

Mitigation Monitoring and Reporting Program for the Santa Rosa Aqueduct and Russian River to Cotati Aqueduct Cathodic Protection Project

The Sonoma County Water Agency (Sonoma Water) is the project proponent and lead agency in accordance with the California Environmental Quality Act (CEQA) for the Santa Rosa Aqueduct and Russian River to Cotati Aqueduct Cathodic Protection Project (Project), which is a water facility improvement project. Sonoma Water prepared an Initial Study and Mitigated Negative Declaration of Environmental Impact (IS/MND) for the Project. Mitigation measures were determined necessary to reduce potentially significant impacts to a less-than-significant level for several environmental factors, including air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation, tribal cultural resources and wildfire.

CEQA and the State CEQA Guidelines (Public Resources Code Section 21081.6 and State CEQA Guidelines Section 15097) require that a mitigation monitoring and reporting program (MMRP) be adopted upon certification of a mitigated negative declaration to ensure that the mitigation measures are implemented. This MMRP has been prepared to ensure compliance with CEQA and that all required mitigation measures are implemented and completed in a satisfactory manner before, during, and after project construction, operation, and maintenance, as applicable. The Project IS/MND was certified and MMRP adopted by Sonoma Water's Board of Directors on December 14, 2021. A record of the MMRP will be maintained at the administrative office of Sonoma Water, 404 Aviation Boulevard, Santa Rosa, CA, 95403.

The MMRP is organized in a table format that includes the following:

- **Mitigation Measure**, the verbatim text of the mitigation measure specified in the Project IS/MND.
- **Action**, the discrete action(s) to be implemented to ensure compliance with the mitigation measure.
- **Implementing Party**, the individual and/or entity responsible for implementing the mitigation measure.
- **Timing**, the time frame in which the mitigation will be implemented.
- **Responsible Party**, the individual or entity that will monitor the measure and ensure that it complies with this MMRP.

- **Verification**, date and signature by the Responsible Party confirming an action was completed (Technical Writing, Construction Inspection, Operations and Maintenance [O&M], or Environmental Resources [ER]).

Mitigation Monitoring and Reporting Program for the Santa Rosa Aqueduct and Russian River to Cotati Aqueduct Cathodic Protection Project

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>Mitigation Measure AIR-1: Dust management, exhaust control, and air quality protection related to construction and maintenance activities.</p> <p>Sonoma Water will require contractors, through project contract specifications, and maintenance staff to implement the following:</p> <p>The Proposed Project would not generate construction emissions that would exceed the NSCAPCD or BAAQMD thresholds. However, due to the non-attainment status of the SFBAAB with respect to ozone, PM10, and PM2.5, the BAAQMD recommends that projects implement the following set of Basic Construction Mitigation Measures, which are modified to reflect conditions related to the Proposed Project and current drought conditions and included below:</p> <ol style="list-style-type: none"> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered at least two times per day on days with no precipitation and breezes at or above 10mph. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be routinely checked by a certified mechanic and determined to be running in proper condition. 	<p>Include mitigation measure items 1-7 in the project contract specifications.</p> <p>Confirm that items 1-7 are implemented by contractor.</p> <p>Implement items 1-7 during maintenance activities.</p>	<p>Technical Writing</p> <p>Construction Inspection</p> <p>O&M</p>	<p>Contract agreement</p> <p>During construction</p> <p>During maintenance</p>	<p>Technical Writing</p> <p>Construction Inspection</p> <p>O&M</p>	

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Mitigation Measure BIO-1: Worker Environmental Awareness Training Sonoma Water will require contractors, through project contract specifications, and internal staff to participate in the following: <ol style="list-style-type: none"> Prior to beginning construction activities, all personnel involved in the activities will participate in an educational training session conducted by a qualified biologist. A qualified biologist (including those specializing in botany, wildlife, and fisheries) is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the project area. Sonoma Water may also utilize appropriately experienced and/or trained environmental staff. Resumes will be submitted to California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service, as appropriate, for approval prior to commencement of biological surveys. This training will include instruction on how to identify bird nests, recognize and identify special-status species (Sebastopol meadowfoam, California tiger salamander) and sensitive habitats, species habitat requirements, regulatory protections, and the appropriate protocol if any special species or nests are found during project implementation. Personnel who miss the first training session must participate in a make-up session before conducting construction activities. 	Include mitigation measure items 1 and 2 in the project contract specifications	Technical Writing	Contractor agreement	Technical Writing	
	Schedule time for training with contractor	Construction Inspection	Prior to construction	Construction Inspection	
	Schedule time for training with maintenance staff	O&M	Prior to maintenance	O&M	
	Items 1 and 2 – conduct training	ER	Prior to construction and maintenance	ER	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
Mitigation Measure BIO-2: Protective measures for Sebastopol meadowfoam at the Cathodic Protection Station RR541+20. 1. A qualified biologist or designated trained monitor shall monitor construction activities at the Cathodic Protection Station RR541+20. The qualified biologist or designated trained monitor shall notify the onsite construction inspector to stop any work that may result in take of Sebastopol meadowfoam and shall be onsite during initial ground disturbing activities. A qualified biologist (including those specializing in botany, wildlife, and fisheries) is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the project area. Sonoma Water may also utilize appropriately experienced and/or trained environmental staff. Resumes will be submitted to California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service, as appropriate, for approval prior to commencement of biological surveys and monitoring. 2. Silt fencing shall be installed according to Figure 3.4-1 ¹ and the CalTrans Temporary Sediment Control BMP SC-1 (Caltrans, 2017) and under supervision of a qualified biologist, or designated trained monitor, to define the construction areas for the Cathodic Protection Station RR541+20 in order to prevent vehicular traffic, equipment staging, and sediment movement within potential habitat for Sebastopol meadowfoam.	Item 1 – schedule time for construction monitoring for with ER	Construction Inspection	Prior to construction	Construction Inspection	
	Item 1 – conduct construction monitoring	ER	During construction	ER	
	Item 2 - include mitigation measure in the project contract specifications	Technical Writing	Contractor agreement	Technical Writing	
	Item 2 – schedule time for silt fence installation monitoring with ER	Construction Inspection	Prior to construction	Construction Inspection	
	Item 2 – Conduct silt fence installation monitoring	ER	Prior to construction (during silt fence installation)	ER	

¹ Figure 3.4-1 (RR 541+20 Rectifier. Construction activities and indirect impacts avoidance measures). Contained in Initial Study and Mitigated Negative Declaration for the Santa Rosa Aqueduct and Russian River to Cotati Aqueduct Cathodic Protection Project. Available at the administrative office of Sonoma Water, 404 Aviation Blvd, Santa Rosa, CA 95403.

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>Mitigation Measure BIO-3: Avoid, minimize, and compensate for temporary impacts to California tiger salamander winter migration, upland refuge, and breeding habitats.</p> <p>1. The project may impact the federally and state listed California tiger salamander (CTS) and require compliance with the federal and state Endangered Species Acts (ESA). Because the project would impact wetlands subject to the authority of the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act, Sonoma Water, through the USACE, shall be required to consult with the U.S. Fish and Wildlife Service (USFWS) in compliance with Section 7 of the federal ESA. Through this consultation process the USFWS will define the necessary mitigation to compensate for unavoidable impacts to CTS and its migration, upland, breeding habitats and issue its findings in a Biological Opinion (BO) for the project. Following the provisions of Section 2080.1 of the California Fish and Game Code (California ESA), the California Department of Fish and Wildlife (CDFW) will review the incidental take statement in the BO and determine if it is consistent with the requirements of the California ESA (CESA). If CDFW determines that the federal authorization is not consistent with the CESA, the project proponent (Sonoma Water) shall apply for a State Incidental Take Permit under section 2081(b) of the California Fish and Game Code.</p> <p>2. Mitigation for impacts to CTS migration, upland refuge, and breeding habitats shall be consistent with the CTS mitigation identified in the Santa Rosa Plain Conservation Strategy (2005) and the Programmatic Biological Opinion (USFWS, 2007). If applicable to the Proposed Project, the appropriate mitigation ratio shall be negotiated with the USFWS and CDFW (agencies), and shall be 0.1:1 to 2:1 based on habitat type and distance from known CTS occurrences. Under the Santa Rosa Plain Conservation Strategy, the agencies concluded that compliance with the interim mitigation guidelines is sufficient to mitigate significant effects to listed species.</p>	<p>Items 1 and 2– apply for permits</p> <p>Items 1 and 2 – implement permit special conditions</p>	<p>ER</p> <p>ER and Construction Inspection prior to construction; ER and O&M prior to maintenance</p>	<p>Prior to construction and maintenance</p> <p>Prior to construction and maintenance</p>	<p>ER</p> <p>ER and Construction Inspection prior to construction; ER and O&M prior to maintenance</p>	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>3. The following measures are recommended to avoid and minimize the possible “take” of CTS during construction activities, as defined by the federal and state ESA. These measures are based on the Santa Rosa Plain Conservation Strategy and the Programmatic Biological Opinion and have been modified to address specific concerns of the Proposed Project regarding the three habitat types or conditions that may temporarily impact CTS or their habitat during construction. Prior to project construction, a CTS exclusionary fence plan shall be submitted to the USFWS and CDFW for approval as specified below for the three habitat types.</p> <p>a. <u>Temporary Impact to Winter Migration Habitat</u></p> <p>The 18 project sites with potential winter migration habitat, listed in Table 3.4-1, shall be scheduled for construction during the dry season from April 16 to October 31. If work from November 1 through April 15 cannot be avoided, open pits would be sealed at the end of each work day. No gaps between the plate and ground shall be allowed. A qualified biological monitor, approved by the USFWS and CDFW, shall inspect the staging and construction area daily for CTS before work begins.</p> <p>A qualified biologist (including those specializing in botany, wildlife, and fisheries) is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the project area. Sonoma Water may also utilize appropriately experienced and/or trained environmental staff. Resumes will be submitted to California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service, as appropriate, for approval prior to commencement of biological surveys and monitoring.</p>	Item 3 – include mitigation measure in the project specifications	Technical Writing	Contract agreement	Technical Writing	
	Item 3 - prepare and submit exclusionary fence plan	Construction Inspection prior to construction; ER prior to maintenance	Prior to construction and maintenance	Construction Inspection prior to construction; ER prior to maintenance	
	Item 3 – implement exclusionary fence plan	Construction Inspection during construction; O&M during maintenance	During construction and maintenance (November 1 – April 1)	Construction Inspection during construction; O&M during maintenance	
	Item 3 – schedule time for construction monitoring at CTS sites with ER	Construction Inspection prior to construction; O&M prior to maintenance	Prior to construction and maintenance (Items 3a, 3b and 3c - November 1 through April 1; Item 3d year-round)	Construction Inspection prior to construction; O&M prior to maintenance	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)												
<p>Table 3.4-1. Proposed Project Sites with Potential for Temporary Impact to California Tiger Salamander (CTS) Migration Habitat.</p> <table><tr><td></td><td>Proposed Project Sites within CTS Migration Habitat</td></tr><tr><td>Santa Rosa Aqueduct</td><td>SR 129+09, SR 134+83, SR 146+50, SR 170+00, SR 207+35, SR 259+60, SR 264+00, SR 285+50, SR 320+52</td></tr><tr><td>Russian River to Cotati Aqueduct</td><td>RR 367+00, RR 376+00, RR 436+80, RR 448+00, RR 502+27, RR 541+20, RR 616+75, RR 630+00, RR 798+50</td></tr></table> <p>b. <u>Temporary Impact to Upland Refuge (Grassland) Habitat</u> The 16 project sites with potential CTS upland habitat, listed in Table 3.4-2, shall minimize disturbance to grassland habitat by fencing the limits of the construction areas. No ground disturbing activities shall occur outside of the fenced area. If construction is conducted during the winter migration period (November 1 to April 15) an exclusionary fence buried at the bottom and at least three feet high shall be installed to prevent the potential for CTS to enter the construction area. After construction is complete, disturbed sites shall be recontoured to preexisting conditions, covered with straw, and revegetated with native grass and forb seeds.</p> <p>Table 3.4-2. Proposed Project Sites with Potential for Temporary Impacts to California Tiger Salamander (CTS) Upland Refuge (Grassland) Habitat.</p> <table><tr><td></td><td>Proposed Project Sites with Potential for Temporary Impacts to CTS Upland Refuge (Grassland) Habitat</td></tr><tr><td>Santa Rosa Aqueduct</td><td>SR 150+03, SR 159+61, SR 203+45, SR 212+00, SR 231+00</td></tr><tr><td>Russian River to Cotati Aqueduct</td><td>RR 312+50, RR 592+00, RR 606+00, RR 608+00, RR 643+75, RR 669+30, RR 677+80, RR 748+52, RR 781+00, RR 808+00, RR 826+55</td></tr></table>		Proposed Project Sites within CTS Migration Habitat	Santa Rosa Aqueduct	SR 129+09, SR 134+83, SR 146+50, SR 170+00, SR 207+35, SR 259+60, SR 264+00, SR 285+50, SR 320+52	Russian River to Cotati Aqueduct	RR 367+00, RR 376+00, RR 436+80, RR 448+00, RR 502+27, RR 541+20, RR 616+75, RR 630+00, RR 798+50		Proposed Project Sites with Potential for Temporary Impacts to CTS Upland Refuge (Grassland) Habitat	Santa Rosa Aqueduct	SR 150+03, SR 159+61, SR 203+45, SR 212+00, SR 231+00	Russian River to Cotati Aqueduct	RR 312+50, RR 592+00, RR 606+00, RR 608+00, RR 643+75, RR 669+30, RR 677+80, RR 748+52, RR 781+00, RR 808+00, RR 826+55	Item 3 – conduct monitoring	ER	During construction and maintenance (Items 3a, 3b and 3c - November 1 through April 1; Item 3d year-round)	ER	
	Proposed Project Sites within CTS Migration Habitat																
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<p>c. <u>Temporary Impact to CTS Breeding Habitat</u> The roadside ditch at Rectifier Station RR 606+00 along Meadow Lane provides potential CTS breeding habitat that would be temporarily impacted during construction. The construction area shall be bordered with a fence and disturbance restricted within the fenced area. No ground disturbing activities shall occur outside of the fenced area. Construction shall be scheduled outside of the winter migration period (November 1 to April 15) to avoid encountering adults and juveniles. This will also avoid impacts to the egg and larval life stages that could be present in the roadside ditch during winter and spring. If construction must be conducted during the winter migration period (November 1 to April 15) an exclusionary fence buried at the bottom and at least three high shall be installed to prevent the potential for CTS to enter the construction area. After construction is complete, the disturbed ditch area shall be recontoured to preexisting conditions, covered with straw, and revegetated with native wetland plants. Fencing shall be installed and maintained during construction as described in item b, Temporary Impact to Upland Refuge (Grassland) Habitat, above.</p> <p>d. In addition, the following minimization measures shall be implemented during the initial ground disturbing activities at project sites within CTS habitat.</p> <p>i. A duly trained monitor shall be present during the initial ground disturbing activities at each site within CTS migration, upland refuge, and breeding habitats. The monitor should remain onsite until the top several feet of soil have been removed and stockpiled. Thereafter, an onsite person shall be designated to monitor compliance with all applicable minimization measures. The USFWS- and CDFW-approved biologist shall ensure that this individual receives training consistent with that outlined in the Biological Opinion issued for the project.</p> <p>ii. If a CTS is observed within a project site by a worker, the worker shall immediately inform the monitor. The monitor shall notify the biologist immediately. All work</p>					

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<p>shall halt and machinery turned off within 100 feet of the animal until a biologist can capture and remove the CTS from the work area. Biologists approved by the USFWS and CDFW are the only personnel allowed to handle CTS. CTS found in the work area shall be relocated to pre-approved areas no more than one hour after capture.</p> <p>iii. The monitor and biologist have the authority to halt work activities at any time to prevent harming special-status species or when any of these protective measures have been violated. Work shall only commence when authorized by the monitor or biologists.</p> <p>iv. Before the start of work each morning, the monitor shall check for animals under any equipment, such as vehicles and stored pipes.</p> <p>v. At the end of each work day during the CTS migration season (November 1 to April 15), open pits or excavated areas will be sealed and inspected by a qualified biologist or designated, trained construction monitor.</p> <p>vi. Before the start of work each morning, the monitor shall check all excavated steep-walled holes or trenches greater than one foot deep for any wildlife. Wildlife shall be removed; the biologist will be notified if CTS are found.</p> <p>vii. A record of all CTS observed and the outcome of that observation shall be kept by the biologist and submitted to the USFWS and CDFW.</p> <p>viii. All foods and food-related trash items, such as lunch bags, plastic sandwich bags, fast food containers, food of any type, candy wrappers, chip packages, drink bottles and cans, etc., shall be enclosed in sealed trash containers and removed from the site regularly. Food items could attract predators into the work area.</p>					

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Mitigation Measure BIO-4: Nesting Bird Protection Measures. 1. If construction or maintenance activities must be scheduled during the nesting season (February 15 through August 15 for most birds), a qualified biologist, familiar with the species and habitats in the area, will conduct pre-construction surveys for raptors within suitable habitat within 500 feet of construction and maintenance activities and passerine nesting birds within 50 feet of construction and maintenance activities. The surveys shall be conducted within one week before initiation of construction or maintenance activities. If no active nests are detected during surveys, activities may proceed. Vegetation removal activities will be conducted under the guidance of a qualified biologist or designated trained monitor. A qualified biologist (including those specializing in botany, wildlife, and fisheries) is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the project area. Sonoma Water may also utilize appropriately experienced and/or trained environmental staff. Resumes will be submitted to California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service, as appropriate, for approval prior to commencement of biological surveys. 2. If active nests are identified in the project area, non-disturbance buffers shall be established at a distance of 500 feet for raptors and 50 feet for all other bird species. Buffer distance may be adjusted with CDFW approval. If active nests are found within 500 feet of a work area, a qualified biologist shall be on site as necessary to monitor the nests for signs of nest disturbance. If it is determined that construction or maintenance activity is resulting in nest disturbance, work shall cease immediately and CDFW shall be contacted. Buffers will remain in place until a qualified biologist determines that the young have successfully fledged, or nests have been otherwise abandoned.	Item 1 – schedule time for nest survey with ER	Construction Inspection during construction; O&M during maintenance	1 week prior to construction and maintenance (February 15 through August 15)	Construction Inspection during construction; O&M during maintenance	
	Item 1 – conduct nesting bird survey	ER	1 week prior to construction and maintenance (February 15 through August 15)	ER	
	Item 2 – establish nest buffers	ER	During construction and maintenance	ER	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>Mitigation Measure BIO-5: Avoid, minimize, or compensate for impacts to jurisdictional wetlands, other protected waters, and riparian habitat.</p> <ol style="list-style-type: none"> 1. Construction activities resulting in the introduction of fill or other disturbance to jurisdictional wetlands and other protected waters may require a permit from the US Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA), a Water Quality Certification from North Coast Regional Water Quality Control Board (NCRWQCB) pursuant to Section 401 of the CWA, and California Department of Fish and Wildlife (CDFW) has jurisdiction over streams and may require a Streambed Alteration Agreement (SAA) under Section 1602 of the California Fish and Game Code. Sonoma Water shall apply for permits from the appropriate regulatory agencies and comply with terms, which would likely include, but not necessarily limited to, the measures listed below: <ol style="list-style-type: none"> a. Delineate all jurisdictional wetlands and other protected waters in the Proposed Project area according to USACE protocol. b. Where soil removal is necessary in a wetland or drainage, the top 12 inches of soil will be stockpiled to maintain an onsite seed source. After excavation is complete, the stockpiled material will be returned and recontoured to the original topography. Supplemental native wetland seed mix will be applied, as needed. c. To account for temporal and permanent disturbance to wetland function, wetland habitat enhancement will be conducted on- or off-site. Enhancement will include one or more of the following: increasing native plant species abundance within the area impacted, managing invasive plants, installing native wetland vegetation on or offsite, and/or acquiring credit from an approved wetland mitigation bank. The appropriate mitigation ratio shall be negotiated with the USACE and NCRWQCB and shall be no less than 1:1. The enhancement effort shall require implementation of a five-year monitoring program with applicable performance standards negotiated with the resource agencies, which will include criteria such as establishing 80 percent survival rate of restoration plantings, increase in vegetative cover by native plant species, and a self-sustaining habitat condition. 	<p>Item 1 – apply for permits</p> <p>Item 1 – implement permit special conditions</p>	<p>ER</p> <p>ER and Construction Inspection during construction; ER and O&M during maintenance</p>	<p>Prior to construction and maintenance</p> <p>During construction and maintenance</p>	<p>ER</p> <p>ER and Construction Inspection during construction; ER and O&M during maintenance</p>	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
Mitigation Measure CUL-1: Tribal Monitor and Archaeologist During Ground-disturbing Activities During ground-disturbing construction activities at sites determined by either a qualified archaeologist or a culturally-affiliated tribe to have an elevated sensitivity to uncover previously unidentified historical or archaeological resources, a qualified archaeologist and representative from the Federated Indians of Graton Rancheria shall be present to monitor ground-disturbing activities.	Provide work schedule to ER Schedule archaeologist and tribal monitor for ground-disturbing activities.	Construction Inspector ER	Prior to construction and maintenance Prior to construction and maintenance	Construction Inspector ER	
Mitigation Measure CUL-2: Inadvertent Discovery of Historical or Archaeological Resources and Worker Awareness Training 1. The project specifications shall require the contractor to comply with the following measures regarding the discovery of cultural resources, including Native American Tribal Cultural Resources and items of historical and archaeological interest. The Sonoma Water Construction Inspector and construction personnel will be notified of the possibility of encountering cultural resources during project construction. <ol style="list-style-type: none"> Sonoma Water shall notify the Federated Indians of Graton Rancheria (FIGR or Tribe) Tribal Historic Preservation Office (THPO) in writing at least five days prior to the start of ground-disturbing activities that work will commence. Prior to initiation of ground-disturbing activities, Sonoma Water shall arrange for construction personnel to receive training about the kinds of cultural materials that could be present at the project sites and protocols to be followed should any such materials be uncovered during construction. An archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61) shall provide appropriate archaeological training, including the purpose of the training to increase awareness and appropriate protocols in the event of an inadvertent discovery. The Tribal Cultural Monitor shall provide appropriate tribal cultural resources training as determined by the Tribe. Training may be required during different phases of construction to educate new construction personnel. 	Include mitigation measure items 1 and 2 in the project contract specifications Provide work schedule to ER Item 1a - schedule archaeologist and tribal monitor for worker training	Technical Writing Construction Inspection ER	Contractor agreement Prior to construction and maintenance Prior to construction and maintenance	Technical Writing Construction Inspection ER	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>2. The project specifications will provide that if discovery is made of items of historical, archaeological, or cultural interest, the contractor will immediately cease all work activities in the area of discovery. Historical, archaeological, and cultural indicators may include, but are not limited to, dwelling sites, locally darkened soils, stone implements or other artifacts, fragments of glass or ceramics, animal bones, and human bones. After cessation of excavation, the contractor will immediately contact Sonoma Water's Construction Inspector and the FIGR THPO. The contractor will not resume work until authorization is received from the Construction Inspector.</p> <p>a. In the event of unanticipated discovery of historical or archaeological materials occurs during construction, Sonoma Water shall retain the services of a qualified professional archaeologist who meets the U.S. Secretary of Interior's professional standards (48 CFR Parts 44738-44739 and Appendix A to 36 CFR 61) to evaluate the significance of the items prior to resuming any activities that could impact the site.</p> <p>b. In the case of an inadvertent historical or archaeological discovery, if it is determined that the find is potentially eligible for listing in the California Register of Historical Resources and/or National Register of Historic Places, and the site cannot be avoided, additional mitigation measures shall be implemented. Mitigation measures may include (but are not limited to): avoidance; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for historical resources shall be developed in consultation with responsible agencies, and the Tribe. If data recovery excavation is necessary, Sonoma Water shall provide an Archaeological Resource Management and Data Recovery Plan, prepared by a qualified archaeologist, outlining recovery of the resource, analysis, and reporting of the find in collaboration with the Tribe. The Archaeological Resource Management and Data Recovery Plan shall be approved by Sonoma Water and the Tribe. Implementation of the Archaeological Resource Management and Data Recovery Plan shall be conducted prior to work being resumed.</p>	Item 2 - inadvertent discovery of archaeological materials	ER and Construction Inspection	During construction and maintenance	Construction Inspection	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>Mitigation Measure CUL-3: Inadvertent Discovery of Human Remains</p> <p>The project specifications will require the contractor to comply with Public Resources Code 5097.98 and Health and Human Safety Code 7050.5, as they pertain to the discovery of human remains. If human remains are encountered, the contractor shall halt work within 50 feet of the find, and contact Sonoma Water's Construction Inspector and the Sonoma County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the coroner determines the remains are Native American, the coroner will contact the Native American Heritage Commission. As provided in Public Resources Code Section 5097.98, the Native American Heritage Commission will identify the person or persons believed to be most likely descended from the deceased Native American. The Most Likely Descendent (MLD) makes recommendations for means of treating the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. Work shall cease in the immediate area until the recommendations of the appropriate MLD are concluded.</p>	<p>Include mitigation measure in the project contract specifications</p> <p>Discovery of human remains</p>	<p>Technical Writing</p> <p>ER and Construction Inspection</p>	<p>Contractor agreement</p> <p>During construction and maintenance</p>	<p>Technical Writing</p> <p>Construction Inspection</p>	
<p>Mitigation Measure GEO-1: Measures to minimize erosion, sedimentation, and discharge to surface and groundwater during construction and maintenance activities</p> <p>Sonoma Water will require contractors, through project contract specifications, and maintenance staff to implement the following in accordance with Caltrans BMP Manual (Caltrans, 2017) if not otherwise included in the project Storm Water Pollution Prevention Plan (SWPPP):</p> <ol style="list-style-type: none"> 1. Soil disturbance shall be kept to the minimum footprint necessary to complete the project and existing vegetation should be preserved to the extent feasible. 2. Staging will occur on work areas, access roads, surface streets, designated stockpile areas, or other disturbed areas that are already compacted and only support ruderal vegetation. Similarly, all equipment and materials will be contained within the existing service roads, paved roads, or other pre-determined staging and stockpile areas. Stockpiling of materials, including portable equipment, vehicles and supplies (e.g., chemicals), shall be restricted to the designated construction staging areas. 3. All project-related items, including equipment, stockpiled material, temporary erosion control treatments, and trash, will be removed within 72 hours of project completion. 	<p>Include mitigation measure items 1-13 in the project contract specifications</p> <p>Items 1-13, minimize erosion, sedimentation, and discharge to surface and groundwater during construction activities</p>	<p>Technical Writing</p> <p>Construction Inspection</p>	<p>Contractor agreement</p> <p>During construction and maintenance</p>	<p>Technical Writing</p> <p>Construction Inspection</p>	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>4. As necessary, to prevent sediment-laden water from being released during transport of spoils to disposal locations, truck beds will be lined with an impervious material (e.g., plastic), or the tailgate blocked with wattles, hay bales, or other appropriate filtration material. Trucks may drain excess water by slightly tilting the loads and allowing the water to drain out through the applied filter, only within the active work area where the sediment is being loaded into the trucks.</p> <p>5. No runoff from the staging areas will be allowed to enter waters of the State, including the creeks or storm drains, without being subjected to adequate filtration (e.g., vegetated buffer, hay wattles or bales, silt screens). The discharge of decant water from any on-site temporary sediment stockpile or storage areas, to waters of the State, including surface waters or surface water drainage courses, outside of the active project site, is prohibited.</p> <p>6. During the dry season (April 15 to October 15), if stockpiled soils will remain exposed and unworked for more than 7 days then erosion control measures will be utilized. During the wet season (October 16 to April 14), no stockpiled soils will remain exposed, unless surrounded by properly installed and maintained silt fencing or other means of erosion control.</p> <p>7. When ground disturbing activities occur during the wet season, work will avoid significant rainfall events. Significant rainfall is defined as 0.1 inch of rain in a 24-hour period. Work will resume when conditions allow and as specified in the SWPPP and Construction General Permit for the Proposed Project.</p> <p>8. In anticipation of the first significant rainfall event, exposed soils will be stabilized according to requirements of the SWPPP and Construction General Permit.</p> <p>9. Following completion of construction or maintenance activities, upland soils should be seeded and stabilized using erosion control fabric, straw, and/or hydroseeding using California certified weed free native seeds appropriate for the site.</p> <p>10. Erosion control fabrics shall consist of natural fibers that will biodegrade over time. No plastic or other non-porous material will be used as part of a permanent erosion control approach. Plastic sheeting may be used to temporarily protect a slope from runoff.</p> <p>11. Erosion control measures shall be installed according to manufacturer's specifications.</p>	<p>Items 1-13, minimize erosion, sedimentation, and discharge to surface and groundwater during maintenance activities</p>	O&M	During maintenance	O&M	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>12. Appropriate measures include, but are not limited to, the following (measures utilized would be implemented in accordance with the Caltrans BMP Manual (Caltrans, 2017)):</p> <ul style="list-style-type: none"> a. Silt fences b. Straw bale barriers c. Brush or rock filters d. Storm drain inlet protection e. Sediment traps f. Sediment basins g. Erosion control blankets and mats h. Straw wattles i. Soil stabilization (i.e., tackified straw with native seed, jute or geotextile blankets, broadcast and hydroseeding, etc.) <p>13. All temporary construction-related erosion control methods (e.g., silt fences) shall be removed at the completion of construction, or as directed by a qualified erosion control specialist.</p>					
<p>Mitigation Measure GEO 2: Stop work if paleontological resources are discovered during project activities, evaluate all identified resources for eligibility for inclusion in the California Register of Historical Resources, and implement appropriate mitigation measures for eligible resources.</p> <p>Prior to initiation of ground-disturbing activities, Sonoma Water shall arrange for construction crews to receive training about the kinds of paleontological materials that could be present at the project site and the protocols to be followed should any such materials be uncovered during construction or maintenance activities. Training shall be conducted by a professional paleontologist meeting the professional standards established by the Society of Vertebrate Paleontology (Society of Vertebrate Paleontology, 2010). Training may be required during different phases of construction to educate new construction personnel.</p> <p>Paleontological resources include fossil remains, as well as fossil localities and rock or soil formations that have produced fossil material. Fossils are the remains or traces of prehistoric animals and plants. Fossils are important scientific and educational resources because of their use in (1) documenting the presence and evolutionary history of particular groups of now-extinct organisms; (2) reconstructing the environments in which these</p>	<p>Include mitigation measure in the project contract specifications</p> <p>Provide work schedule to ER</p> <p>Schedule paleontologist for worker training</p>	<p>Technical Writing</p> <p>Construction Inspector</p> <p>ER</p>	<p>Contractor Agreement</p> <p>Prior to construction and maintenance</p> <p>Prior to construction and maintenance</p>	<p>Technical Writing</p> <p>Construction Inspector</p> <p>ER</p>	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>organisms lived; and (3) determining the relative ages of the strata in which they occur, as well as the relative ages of the geologic events that resulted in the deposition of the sediments that formed these strata and in their subsequent deformation.</p> <p>If any items of paleontological interest are encountered, all soil-disturbing work in that area and within 100 feet of the find shall be halted until a qualified paleontologist meeting the professional standards established by the Society of Vertebrate Paleontology (Society of Vertebrate Paleontology, 2010) evaluates the site.</p> <p>If it is determined by the qualified paleontologist that the proposed project could damage a unique paleontological resource, as defined in the CEQA Guidelines, mitigation shall be implemented in accordance with PRC § 21083.2 and § 15126.4 of the CEQA Guidelines. If avoidance is not feasible, the paleontologist shall develop and implement a treatment plan consistent with the methods recommended by the Society of Vertebrate Paleontology (Society of Vertebrate Paleontology, 2010). Work shall not be resumed until recommendations received from the qualified paleontologist are implemented.</p>	<p>Discovery of paleontological resources – stop work</p> <p>Discovery of paleontological resources – schedule paleontologist for site evaluation</p> <p>Discovery of paleontological resources – implement special mitigation measures</p>	<p>Construction Inspector</p> <p>ER</p> <p>ER and Construction Inspector</p>	<p>During construction and maintenance</p> <p>During construction and maintenance</p> <p>During construction and maintenance</p>	<p>Construction Inspector</p> <p>ER</p> <p>Construction Inspector</p>	
<p>Mitigation Measure HAZ-1: Spill Prevention and Response</p> <p>Sonoma Water will require the contractors, through project specifications, to prepare a SWPPP. The SWPPP shall comply with Caltrans Storm Water Pollution Prevention Plan and Water Pollution Control Program Preparation Manual and the Caltrans Construction Site Best Management Practices Manual. Sonoma Water will require contractors, through project contract specifications, and maintenance staff to follow the SWPPP during all project activities as well as implement the following measures:</p> <ol style="list-style-type: none"> 1. All field personnel shall be appropriately trained in spill prevention, hazardous material control, and cleanup of accidental spills. 2. Equipment and materials for cleanup of spills will be available on site and spills and leaks will be cleaned up immediately and disposed of in accordance with local, state, and federal regulations. 3. Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations). Spill clean-up materials will be stockpiled where they are readily 	<p>Include mitigation measure items 1-7 in the project contract specifications</p> <p>Items 1-7 spill prevention and response</p>	<p>Technical Writing</p> <p>Construction Inspection</p>	<p>Contractor agreement</p> <p>During construction and maintenance</p>	<p>Technical Writing</p> <p>Construction Inspection</p>	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>accessible. All field personnel shall be advised of these locations and trained in their appropriate use.</p> <p>4. During construction and maintenance activities, Sonoma Water staff and contractor(s) will routinely inspect the work site to verify that items 1-4 above are properly implemented and maintained.</p> <p>5. Absorbent materials will be used on small spills located on impervious surface rather than hosing down the spill; wash waters shall not discharge to the storm drainage system or surface waters. For small spills on pervious surfaces such as soils, wet materials will be excavated and properly disposed rather than burying it. The absorbent materials will be collected and disposed of properly and promptly.</p> <p>6. Vehicle and equipment maintenance activities will be conducted off-site or in a designated, protected area away from waterways equipped with secondary containment and designed to avoid a direct connection to underlying soil, surface water, or the storm drainage system. For stationary equipment that must be fueled on-site, secondary containment, such as a drain pan or drop cloth, shall be provided in such a manner to prevent accidental spill of fuels to underlying soil, surface water, or the storm drainage system.</p> <p>7. All vehicles and equipment will be kept clean. Excessive build-up of oil or grease will be avoided. Incoming vehicles and equipment will be checked for leaking oil and fluids (including delivery trucks, and employee and subcontractor vehicles). Leaking vehicles or equipment will not be allowed onsite.</p>					

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
Mitigation Measure NOISE-1: Avoid and Minimize Ambient Noise during Construction and Maintenance Activities Sonoma Water will require contractors, through project contract specifications, and maintenance staff to implement in the following: <ol style="list-style-type: none"> 1. Work will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday. No construction shall be permitted on Sunday or on holidays. 2. Power equipment (vehicles, heavy equipment, and hand equipment such as chainsaws) will be equipped with manufacturer's sound-control devices, or alternate sound control that is no less effective than those provided as original equipment. Equipment will be operated and maintained to meet applicable standards for construction noise generation. No equipment will be operated with an unmuffled exhaust. 	Include mitigation measure items 1 and 2 in the project contract specifications	Technical Writing	Contractor agreement	Technical Writing	
	Items 1 and 2 - noise abatement	Construction Inspection	During construction and maintenance	Construction Inspection	
	Items 1 and 2 - noise abatement	O&M	During maintenance	O&M	
Mitigation Measure TRAN-1: Traffic Control Plan Sonoma Water will require contractors, through project contract specifications, to implement the following: <ol style="list-style-type: none"> 1. Notification: <ol style="list-style-type: none"> a. At least seven days prior to commencement of work, notify residents along the Proposed Project roadways, in writing, that traffic flows will be subject to detours and/or delays, and that access to individual driveways may be disrupted during working hours. Provide notice to property owner. b. At least seven days prior to commencement of work, post notifications in the Proposed Project area to inform drivers of impending construction work and likely delays and detours. c. Notify the property occupants, in writing, at least three days in advance of the trenching across property occupants' driveways. Provide notice to property owner. d. At least seven days prior to commencement of work, and in compliance with any additional notice requirements set forth in any applicable permits, coordinate vehicular access with affected entities, including, but not limited to, the following: <ol style="list-style-type: none"> i. CalTrans ii. Charles M. Schulz Sonoma County Airport 	Include mitigation measure items 1-3 in the project contract specifications	Technical Writing	Contractor agreement	Technical Writing	
	Items 1-3, traffic management	Construction Inspection	During construction and maintenance	Construction Inspection	
	Items 1-3, traffic management	O&M	During maintenance	O&M	

<ul style="list-style-type: none"> iii. City of Santa Rosa iv. City of Santa Rosa Police Department v. Hebert Slater Middle School vi. Montgomery Village Shopping Center vii. Recology (local recycling, compost, and trash collection hauler) viii. Santa Rosa CityBus ix. Santa Rosa Fire Department x. Santa Rosa French-American Charter School xi. Santa Rosa Junior College, Shone Farm xii. Sonoma County Fire and Emergency Services Department xiii. Sonoma County Regional Parks xiv. Sonoma County Sherriff xv. Sonoma County Transit xvi. Sonoma-Marin Area Rail Transit xvii. Sports City Cotati <p>e. If any applicable permits require contractor to notify residents or any organization of traffic detours or delays, provide such notice(s) to property owner.</p> <p>2. Traffic Control Measures:</p> <ul style="list-style-type: none"> a. Traffic control and safety precautions shall conform to the "California Manual on Uniform Traffic Control Devices" (latest edition), and applicable provisions of the County of Sonoma, City of Santa Rosa, and California Department of Transportation encroachment permits. b. Pay for traffic signage, including flagging and modification of traffic signal operation. c. Provide safe passage for vehicular and pedestrian traffic through the work at all times. d. Subject to encroachment permit requirements, traffic on two-lane streets may be reduced to one lane provided that restriction of traffic flow, flaggers, cones, signs, and barricades are furnished as required by Sonoma Water. Permit the traffic equal flow time in each direction. e. Maintain access to public and private buildings, businesses and driveways. Provide approved metal "bridge" or temporary backfill for access when and where required within thirty minutes after request by property owner except that 					
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<p>emergency vehicles and personnel shall be provided immediate access at all times.</p> <p>f. Restore access to residences for non-working hours, holidays, and weekends.</p> <p>3. Maintain Traffic Control Measures:</p> <p>a. Maintain traffic control through the site and provide local access as specified herein regardless of rain or other causes, either within or beyond the control of contractor, which may force suspension or delay of the work. At all times keep on the site such materials, labor forces, and equipment as may be necessary to keep the streets and driveways within the site open to traffic and in good repair. Expedite the passage of such traffic, using such labor forces and equipment as may be necessary.</p>					
<p>Mitigation Measure TCR-1: Tribal Monitor During Ground-disturbing Activities</p> <p>During ground-disturbing construction activities at sites determined by Federated Indians of Graton Rancheria (FIGR or Tribe) to have an elevated sensitivity to uncover previously unidentified tribal cultural resources, a representative from the Tribe shall be present to monitor ground-disturbing activities.</p>	<p>Include mitigation measure in the project contract specifications</p> <p>Provide work schedule to ER</p> <p>Arrange tribal monitor</p>	<p>Technical Writing</p> <p>Construction Inspection</p> <p>ER</p>	<p>Contractor agreement</p> <p>Prior and during construction and maintenance</p> <p>Prior to construction and maintenance</p>	<p>Technical Writing</p> <p>Construction Inspection</p> <p>ER</p>	

Mitigation Measure	Action	Implementing Party	Timing	Responsible Party	Verification (Signature, Date of Compliance)
<p>Mitigation Measure WILD-1. Prepare and implement a Fire Protection Plan to minimize potential for wildland fires during construction activities</p> <p>Before construction begins, Sonoma Water and its contractors shall develop a fire protection plan for implementation during construction activities as specified in the project specifications. This plan will require:</p> <ul style="list-style-type: none"> • Equipment shall include spark arresters; • Equipment staging areas and worker parking areas are cleared of all extraneous flammable materials; • Fire extinguishing equipment will be accessible during vegetation management, construction activities, and maintenance activities; • Crews are informed of Fire Protection Plan and trained to follow method of operation in case of fire; • Crews will have relevant contact information on hand to identify who to contact in case of emergency; • Crews will notify authorities of any fire; • Sites will be accessible to emergency vehicles during performance of work; • Require that light trucks and cars with factory-installed (type) mufflers be used only on roads where the roadway is cleared of vegetation. These vehicle types shall maintain their factory-installed (type) muffler in good condition. • Smoking is prohibited in wildland areas, with smoking limited to paved areas or areas cleared of all vegetation. • Require that nylon or other non-metal string be used in string trimmers to reduce risk of sparks. 	<p>Include mitigation measure in the project contract specifications</p> <p>Prepare and implement fire protection plan</p> <p>Implement fire protection plan</p>	<p>Technical Writing</p> <p>Construction Inspection</p> <p>O&M</p>	<p>Contractor agreement</p> <p>Prior and during construction and maintenance</p> <p>During maintenance</p>	<p>Technical Writing</p> <p>Construction Inspection</p> <p>O&M</p>	