

**Chalk Mountain Road Over North Fork Cache Creek Bridge Replacement Project (Bridge No. 14C-0048)
Project Mitigation Monitoring and Reporting Program**

Impact	Mitigation, Avoidance, and Minimization Measures	Implementation Timing	Implementation Responsibility	Verification Responsibility	Compliance Verification Date
Air Quality					
AQ-1 to AQ-2: The project would result in air quality emissions during construction.	AQ-1: Prior to obtaining the necessary permits and/or approvals, the applicant shall contact the Lake County Air Quality Management District and obtain an Authority to Construct.	Prior to construction	Applicant	Lake County Air Quality Management District (LCAQMD)	
	AQ-2: All vegetation during site development shall be chipped and spread for ground cover and/or erosion control. The burning of vegetation, construction debris, including waste material is prohibited.	Prior to, during, and following construction	Contractor	Applicant	
Biological Resources					
BIO-1 to BIO-13: The project would impact nesting birds and the foothill yellow-legged frog.	BIO-1. Work within the channel should avoid disturbing downed trees, stumps and other basking sites and refuges within these aquatic habits Should any work occur within the banks or	During construction	Contractor/Qualified Biologist	Applicant/Qualified Biologist	

	<p>riparian habitat of the creek at times when the affected segment contains water, it should be immediately preceded by a site inspection of the channel by a qualified biologist with a valid CDFW collecting permit. Any turtles within the work area should be captured and transferred to another suitable portion of North Fork Cache Creek.</p>				
	<p>BIO-2. The flowing portion of the stream shall be diverted through placement of temporary levees along the banks of the low flow channel to convey the water from the North Fork Cache Creek through the project site. The Resident Engineer shall check with Yolo County Flood Control to determine the volume of maximum construction season stream flows.</p>	<p>During construction</p>	<p>Applicant/Resident Engineer</p>	<p>Applicant/Resident Engineer</p>	
	<p>BIO-3. The culverts shall be no less than two feet</p>	<p>During construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	<p>in diameter and inset into the channel to a depth of half their diameter in order to allow downstream passage of fish and herptiles. These structures shall be removed at the end of the project and prior to winter stream flows.</p>				
	<p>BIO-4. The proposed diversion shall be reviewed and approved by a qualified biologist with a valid CDFW collecting permit prior to installation. That individual shall be present during its construction. During construction of this diversion, the qualified biologist shall inspect the diverted channel segment for sensitive herptiles and nests as described above and shall capture and release any herptiles or fish within the diversion area to a suitable segment of North Fork Cache Creek.</p>	<p>Prior to and during construction</p>	<p>Qualified Biologist</p>	<p>Applicant/Qualified Biologist</p>	

	<p>BIO-5. Prior to construction outside of the period when water is present in the channel, the qualified biologist shall inspect adjacent banks within the proposed stream crossing (PIA) for turtle nests and flag any nests for installation of construction fencing around a 5-foot radius. Any nests that cannot be avoided shall be moved and monitored by the qualified biologist. If nests are found a monitoring report containing photographs of the nest relocation effort and weekly inspections for a period of one (1) month shall be submitted to CDFW staff for review upon completion of the monitoring period.</p>	<p>Prior to and during construction</p>	<p>Qualified Biologist</p>	<p>Applicant/Qualified Biologist</p>	
	<p>BIO-6. Work within a minimum of 250 feet of a bald eagle or white-tailed kite nest should be avoided between</p>	<p>During construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	<p>February 15 and August 31 in order to avoid the potential for disrupting nesting and breeding, unless the work is preceded by the survey described below and the species are determined to not be present</p>				
	<p>BIO-7. To the extent feasible, construction-related activities within the bridge crossing area, including vegetation removal, shall occur outside of the nesting season (February 15 through August 31). If construction during the nesting season cannot be avoided, any required vegetation removal should be the minimal amount necessary for construction and should be completed prior to the nesting season. In the event that vegetation removal is necessary during the nesting season, the work shall be preceded by a pre-construction nest survey</p>	<p>Prior to and during construction</p>	<p>Contractor/ Qualified Biologist</p>	<p>Applicant/Qualified Biologist</p>	

	<p>conducted by a qualified biologist within two weeks of disturbance. If an active nest of a sensitive bird species is found, a construction buffer shall be established around it in consultation with CDFW staff and shall remain in place until fledging is completed or until it is determined that the nesting effort has failed as determined by the qualified biologist.</p>				
	<p>BIO-8. Work within 250 feet of the willow thicket habitats along North Fork Cache Creek should be avoided from February 15 through August 31 in order to avoid the potential for disrupting nesting and breeding for these species, unless the work is preceded by the survey described below and the species is determined to not be present.</p>	<p>During construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	<p>BIO-9. Any work requiring construction or vegetation clearing within 250 feet of the red and narrow-leaved willow thicket communities between February 15 and August 31 of any year should be preceded by pre-construction surveys pursuant to CDFW policy. In the event that this species is determined to be nesting within 250 feet of the proposed construction activities, construction should be delayed within 250 feet of the nest until after August 31, or until fledging is completed as determined by a qualified biologist. The construction buffer may be reduced depending on presence of screening vegetation or topography based on the recommendation of a qualified biologist.</p>	<p>Prior to and during construction</p>	<p>Contractor/ Qualified Biologist</p>	<p>Applicant/Qualified Biologist</p>	
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	<p>BIO-10. Disturbance in and adjacent to the creek, within 100 feet of the bridge crossing area should be avoided between December 1 and April 30 to avoid the potential for disrupting nesting and breeding, unless the work is preceded by a survey. If work requiring construction or vegetation clearing at the bridge site between these dates is performed, it should be preceded by pre-construction surveys by a qualified biologist for active otter den sites within the proposed active disturbance area. In the event that an active den site is present within the area of active disturbance, construction should be delayed within 50 feet of the nest until young are independent as determined by a qualified biologist.</p>	<p>Prior to and during construction</p>	<p>Contractor/ Qualified Biologist</p>	<p>Applicant/Qualified Biologist</p>	
	<p>BIO-11. Removal of the bridge or any trees</p>	<p>During construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	<p>containing hollows or peeling bark within the BSA should be completed between September 15 and October 15, or between February 15 and April 1, in order to avoid disrupting the breeding season or disturbance of hibernating bats unless the surveys and mitigation described below are implemented.</p>				
	<p>BIO-12. If work is proposed within woodland habitat (outside of the dates listed above), all trees within the proposed area of work that are suitable for use by bats shall be surveyed for signs of bats no earlier than fourteen days prior to tree removal or other habitat disturbance. Suitable trees include those with hollows and/or shedding bark. If pallid bats, or other bats with sensitive regulatory status, are discovered during the surveys, a</p>	<p>Prior to and during construction</p>	<p>Contractor/ Qualified Biologist</p>	<p>Applicant/Qualified Biologist</p>	

	<p>buffer of 50 feet should be established depending on recommendations of the surveying biologist. Removal of these roost trees shall be restricted to between September 15 and October 15, when young of the year are capable of flying, or between February 15 and April 1 to avoid hibernating bats and prior to formation of maternity sites.</p>				
	<p>BIO-13. The construction contractor would be required to avoid and minimize unnecessary impacts on wetlands during construction. Wetlands in the vicinity of construction zones would be marked with construction fencing to ensure vehicles do not inadvertently access them. Best management practices for erosion control would be used to ensure sediment from construction does not</p>	<p>Prior to and during construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	enter wetlands or other waters.				
Cultural Resources					
CUL-1: The project would possibly impact cultural resources during construction.	CUL-1. All earthmoving activity within and around the immediate discovery area shall be halted until an archaeologist who meets state and federal qualifications can assess the nature and significance of the find.	During construction	Contractor	Applicant	
	CUL-2. If human remains are discovered, contact the County Coroner. If the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission, which will then notify the Most Likely Descendant (MLD). At that time, the District 1 Environmental Branch Chief or the District 1 Native American Coordinator will be contacted so that he/she may work with the MLD on the respectful	During construction	Contractor	Applicant	

	treatment and disposition of the remains.				
	CUL-3. A Tribal Cultural Resource Monitor shall be present at the site during excavation activities under the conditions agreed upon by the County and Tribal government.	During construction	Contractor/Tribal Monitor	Applicant	
Hazards & Hazardous Materials					
HAZ-1 to HAZ-5: The project could result in hazard materials related to lead and treated timber.	HAZ-1. Removal, disposal, storage and transportation of the structure containing lead-based paint shall be performed in compliance with federal and state regulations for hazardous waste.	Prior to and during construction	Contractor	Applicant	
	HAZ-2. Building materials associated with paint on structures, and paint on utilities shall be abated by a California licensed abatement contractor and disposed of as a hazardous waste.	During construction	Contractor/California Licensed Abatement Contractor	Applicant	
	HAZ-3. A Lead Compliance Plan shall be prepared by the contractor for the	Prior to construction	California Licensed Lead Contractor	Applicant	

	<p>disposal of lead-based paint. A California state licensed lead contractor shall be required to perform all work that will disturb any lead-based paint as a result of planned or unplanned renovations in the project area.</p>				
	<p>HAZ-4. Removal of treated timber associated with the existing bridge will be removed and disposed at a Regional Water Quality Control Board certified treated wood waste (TWW) landfill.</p>	<p>During construction</p>	<p>Contractor</p>	<p>Applicant</p>	
	<p>HAZ-5. The contractor should prepare a Develop a Health and Safety Plan (HASP) that describes appropriate procedures to follow in the event that any contaminated soil or groundwater is encountered during construction activities. Any unknown substances should be tested, handled and disposed of in</p>	<p>Prior to construction</p>	<p>Contractor/Applicant</p>	<p>Contractor/Applicant</p>	

	accordance with appropriate federal, state and local regulations.				
Hydrology/Water Quality					
WQ-1 to WQ-9: The project could result in impacts to Hydrology/Water Quality.	WQ-1. All temporarily disturbed areas will be returned to pre-Project conditions upon completion of construction. These areas will be properly protected from washout and erosion using appropriate erosion control devices including coir netting, hydroseeding, and revegetation. In sloped areas, additional erosion control measures would be applied including erosion control blankets and fiber rolls. If woody species (i.e., trees and large shrubs) are removed, these areas would be replanted with comparable native vegetation.	Following construction	Contractor	Applicant	
	WQ-2. Develop and Implement Dewatering Plan.	Prior to construction	Applicant	Applicant	
	WQ-3. Develop Stormwater Pollution	Prior to construction	Applicant	Applicant	

	<p>Prevention Plan (SWPP) and Implement Water Quality Best Management Practices. The SWPPP must include a waste management section that provides procedural and structural BMPs for collecting, handling, storing, and disposing of wastes generated by the construction project to prevent the accidental release of pollutants during construction. The SWPPP also includes measures to report, contain, and mitigate for any accidental spills during construction. Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) shall be cleaned up in accordance with applicable local, state, and/or federal regulations.</p>				
	<p>WQ-4. The Contractor will install silt fencing, fiber rolls, or other equivalent erosion and</p>	<p>During and following construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	<p>sediment control measures between the designated work area and North Fork Cache Creek, as necessary, to ensure that construction debris and sediment does not inadvertently enter the waterway. Storage and stockpiling of earth materials near North Fork Cache Creek will be avoided if possible. To ensure that wildlife are not trapped, tightly woven fiber netting (no monofilament netting) or similar material shall be used for erosion control or other purposes within the Project work limits. Coconut coir matting and burlap-contained fiber rolls are an example of acceptable erosion control materials.</p>				
	<p>WQ-5. Immediately after bridge construction is complete, all exposed soil shall be stabilized. Soil stabilization may include, but is not limited to, seeding with a native</p>	<p>Following construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	<p>grass seed mix, planting native plants and placement of rock. Hydraulic mulch should be used in conjunction with a native seed mix applied to the disturbed soil. Disturbed soil areas and areas where existing pavement is removed would be reseeded using a California native plant seed blend. An erosion control seed mix (hydroseed) would be applied in disturbed soil area and on slopes flatter than 1:1. Erosion control (e.g., Bonded Fiber Matrix with a native plant seed blend) would be applied on all disturbed or cut slopes steeper than 1:1.</p>				
	<p>WQ-6. Sediment cleanup will be implemented anywhere sediment is tracked from the Project area and staging area onto public or private paved roads, typically at points of ingress/egress. For the Project, street</p>	<p>During construction</p>	<p>Contractor</p>	<p>Applicant</p>	

	sweeping may be used along Chalk Mountain Road.				
	WQ-7. If dewatering is required during pile construction, activities will need to account for changes in pH associated with concrete contact water. High pH water (pH > 8.5) must be managed to prevent any discharges to receiving waters. Discharges of high pH water to land (upland disposal) must be approved by the RWQCB prior to disposal.	During construction	Contractor/RWQCB	Applicant	
	WQ-8. To avoid waste products from pile driving operations, pile shells for construction of cast-in-steel-shell or cast-in-drilled-hole piles will be used in accordance to Caltrans Standard Specifications.	During construction	Contractor	Applicant	
	WQ-9. Use, storage, and disposal of materials and equipment on barges, boats, temporary construction pads, over or adjacent to a watercourse	During construction	Contractor	Applicant	

	will be performed according to Caltrans Standard Specifications.				
	WQ-10. During bridge demolition and removal, best management practices will be used to protect North Fork Cache Creek from debris and waste associated with the demolition. These measures include using attachments on construction equipment, platforms, or other means to catch debris.	During construction	Contractor	Applicant	
Noise					
NOS-1 to NOS-2: The project would have noise impacts during construction from equipment.	NOS-1. Construction operations are limited to daylight hours only (Monday to Friday, 7:00 AM to 7:00 PM).	During construction	Contractor		
	NOS-2. Use equipment with regulatory approved or meter muffling devices and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact	During construction	Contractor		

	and operational. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).				
	NOS-3. Utilize construction methods or equipment that shall provide the lowest level of noise and ground vibration impact such as drilled pile installation (i.e. use of CIDH piles) rather than pile driving.	During construction	Contractor	Applicant	
	NOS-4. Turn off idling equipment.	During construction	Contractor	Applicant	
	NOS-5. Provide information to the Community Center regarding the proposed Project and construction schedule.	Prior to construction	Applicant	Applicant	
Public Services					
PS-1: The project would possibly impact public services during construction.	PS-1. During construction, maintain access to the public day-use portion of Helen Mitcham Park through	During construction	Contractor	Applicant	

	Gate 2 throughout Project construction.				
	PS-2. Following construction, restore areas of construction disturbance, such as staging and access areas, to preconstruction conditions	After construction	Contractor	Applicant	
Tribal Cultural Resources					
CUL-1 to CUL-3: Tribal cultural resources could be affected during construction.	CUL-1. All earthmoving activity within and around the immediate discovery area shall be halted until an archaeologist who meets state and federal qualifications can assess the nature and significance of the find.	During construction	Contractor	Applicant	
	CUL-2. If human remains are discovered, contact the County Coroner. If the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission, which will then notify the Most Likely Descendant (MLD). At that time, the District 1 Environmental	During construction	Contractor/County Coroner	Contractor/County Coroner	

	Branch Chief or the District 1 Native American Coordinator will be contacted so that he/she may work with the MLD on the respectful treatment and disposition of the remains.				
	CUL-3. A Tribal Cultural Resource Monitor shall be present at the site during excavation activities under the conditions agreed upon by the County and Tribal government.	During construction	Contractor/Tribal Monitor	Applicant	