ESA. 2008. Dry Creek Rancheria: Proshold Property Biological Resources Inventory and Constraints Reports. Prepared for Dry Creek Rancheria Band of Pomo Indians, August.

36. ESA. 2008. Proshold Property Acquisition: Phase I Environmental Site Assessment. Prepared for Dry Creek Rancheria Band of Pomo Indians, August.