

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Method to Verify Compliance
AIR QUALITY			
AIR-01 Basic Construction Mitigation Measures	Napa County construction contractor(s).	During construction.	Determination by Napa County contractor(s).
The following Basic Construction Mitigation Measures as defined by the Air District's CEQA Air Quality Guidelines (2017b) shall be adhered to: - All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. - All haul trucks transporting soil, sand, or other loose material off-site shall be covered. - 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. - All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. - All roadways, driveways, and sidewalks to be paved shall be paved as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. - 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 Toxic Control Measures under Title 13, Section 2485 of California Code of Regulations). Clear signage shall be provided for construction workers at all access points. - All construction equipment shall be maintained and properly tuned in accordance with the	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:		

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manufacturers' specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. A publicly visible sign shall be posted with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.			
BIOLOGICAL RESOURCES			
BIO-01 Worker Environmental Awareness Training	Napa County construction contractor(s) & a qualified biologist.	Prior to construction.	Determination by a qualified biologist.
Prior to construction, a qualified biologist shall conduct one worker environmental awareness training (WEAT) for construction personnel. The WEAT shall be given to construction personnel to brief them on how to recognize special-status plant species, wildlife species, sensitive habitats, and appropriate avoidance measures that could occur in the proposed Project site (e.g., special-status plant identification, amphibian identification, nesting bird identification and habitat, riparian habitats, relevant BMPs, mitigation, and regulations). WEAT reference pamphlets shall also be provided to keep on-site for use by the trained site representative or foreperson to train new Project personnel in the absence of the biologist. If special-status species are encountered in the work area, construction shall cease and a qualified biologist shall be notified for guidance before any construction activities are resumed.	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:		

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BIO-02 Invasive Species Prevention	Napa County construction contractor(s).	During construction.	Determination by Napa County construction contractor(s).
To prevent the spread of non-native, invasive plant or wildlife species that may result in adverse impacts to native plant or wildlife species or habitats, the following measures will be implemented: - All imported or planted vegetation will be native and sourced from a local nursery, within 50 miles if possible. - All imported materials used for the Project will be from weed-free sources, and the source of the material will be provided in writing for Napa County review and approve prior to implementation. - All vehicles, tools, and mechanical and personal equipment shall be cleaned prior to arrival on the Project site. The contractor shall be required to use the California Invasive Plant Council's BMP checklist for cleaning vehicles, tools, and equipment (California Invasive Plant Council 2012).	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:		
BIO-03 Nesting Birds Avoidance	Napa County construction contractor(s) & a qualified biologist.	Within 5 days prior to start of construction and during construction.	Field survey by a qualified biologist.
Active nests occurring at or near the Project site shall be avoided. Permittee is responsible for complying with Fish and Game Code section 3503 et seq. and the Migratory Bird Treaty Act of 1918. <i>Nesting Bird Surveys:</i> If construction, grading, vegetation removal, or other Project-related activities are scheduled during the nesting season, February 1 to August 31, a focused survey, within the Project site and a minimum 250 to 500-foot	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____		

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radius of the Project site, for active nests shall be conducted by a Qualified Biologist within 5 days prior to the beginning of Project-related activities. If an active nest is found, Permittee shall consult with CDFW regarding appropriate action to comply with Fish and Game Code. If a lapse in Project-related work of 5 days or longer occurs, another focused survey and, if needed, consultation with CDFW, shall be required before Project work can be reinitiated. • <i>Active Nest Buffers:</i> If an active nest is found during surveys, the Project shall consult with CDFW regarding appropriate action to comply with state and federal laws. Active nest sites shall be designated as “Ecologically Sensitive Areas” (ESA) and protected (while occupied) during Project work by demarking a “No Work Zone” around each nest site. ○ Buffers shall be a minimum of 250 feet for non-listed bird species and 500 feet for non-listed raptors. The buffer distances shall be determined by a Qualified Biologist based on-site conditions and specified to protect the bird’s normal behavior to prevent nesting failure or abandonment. The buffer distance recommendation shall be developed after field investigations that evaluate the bird(s) apparent distress in the presence of people or equipment at various distances. Abnormal nesting behaviors which may cause reproductive harm	Remarks:		

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include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The Qualified Biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. • The Qualified Biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project work. Nest monitoring shall continue during Project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the Qualified Biologist. Any reduction in monitoring active nests must be approved in writing by CDFW. • <i>Nesting Habitat Removal or Modification.</i> No habitat removal or modification shall occur within the ESA-marked nest zone until the young have fully fledged and will no longer be adversely affected by the Project, as determined by a Qualified Biologist.			
BIO-04 Special-Status Fish	Napa County construction contractor(s) & a qualified biologist.	Before, during, and after diversion and dewatering.	Determination by a qualified biologist.
Project activities are anticipated to require the dewatering of a portion of Campbell Creek. A diversion and dewatering plan and a fish rescue and relocation	<u>Verification of Compliance</u>		

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plan shall be prepared for the Project in consultation with appropriate agencies including the National Marine Fisheries Service (NMFS), CDFW, USFWS, and RWQCB. The plans will include measures that detail procedures for dewatering activities and for fish rescue and relocation to avoid and minimize the number of steelhead, Chinook, and lamprey that could be stranded during dewatering. The diversion and dewatering plan and/or the fish rescue and relocation plan shall specify, among other requirements, the following: • That all work is to be scheduled between July 1 and October 31. This time period is a season when there is naturally minimal flow in Dry Creek and Campbell Creek, and it is outside of the season when adult migrating steelhead would be expected to enter the Napa River watershed. • Fish rescue will be conducted by a qualified biologist or team of biologists prior to the initiation of dewatering efforts. • Captured fish will be relocated to a pre-determined location in appropriate habitat outside of the Project site. Holding time (in water in buckets or coolers with aerators) and handling of fish will be minimized to the greatest extent feasible. • Once dewatering is initiated, a qualified biologist or fish rescue team will remain on-site to observe the process and remove additional fish using established rescue procedures until dewatering is complete. • Dewatering pump intakes will be screened to prevent entrainment of fish in accordance with	Name: _____ Title: _____ Date: _____ Remarks:		

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NMFS screening criteria for salmonid fry (NMFS 1997). There will be limits to ensure that the time period for which any area is dewatered is as short as is feasible.			
BIO-05 Special-Status Amphibians	Napa County construction contractor(s) & a qualified biologist.	Within 48 hours prior to the start of work.	Field survey by a qualified biologist.
A qualified biologist will conduct a pre-construction survey within 48 hours prior to the start of work for FYLF, CRLF, and California giant salamander following available protocols, including USFWS's Revised Guidance on Site Assessments and Field Surveys for the California Red-legged Frog (USFWS 2005), and Visual Encounter Survey Protocol for Rana Boylii in Lotic Environments (Peek et al. 2017). The qualified biologist shall provide a survey methodology to CDFW for review and approval a minimum of two weeks prior to start of Project construction. If pre-construction survey results are positive, the appropriate agencies will be notified (CDFW and/or USFWS) and a qualified biological monitor shall be on-site during all construction activities, including mobilization. Additional protective measures may be implemented, including, but not limited to, establishing an avoidance buffer around observed individuals; placing Environmentally Sensitive Area protective fencing; or locally relocating individuals by a qualified biologist or biological monitor. If pre-construction survey results are negative, a full-time biological monitor is not required and the following measures will be implemented:	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:		

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- A biological monitor will be on-site during any vegetation trimming or removal activities within riparian or aquatic habitats and during dewatering activities. - During work, crews will inspect the work space for wildlife to make sure there are no animals in holes and trenches, construction material, and equipment. Any potential FYLF, CRLF, or salamander individuals discovered during Project activities shall be first allowed to move out of the Project site of their own volition. Project activities within 25 feet of the individual will cease and a qualified biologist will be contacted, and the appropriate resource agencies will be notified (CDFW and/or USFWS) within 24 hours where appropriate. If the individual does not move or does not leave the Project site, a qualified biologist will work with the appropriate resource agencies to capture and relocate the individual to the nearest suitable habitat at least 100 feet from the Project site where it was found. Work may resume when the qualified biologist has relocated the individual outside of the impacted work area or determined that the individual has left the work area of its own accord. - If any individuals are observed or moved, the details shall be included in the post-construction report.			
BIO-06 Special-Status Reptiles	Napa County construction contractor(s) & a qualified biologist.	Within 48 hours prior to the start of work.	Field survey by a qualified biologist.
A qualified biologist will conduct a pre-construction survey for western pond turtle individuals in suitable aquatic habitat within 48 hours prior to the start of work. If pre-construction survey results are positive, the appropriate agencies will be notified and a biological	<u>Verification of Compliance</u> Name: _____		

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monitor shall be on-site during all construction activities. Additional protective measures may be implemented, including, but not limited to, establishing an avoidance buffer around observed individuals; placing Environmentally Sensitive Area protective fencing; or locally relocating individuals by a qualified biologist or biological monitor. If work will be conducted during pond turtle nesting season (typically April to August), areas that present suitable nesting habitat within 200 feet of the Project site and potential area of impact (Map 2) will be searched for nests. If a potential nest is identified, the nest location shall be flagged and a biological monitor will be present throughout all ground-disturbing activities/use of heavy equipment to minimize the potential for impacts to the nest. During work, crews will inspect the workspace for wildlife to make sure there are no animals in holes and trenches, construction material, and equipment. Any potential pond turtles discovered during Project activities shall be allowed to move out of the Project site of their own volition. Project activities within 25 feet of the individual will cease, and a qualified biologist will be contacted. The appropriate resource agencies (CDFW and/or USFWS) will be notified within 24 hours where appropriate. If the individual does not move or does not leave the Project site, it shall be hand captured by a qualified biologist and relocated to the nearest available suitable habitat 100 feet outside the designated Project disturbance and staging/parking areas. Work may resume when the qualified biologist has relocated the individual outside of the impacted work area or determined that the individual has left the work area of its own accord.			Title: _____ Date: _____ Remarks:

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If any individuals are observed or moved, the details shall be included in the post-construction report.			
BIO-07 Special-Status Bats	Napa County construction contractor(s) & a qualified biologist.	At least 30 days prior to construction, but no more than 60 days from the start of construction.	Field survey by a qualified biologist.
At least 30 days prior to construction, but no more than 60 days from the start of construction, a bat roosting habitat assessment shall be conducted of all trees and structures to be removed or otherwise impacted during construction. If suitable roosting habitat is identified, visual surveys shall be conducted to determine the presence or absence of roosting bats. If presence is confirmed, appropriate agencies such as CDFW will be consulted and a plan will be implemented to assess species, type of colony, and usage, and appropriate avoidance and mitigation measures will be developed.	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:		
BIO-08 Northern Spotted Owl	Napa County construction contractor & a qualified biologist	Prior to construction.	Field survey by a qualified biologist
No Project activities within 0.25 miles of northern spotted owl nesting habitat shall occur from March 15 to August 31, unless modified one-year call-back northern spotted owl surveys have been completed by a qualified biologist with reference to the USFWS Protocol for Surveying Proposed Management Activities That May Impact Northern Spotted Owls, dated (revised) January 9, 2012 and accepted by CDFW in writing. If an active nest site is detected during surveys, a 0.25-mile no-disturbance buffer zone shall be implemented around the nest. Unless otherwise approved in writing by CDFW, no Project activities shall occur within the buffer	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____		

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Method to Verify Compliance
zone until the end of breeding season, or until a qualified biologist determines that the nest is no longer active. Alternate buffer zones may be proposed by a qualified biologist after conducting an auditory and visual disturbance analysis following the USFWS. If no active spotted owl nests are identified during the call back surveys, no work buffers and/or further Project modifications are required.	Remarks:		
BIO-09 Pre-Project Special-Status Plant Surveys	Napa County construction contractor(s) & a qualified biologist.	Appropriate blooming period to the start of construction.	Field survey by a qualified biologist.
A Qualified Biologist shall conduct botanical surveys during the appropriate blooming period and conditions for all special-status plants that have the potential to occur prior to the start of construction. Surveys shall be conducted following CDFW's Protocol for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants). Survey reports shall be submitted to CDFW for written approval prior to the start of construction. If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and prepare and implement a CDFW-approved avoidance plan prior to Project activities.	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:		
BIO-10 Adherence to Applicable Napa County Code Requirements and Regulatory Permit Conditions	Napa County construction contractor(s).	Prior to and during construction.	Determination by Napa County construction contractor(s).
All relevant measures of the Napa County Code of Ordinances shall be adhered to. These measures include multiple requirements that support minimization and avoidance of unnecessary impacts to species and wildlife habitat. Specifically, Chapter 16.04.750 -	<u>Verification of Compliance</u> Name: _____		

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Riparian zones—Restricted activities, specifies the following with respect to removal of vegetation in the riparian zone: A. The proposed activity will not, with regard to the riparian zones along a channel, remove more than the following: 1. A native tree eighteen inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or 2. Three native trees twelve inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or 3. Six native trees six inches DBH per one hundred linear feet of riparian zone on each side of the floodplain, or 4. Five hundred square feet of vegetation in riparian zones beyond ten feet from the top of the bank, or 5. The temporary removal of a portion of riparian vegetation not more than fifteen feet wide beyond ten feet from the top of the bank, where replanting of such strip is a part of the project; and B. The proposed activity will not involve the locating of any facility or structure within ten feet from the top of the bank; and C. Will not result in a cut or fill slope that would remain unprotected by slope reseeding and bank stabilization replanting at the end of the project, thereby making the slope susceptible to erosion. In addition, Napa County Municipal Code Chapter 18.108.070 – Erosion hazard areas, Use requirements; and Chapter 18.108.100 – Erosion hazard areas—	Title: _____ Date: _____ Remarks:		

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Vegetation preservation and replacement; specify compliance with various vegetation and erosion hazard measures specific to erosion hazard areas. These are applicable to the Project, at the discretion of Napa County, and include: • Compliance with the requirements of Napa County's NPDES Program • Submission of an erosion control plan • Protection of new plantings • County approval for removal of trees 6-inches DBH or larger • Protection of trees to be retained within the work area Beyond these Napa County requirements, the Project shall adhere to all the permitting conditions included in the anticipated Clean Water Act (CWA) Section 401 Water Quality Certification from the San Francisco Bay RWQCB, CWA Section 404 permit from the USACE, and Streambed Alteration Agreement in compliance with Section 1600 of the California Fish and Game Code from the CDFW. More information about these permit requirements and compliance expectations is described in Section 3.8.			
CULTURAL RESOURCES			
CUL-1 Undocumented Cultural Resources	A qualified field archaeologist & Napa County construction contractor(s).	During construction.	Confirmation by Napa County construction contractor(s).
If archaeological resources (prehistoric or historic), fossils, or human remains are encountered during construction, work shall be stopped until a qualified	<u>Verification of Compliance</u>		

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archaeologist can assess the findings. Per Archaeological Resources Protection Act, 43 Code of Federal Regulations § 7.4, Prohibited Acts and Criminal Penalties: <i>Under section 6(a) of the Act, no person may excavate, remove, damage, or otherwise alter or deface, or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands unless such activity is pursuant to a permit issued under § 7.8 or exempted by § 7.5(b) of this part.</i> In all cases, the retained archaeologist shall adhere to professional standards regarding the evaluation and treatment of all previously identified or newly identified resources including assessing the potential for Project impacts and prioritizing avoidance of the resource with implementation of protective measures (e.g., exclusion fencing or flagging) as needed. In instances where the resource cannot be avoided, the resource shall be evaluated to determine its historical, archaeological, or tribal significance. If the resource is not found significant, construction may proceed. If the evaluation determines significance, mitigation measures shall be devised by the archaeologist for approval by the county before construction may proceed.	Name: _____ Title: _____ Date: _____ Remarks:		
CUL-2 Resource Awareness Training	A qualified field archaeologist and the Napa County construction contractor(s).	Prior to construction.	Determination by a qualified field archeologist.
All construction personnel responsible for overseeing and operating ground-disturbing equipment shall be trained regarding the recognition of cultural and heritage resources and informed of what to do in the event they	<u>Verification of Compliance</u>		

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encounter subsurface prehistoric or historical cultural resources and/or human remains. At a minimum the heritage and cultural resources to cover with personnel include: • Types of heritage and cultural resources expected in the Project site; • Types of evidence that indicate heritage or cultural resources might be present (e.g., ceramic shards, trash scatters, lithic scatters); • Importance of avoiding areas flagged or otherwise identified as sensitive; • Protocol to be followed if a cultural or tribal cultural resource or human remains are encountered; and • Penalties for removing or intentionally disturbing heritage and cultural resources. • Pamphlets covering the laws and regulations pertaining to protection of cultural resources and what to do in the event of a find shall be left with the construction foreman and other key construction employees. The pamphlets shall remain on site for the duration of Project construction.	Name: _____ Title: _____ Date: _____ Remarks: _____		
HAZARDS AND HAZARDOUS MATERIALS			
HAZ-1 Spill Prevention and Response	Napa County construction contractor(s).	Prior to and during construction.	Determination by Napa County contractor(s).
Napa County shall require the contractor to prepare a Spill Prevention and Response Plan (SPRP) to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. The SPRP shall contain BMPs for spill prevention and include an emergency response program to address quick and	<u>Verification of Compliance</u> Name: _____ Title: _____		

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safe cleanup of accidental spills. The emergency response program shall include reporting requirements and directions consistent with the Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA), Emergency Planning and Community Right-to-Know Act (EPCRA), and California law. In addition, the contractor shall immediately notify the county in the event of any spill or release of any chemical during construction. The SPRP shall include (but not be limited to): • Requirement that staff have appropriate training in compliance with 29 Code of Federal Regulations Section 1910.120. • Requirement that equipment shall be regularly inspected as well as cleaned and repaired (other than emergency repairs) outside of the Project site boundaries and that all contaminated spill residue, or other hazardous compounds shall be contained and disposed of outside of outside the boundaries of the site at a lawfully permitted or authorized designation. • A map that delineates construction staging areas, where refueling, lubrication, and emergency repair of equipment would occur. • Areas designated for refueling, lubrication, and emergency repair of equipment shall be at least 50 feet from any waterbody (including Campbell Creek and Dry Creek) • A list of items required in a spill kit on-site that would be maintained throughout the life of the Project. Each vehicle would be equipped with a spill containment kit sufficient to mitigate spills associated with a ruptured hydraulic line or fuel tank.			

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- Procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process. - Requirement that the contractor shall, prior to the start of on-site construction activities, inspect all equipment for leaks and regularly inspect the equipment thereafter until equipment is removed from the Project site. - Requirement that all contaminated water, sludge, spill residue, or other hazardous compounds shall be contained and disposed of outside the boundaries of the site, at a lawfully permitted or authorized destination.			
HAZ-2 Wildfire Prevention Napa County shall require the contractor and all crews on-site to adhere to the following wildfire prevention measures: - Train supervisors and employees on both the causes and control measures for wildfires, including trade-specific ignition sources (like welding sparks) and Project-specific fire control plans. - Crews should check the forecast regularly and employ heightened wildfire awareness during Red Flag Warnings, which are issued when warm temperatures, low humidity, and strong winds are expected to combine to heighten the risk of wildfire danger. - Ensure that appropriate fire suppression equipment is available for onsite crews. Equipment should be ready when work is started, and all crews should be trained in the proper use of equipment.	Napa County construction contractor(s).	Prior to and during construction.	Determination by Napa County contractor(s). <u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks:

Mitigation Measure	Responsible Party for Implementation	Implementation Timing	Method to Verify Compliance
- Develop and use “Stop Work” guidelines, that include weather monitoring, work type, and work locations. These should be easily communicated to work crews, clients, and owners’ groups. - Keep construction equipment and materials on-site as little as possible in fire-prone areas. Do not park equipment on dry grass. This will reduce loss if the construction storage area is affected by nearby fire. This includes removing equipment during weekends or off work hours. - Smoking shall be prohibited on the job site.			
HYDROLOGY AND WATER QUALITY			
HYD-1 Diversion and Dewatering Plan Napa County shall require that the Diversion and Dewatering Plan for the Project include the following: - Water diversion will be implemented by the contractor to maintain the work site as water-free as possible for the duration of in-channel work. - All dewatering and diversion methods will be installed such that natural flow is maintained upstream and downstream of the Project site. - Diversion pipe sizing shall conform to Caltrans’ <i>Field Guide to Construction Site Dewatering</i> (2014).	Napa County construction contractor(s).	Prior to and during diversion and dewatering.	Determination by Napa County contractor(s).
	<u>Verification of Compliance</u> Name: _____ Title: _____ Date: _____ Remarks: _____		