Mitigation Monitoring and Reporting Program

Deer Creek Erosion Repair Project

Prepared for:

Tehama Flood Control and Water Conservation District

March 2021

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Mitigation Monitoring and Reporting Program

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March 2021

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Acronyms and Other Abbreviations

BMPs	best management practices
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
District	Tehama County Flood Control and Water Conservation District
DOORS	Diesel Off-Road Online Reporting System
IS/MND	Initial Study/proposed Mitigated Negative Declaration
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NMFS	National Marine Fisheries Service
PRC	Public Resource Code
Project/proposed project	Deer Creek Erosion Control Project
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
TCAPCD	Tehama County Air Pollution Control District
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

Mitigation Monitoring and Reporting Program

In accordance with the California Environmental Quality Act (CEQA), the Tehama County Flood Control and Water Conservation District (District) prepared an Initial Study/proposed Mitigated Negative Declaration (IS/MND) in December 2020 to provide the public and responsible and trustee agencies with information about the potential environmental impacts associated with implementation of the Deer Creek Erosion Control Project (hereafter referred to as the "project" or "proposed project").

The IS/MND concludes that implementation of the proposed project would generate significant and potentially significant adverse effects on the environment. The IS/MND identifies feasible mitigation measures that avoid, mitigate, or reduce these impacts to a less-than-significant level.

Section 21081.6(a)(1) of the California Public Resources Code and Section 15097 of the State CEQA Guidelines require a public agency to adopt a reporting and monitoring program on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental impacts on the physical environment.

This Mitigation Monitoring and Reporting Program will be used by the District to ensure that mitigation measures identified in the MND are implemented as described and that their implementation is documented.

The Mitigation Monitoring and Reporting Program is presented in tabular format. The table columns contain the following information:

Mitigation Number: Lists the mitigation measures by number, as designated in the MND.

Mitigation Measure: Provides the text of the mitigation measures, each of which has been adopted and incorporated into the project. Changes made to mitigation measures in the IS/MND based on public comments are identified in ~~strikeout~~ text for deletions and <u>underlined</u> text for additions. These changes were made in accordance with Section 15074.1 of the State CEQA Guidelines

Timing/Schedule: Lists the time frame in which the mitigation measure is expected to take place.

Implementation Responsibility: Identifies the entity responsible for implementing the mitigation measure.

Completion of Implementation: The District is responsible for reporting on implementation of the mitigation measures. The "Completion of Implementation" column is to be used by the District to indicate when implementation of a mitigation measure has been completed. The District, at their discretion, may delegate implementation responsibility or portions thereof to qualified consultants or contractors.

Table 1. Mitigation Monitoring and Reporting Program for the Deer Creek Erosion Control Project

Mitigation Number	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Completion of Implementation
Air Quality				
AQ-1	**Implement Tehama County Air Pollution Control District (TCAPCD) Construction Best Management Practices** The District will require its construction contractor to implement the following measures during construction: ▪ Maintain all construction equipment in proper tune according to manufacturer's specifications. ▪ Maximize to the extent feasible, the use of diesel construction equipment meeting current California Air Resources Board certification standards for off-road heavy-duty diesel engines. ▪ If required by TCAPCD, all off-road heavy-duty diesel equipment greater than 50 horsepower used in project construction shall be registered with the Air Resources Board's Diesel Off-Road Online Reporting System (DOORS) and meet all applicable standards for replacement and/or retrofit. ▪ If required by TCAPCD, all portable equipment used in project construction, including generators and air compressors rated over 50 brake horsepower, shall be registered in the Portable Equipment Registration Program or permitted through the TCAPCD. ▪ Water shall be applied by means of truck(s), hoses, and/or sprinklers as needed prior to any land clearing or earth movement to minimize dust emission. ▪ Haul vehicles transporting soil into or out of the property shall be covered to reduce track out. ▪ Water shall be applied to disturbed areas a minimum of twice daily as necessary to reduce fugitive dust emissions.	During construction	The District and its construction contractor(s)	
Biological Resources				
BIO-1	**Implement Best Management Practices to Avoid and Minimize Impacts on Special-status Species and Habitats** ▪ Develop and implement an environmental awareness training program. This training shall be conducted by a qualified biologist and provided to all construction personnel before engaging in project-related activities. Environmental awareness training shall include descriptions of all special-status wildlife species potentially occurring in the project area, their habitats, and methods of identification, including visual aids as appropriate, and shall also describe activity specific measures required to minimize and avoid impacts. ▪ Retain a qualified biologist to conduct biological surveys prior to ground-disturbing activities and to provide monitoring during excavation activities. The biologist shall ensure that the project proponent implements best management practices to	Before, during, and after construction	The District and its construction contractor(s)	

Table 1. Mitigation Monitoring and Reporting Program for the Deer Creek Erosion Control Project

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	avoid and minimize impacts and shall document compliance with all biological resource-related mitigation measures. ▪ Limit ground disturbance to the minimum area necessary. Prior to ground-disturbing activities, project construction boundaries and access areas will be flagged and temporarily fenced during construction to reduce the potential for vehicles and equipment to stray into adjacent habitats. ▪ Erosion control measures will be implemented to reduce sedimentation in nearby aquatic habitat when activities are the source of potential erosion. ▪ Prior to initiation of repair activities, the retained biologist will identify potential riparian habitat, shaded riverine aquatic cover, and native oaks, and mark the boundaries of these areas using temporary fencing, high-visibility flagging, or other means that are equally effective in clearly delineating the boundaries. When feasible, repair activities will be excluded from these areas. In many situations, equipment can be operated to avoid disturbing isolated riparian trees or low-height riparian scrub habitat. ▪ Vegetation within the proposed work area will be removed prior to grading. Prior to clearing and grubbing operations, a qualified biologist will clearly mark vegetation within the work area that will be avoided. Vegetation outside the work area will not be removed. All vegetation removal will be monitored by the qualified biologist to minimize impacts on special-status species. ▪ Prohibit firearms, open fires, hunting, and pets on the project site. ▪ All vehicles and heavy equipment will be inspected for the presence of wildlife before the start of each workday when equipment is staged overnight. ▪ Construction vehicles and equipment will be checked daily for leaks and will be properly maintained to prevent contamination of soil or water from external grease and oil or from leaking hydraulic fluid, fuel, oil, and grease. ▪ All project-related trash items, such as wrappers, cans, bottles, and food scraps, will be collected in closed containers, removed from the repair site each day, and disposed of at an appropriate off-site location to minimize attracting wildlife to the work area. ▪ The amount of revetment and similar materials used for bank protection and other repair activities will be limited to the amount necessary to ensure proper flood protection system integrity and function. ▪ Temporary fill, construction debris, and refuse will be removed and properly disposed of following completion of repair activities. ▪ Habitats, including sensitive natural communities, will be restored to pre-project conditions wherever feasible.			

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BIO-2	**Implement Protection Measures for the Valley Elderberry Longhorn Beetle** ▪ All suitable elderberry shrubs (i.e., shrubs with stem diameters of at least 1 inch when measured at ground level) will be avoided if not designated for removal or trimming. ▪ A 20-foot buffer will be established from the dripline of any elderberry shrubs within the project limits to be avoided. These buffers will be avoided by all personnel and repair activities. Shrubs will be flagged or temporarily fenced, as needed, with guidance from the Designated Biologist and designated as biologically sensitive areas. When feasible, fencing will be placed at the buffer.	Before and during construction	The District and its construction contractor(s)	
BIO-3	**Implement Measures to Minimize Injury, Mortality, or Disruption to Fish Species** ▪ Instream construction activities shall occur between July 15 and October 15 to avoid adverse impacts to Chinook salmon. Instream work could start sooner if California Department of Fish and Wildlife (CDFW) determines that the adult spring-run Chinook salmon are no longer present based on environmental conditions and real time passage data. Instream work could also be extended if environmental conditions which would preclude juvenile steelhead and spring-run Chinook salmon emigration or adult steelhead and late-fall-run Chinook salmon immigration are expected to persist. Instream work outside of the July 15 to October 15 work window must be approved by CDFW and Nation Marine and Fisheries Service (NMFS) with details on how take will be avoided and/or minimized. ▪ Instream work shall only occur for up to 12 hours per day to allow a 12-hour window of time for fish to migrate through without noise disturbance. ▪ Prior to beginning instream work, the excavator bucket shall be operated to “tap” the surface of the water. ▪ Instream operation of the excavator bucket shall be conducted slowly and deliberately to allow fish time to seek refuge outside the work area.	Before and throughout the in-water construction period	The District and its construction contractor(s)	
BIO-4	**Implement Measures to Avoid, Minimize, and if Necessary, Compensate for Impacts on Critical Habitat** ▪ Impacts on instream habitat and riparian vegetation that provide shaded riverine aquatic habitat shall be avoided to the maximum extent practicable during development of the final project footprint. Habitat to be avoided shall be clearly designated as environmentally sensitive areas, and these areas shall be avoided by all construction personnel. Impacts also shall be minimized by retaining the integrity of important critical habitat features to the maximum extent feasible. ▪ If permanent impacts on critical habitat cannot be adequately avoided and minimized, an appropriate and feasible mitigation plan shall be developed in consultation with NMFS and the California Department of Fish and Wildlife. If	In coordination and compliance with regulatory agencies during the permitting process	The District and its construction contractor(s)	

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	required, compensatory mitigation may include preserving, enhancing, and/or restoring habitat along the creek (outside of the project footprint) and/or at an off-site location. Compensation also may include purchase of credits at a NMFS-approved mitigation bank.			
BIO-5	**Implement Protection Measures for the Western Pond Turtle** ▪ A qualified biologist shall conduct pre-construction surveys for western pond turtle in suitable upland and aquatic habitat ~~within 48 hours prior to the start of construction activities~~ and on the morning of the start of work. If there is a lapse in construction activities of 2 weeks or greater, the area shall be resurveyed within 24 hours prior to recommencement of work. ▪ If western pond turtles are observed within the project area during project construction, CDFW shall be notified and construction activities in the vicinity shall cease until protective measures are implemented or it is determined that the pond turtle will not be harmed. If it is determined that the pond turtle would be harmed by continued construction activities, a qualified biologist possessing a valid Scientific Collecting Permit (SCP) shall move the western pond turtle to a suitable location outside of the project area. The location area(s) will be determined prior to the start of work and approved by CDFW.	Before and during construction	District and its construction contractor(s)	
BIO-6	**Conduct Pre-construction Nesting Bird Surveys During the Nesting Season** ▪ If construction is scheduled to occur during the bird nesting season (February 1 through August 31), pre-construction nesting bird surveys shall be conducted by a qualified biologist in all suitable nesting habitats within the project area. ▪ Nesting surveys shall be conducted in accordance with the recommended timing, methodology, and or/protocol for each bird species. ▪ Surveys shall also include a 0.25-mile radius outside of the project area for Swainson's hawk, white-tailed kite, and bald eagle, and a 500-foot radius outside of the project area for other nesting birds. ▪ Surveys shall be conducted not more than 5 days prior to the start of construction, or as prescribed by established survey protocols.	Before construction	District and its construction contractor(s)	
BIO-7	**Establish Nest Protection Buffers for Active Bird Nests** ▪ If an active bird nest is located in the survey area, an appropriate nest protection buffer shall be established by a qualified biologist based on the species, type of construction activities, and line of sight to the work area. Under this measure, nesting birds and offspring would not be disturbed or killed, and nests and eggs would not be destroyed. ▪ Work shall be conducted no less than 500 feet from an active raptor nest and 100 feet from an active migratory bird nest, though buffer distances for all nesting	Before construction	District and its construction contractor(s)	

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	birds may differ based on consultation with CDFW and U.S. Fish and Wildlife Service (USFWS). ▪ To prevent encroachment, the established buffer(s) shall be clearly marked by high-visibility material if it has been determined by the qualified biologist that high-visibility material would not attract predators to the nest site. No construction activities, including tree removal, shall occur within the buffer zone until the young have fledged or the nest is no longer active, as confirmed by the qualified biologist.			
BIO-8	**Monitor Active Bird Nests Within Nest Protection Buffer** ▪ If project activities must occur within established buffer zones, a qualified biologist shall establish monitoring measures, including frequency and duration, based on species, individual behavior, and type of construction activities. ▪ If birds are showing signs of distress within the established buffer(s), work activities shall be modified, or the buffer(s) shall be expanded, to prevent birds from abandoning their nest. ▪ At any time, the biologist shall have the authority to halt work if there are any signs of distress or disturbance that may lead to nest abandonment. Work shall not resume until corrective measures have been taken or it is determined that continued activity would not adversely affect nest success.	Before and during construction	District and its construction contractor(s)	
BIO-9	**Conduct Pre-construction Surveys for Special-status Bats** ▪ A qualified biologist shall conduct pre-construction surveys of all trees proposed for removal for western red bat, pallid bat, and maternity roosts within 24 hours prior to the start of construction activities. Pre-construction survey methods and equipment will be provided to CDFW prior to the start of surveys. ▪ If the tree removal lapses for more than 24 hours after the survey, an additional survey will be required.	Before and during construction	District and its construction contractor(s)	
BIO-10	**Implement Protective Measures during Removal of Trees with Bat Roosts** ▪ All removal of trees with bat roosts shall be conducted between September 1 and October 30, which corresponds to a time period when bats would not be caring for non-volant young and have not yet entered torpor, or after October 30 to avoid impacts to hibernating bats (or earlier than October 30 if evening temperatures fall below 45 degrees Fahrenheit and/or more than a half inch of rainfall occurs within 24 hours). ▪ If a non-maternity roost is found in a tree that must be removed or trimmed between September 1 and October 30, a qualified biologist shall monitor tree removal/trimming. Tree removal/trimming shall occur over 2 consecutive days. On the first day in the afternoon, limbs and branches shall be removed using chainsaws only. Limbs with cavities, crevices, or deep bark fissures shall be	Before and during construction	District and its construction contractor(s)	

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	avoided, and only branches or limbs without those features shall be removed. On the second day, the entire tree shall be removed. Prior to tree removal/trimming, each tree shall be shaken gently and several minutes shall pass before felling trees or limbs to allow bats time to arouse and leave the tree. The biologist shall search downed vegetation for dead or injured bat species and report any dead or injured special-status bat species to CDFW. ▪ If a maternity roost is identified, a no-disturbance buffer shall be established and maintained until a qualified biologist determines that the roost is no longer active.			
BIO-11	**Compensate for Impacts to Waters of the United States** If impacts to waters of the United States cannot be feasibly avoided, the District shall implement one of the following compensatory measures: ▪ Pay in-lieu fees for wetlands or waters of the United States permanent impacts authorized by U.S. Army Corps of Engineers (USACE) through the in-lieu fee program of the Sacramento District of the USACE and administered by the National Fish and Wildlife Foundation, at a ratio determined in consultation with USACE, or ▪ Secure waters of the United States credits at a USACE-approved mitigation bank for permanent impacts at the repair site at a ratio determined in consultation with USACE.	Before construction	District and its construction contractor(s)	
Cultural Resources				
CR-1	**Implement Procedures for Inadvertent Discovery of Cultural Material.** ▪ If an inadvertent discovery of buried or otherwise previously unidentified historical resources, including archaeological resources (e.g., unusual amounts of shell, animal bone, any human remains, bottle glass, ceramics, building remains), is made at any time during project-related construction activities or project planning, the District, with input from other interested parties, will develop and implement appropriate protection and avoidance measures, where feasible. If such resources are discovered during project construction, all work within a 100-foot radius of the find shall cease. Tehama County shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeologists to assess the discovery and recommend what, if any, further treatment or investigation is necessary for the find. Culturally affiliated Native American Tribes will also be contacted concerning resources of Native American origin. Avoidance is the preferred CEQA mitigation measure for cultural resources. If avoidance is not possible, any necessary treatment/investigation shall be developed in coordination with interested Native American Tribes providing recommendations to Tehama County and shall be completed before project activities continue in the vicinity of the find. An inadvertent discovery plan	Before and during construction	District and its construction contractor(s)	

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	shall be developed before construction begins and shall be implemented in the event of a discovery during project construction.			
CR-2	**Avoid Potential Effects to Previously Unknown Human Remains.** ▪ If an inadvertent discovery of human remains is made at any time during project-related construction activities or project planning, the District and its construction contractors will implement the procedures listed below. If human remains are identified on the project site, the following performance standards shall be met prior to implementing or continuing actions, such as construction, that may result in damage to or destruction of human remains: ▪ In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the District will immediately halt potentially damaging excavation in the area of the burial and notify the Tehama County Coroner and a professional archaeologist to determine the nature of the remains. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or State lands (California Health and Safety Code Section 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (California Health and Safety Code Section 7050[c]). After the Coroner's findings have been made, the archaeologist and the NAHC-designated Most Likely Descendant (MLD), in consultation with the landowner, shall determine the ultimate treatment and disposition of the remains. The responsibilities of the District for acting upon notification of a discovery of Native American human remains are identified in Public Resource Code (PRC) Section 5097.9 et seq. ▪ Upon the discovery of Native American human remains, the District will require that all construction work within 100 feet of the discovery stop, until consultation with the MLD has taken place. The MLD will have 48 hours to complete a site inspection and make recommendations to the landowner after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal, preservation in place, relinquishment of the remains and associated items to the descendants, or other culturally appropriate treatment may be discussed. Public Resources Code Section 5097.98(b)(2) suggests that the concerned parties may mutually agree to extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. ▪ If agreed to by the MLD and the landowner, the District or its authorized representative will rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. If the NAHC is unable to identify an MLD, or if the MLD fails to make a recommendation within 48 hours after being granted access	During construction	District and its construction contractor(s)	

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	to the site, the District or its authorized representative may also reinter the remains at a location not subject to further disturbance if recommendation of the MLD is rejected and mediation by the NAHC fails to provide measures acceptable to the District. ▪ If the human remains are of historic age and are determined not to be of Native American origin, the District will follow the provisions of the California Health and Safety Code Section 7000 (et seq.) regarding the disinterment and removal of non-Native American human remains.			
Geology and Soils				
GEO-1	**Implement a Stormwater Pollution Prevention Plan and Associated Best Management Practices.** ▪ Prior to initiating and during construction, the District will prepare and implement the appropriate Stormwater Pollution Prevention Plan (SWPPP), or Stormwater Management Plan (SWMP), as needed, to prevent and control pollution and to minimize and control runoff and erosion in compliance with State and local laws. The SWPPP or SWMP will identify the activities that may cause pollutant discharge (including sediment) during storms or strong wind events, techniques to control pollutant discharge, and an erosion control plan. Regardless of the need for a SWPPP or SWMP, construction techniques and Best Management Practices (BMPs) will be identified and implemented, as appropriate to reduce the potential for runoff and exposure to hazardous materials. Construction techniques will include minimizing site disturbance, controlling water flow over the construction site, stabilizing bare soil, and ensuring proper site cleanup. BMPs that specify erosion and sedimentation control measures to be implemented may include silt fences, staked straw bales/wattles, silt/sediment basins and traps, geofabric, trench plugs, terraces, water bars, soil stabilizers, re-seeding with native species, and mulching to revegetate disturbed areas. If suitable vegetation cannot reasonably be expected to become established, non-erodible material will be used for such stabilization. The SWPPP or SWMP shall also include a spill prevention, control, and countermeasure plan, and applicable hazardous materials business plans. The SWPPP or SWMP shall identify the types of materials used for equipment operation (including fuel and hydraulic fluids), measures to prevent hazardous material and waste spills, and materials available to clean up hazardous material and waste spills. The SWPPP or SWMP shall also identify emergency procedures for responding to spills. The SWPPP shall also include dust control practices to prevent wind erosion, sediment tracking, and dust generation by construction equipment.	Before and during construction	District and its construction contractor(s)	

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	The BMPs presented in either document shall be clearly identified, and they and all construction equipment and vehicles will be maintained in good working condition throughout the construction process. The construction contractor shall retain a copy of the approved SWPPP or SWMP on the construction site and modify it as necessary to suit specific site conditions. The District and all contractors will abide by regulations governing hazardous materials transport included in California Code of Regulations (CCR) Title 22, the California Vehicle Code (CCR Title 13), and the State Fire Marshal Regulations (CCR Title 19). Transport of hazardous materials can only be conducted under a registration issued by the California Department of Toxic Substances Control. Construction contractors shall be required to use, store, and transport hazardous materials in compliance with Federal, State, and local regulations.			