Mitigation Monitoring and Reporting Program
Delta Dams Rodent Burrow Remediation Project

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Mitigation Monitoring and Reporting Program

Introduction

Section 15097 of the State of California Environmental Quality Act (CEQA) Guidelines requires that, upon adoption of a Mitigated Negative Declaration, "the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects."

This Mitigation Monitoring and Reporting Program has been developed in compliance with Section 21081.6 of CEQA and Section 15097 of the CEQA Guidelines, and it includes the following information:

- The full text of each mitigation measure,
- The timing for implementation of the mitigation measures,
- The party(ies) responsible for implementing the mitigation measures,
- The party(ies) responsible for monitoring implementation of the mitigation measures, and
- Performance criteria that must be attained through mitigation measure implementation.

Delta Dams Rodent Burrow Remediation Project Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
Biological Resources			
BIO-1: Avoid or Minimize Impacts on Native Plants and Wildlife. To avoid or minimize impacts on plants and wildlife, the following general measures shall be implemented throughout the Project site: • Approved Biologists. At least 15 days prior to start of Project activities, the California Department of Water Resources (DWR) shall submit the names and credentials of personnel seeking to act as approved biologists to the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) for review. Biologists shall have appropriate training and experience with the species for which they are seeking approval. All biologists shall be approved in writing by USFWS and CDFW prior to conducting proposed Project activities. • Environmental Awareness Training. An approved biologist shall conduct environmental awareness training for all individuals working on the Project before work begins. The training shall cover the life history, habitat requirements, and conservation measures for potentially affected species. The training shall also include information on federal and state regulatory protections, restrictions, and guidelines that must be followed by crews to avoid and minimize impacts to threatened and endangered species and their habitat. Upon completion of training, crews shall sign a form stating that they attended the training and understand all conservation measures. If new personnel are added	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR USFWS and CDFW for approval of qualified biologist(s)	Prior to Project activities: • Biologists qualifications submitted (15 days prior) • Environmental awareness training conducted • Spill Prevention Control and Countermeasure Plan and Fire Prevention and Suppression Plan prepared During Project activities: • Approved biologist(s) inspections • Speed limits, traffic prohibitions, trash abatement, spill and fire prevention measures implemented At Project completion: • Final report submitted within 30 days of Project completion	• USFWS and CDFW approve qualified biologist(s) • Environmental awareness training is completed for all construction personnel before they begin work • Project activity areas are surveyed weekly • Traffic and trash are managed to minimize disturbance of plants and wildlife • Hazardous materials are controlled • Fire risk is minimized and any fires that occur are suppressed before disturbance of plants and wildlife can occur • Final report documents species encountered

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
to the Project, the new personnel shall receive the training prior to starting work. • Approved Biologist Authority. An approved biologist shall be available to inspect all Project activities to ensure compliance with avoidance and minimization measures and shall monitor all ground-disturbing activities. Approved biologists shall perform weekly surveys of the Project area to ensure appropriate application of all general and species measures. Approved biologists shall have the authority to stop work if a listed species is encountered within active work areas or activities may result in take of listed species. • Speed Limits. Project-related vehicles shall observe a daytime speed limit of 15 mph, except on county roads and state and federal highways. Emergency vehicles are exempt from these restrictions in emergency situations. • Off-Road Traffic Prohibition. Off-road traffic outside of designated Project areas shall be prohibited. • Trash Abatement. All food-related trash items, such as wrappers, cans, bottles, and food scraps, shall be disposed of in a closed container and removed from the Project site daily. • Spill Prevention. A Spill Prevention Control and Countermeasure Plan shall be prepared prior to Project implementation. All machinery shall be properly maintained and cleaned to prevent spills and leaks. Any spills or leaks from equipment shall be reported and cleaned up in accordance with applicable local, state, and/or federal regulations. • Fire Prevention. A Fire Prevention and Suppression Plan shall be prepared prior to the start of Project activities. • Reporting. A final report containing details of the construction activities and any observations of listed species shall be submitted to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife			

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
within 30 days of Project completion. The report shall document the number of each species encountered.			
BIO-2: Avoid, Minimize, and Mitigate Impacts to Special-Status Plants. Permanent and temporary impacts to long-styled sand-spurrey (California Rare Plant Rank [CRPR] 1B.2) individuals would result from implementation of the Project at Clifton Court Forebay Dam; these impacts are significant and require mitigation. Compensatory mitigation for permanent impacts to long-styled sand-spurrey shall include one of the following: a. The protection, through land acquisition or a conservation easement, of land that supports an equal or greater number of plants of similar health. Or, b. Salvage and relocation or propagation of impacted plants to create a new population on suitable unoccupied habitat or expand the existing Clifton Court Forebay population at a 1:1 ratio. Plant relocation or propagation would be subject to the following requirements: • A special-status plant mitigation plan shall be prepared by a qualified biologist and include (1) seed/propagule collection methods, (2) identification of receiver sites or locations for relocated or propagated plants and rationale for their selection, (3) success criteria for population establishment, including a not-to-exceed threshold for invasive species cover, (4) 5 years of maintenance and monitoring, (5) the adaptive management approaches that would be used to evaluate monitoring results and adjust management actions, if necessary, and (6) financial assurances for the funding of special-status plant mitigation. • Prior to disturbance of the existing long-styled sand-spurrey population, propagules shall be collected. This	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR	<u>At Clifton Court Forebay only</u> Prior to Project activities: • DWR-qualified biologist flags the population or natural community areas and buffers • If salvage and relocation/propagation is implemented, special-status plant salvage, relocation, and propagation plan is prepared and propagules are collected before the existing long-styled sand-spurrey population is disturbed During Project activities: • DWR-qualified biologist observes activities to ensure avoidance of disturbance to flagged areas	Compensatory mitigation results in no net loss of species population and range

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
may include seed collection, cuttings, or seed-bearing topsoil salvage, and these propagules shall be used to establish a new population on suitable, unoccupied habitat or expand the existing population, as described above. Transplantation of whole plants may be attempted, but shall not be used as the primary means for creating a new occurrence or expanding an existing occurrence. • The biologist shall conduct a literature review to determine appropriate and viable propagation or planting techniques for the species, appropriate seed-collection techniques, and seeding rates. Compensatory mitigation for temporary impacts to long-styled sand-spurrey shall include salvage of the affected topsoil and restoration of the temporary impact area at a 1:1 ratio. Methods for salvaging, storing, and reapplying topsoil before, during, and after construction, respectively, shall be incorporated into the special-status plant mitigation plan described above. Other plan components as described above (i.e., monitoring and adaptive management) shall also apply to the on-site restoration area. Additionally, a qualified California Department of Water Resources (DWR) biologist (qualified biologist) shall be present prior to and during construction to ensure avoidance of impacts on special-status plant species and special-status natural communities by flagging the population or natural community areas and/or allowing adequate buffers.			
BIO-3: Avoid, Minimize, and Mitigate Impacts to Sensitive Natural Communities. The Project would result in permanent and temporary impacts to sensitive vegetation communities at Clifton Court Forebay Dam and Dyer Dam; these impacts are significant and require mitigation. All temporary impacts to sensitive vegetation communities shall be restored on site. Restoration shall include	**Implementation:** DWR, approved qualified biologist(s) **Monitoring:** DWR	<u>At Clifton Court Forebay Dam and Dyer Dam</u> Prior to Project activities: • Mitigation bank credits or in-lieu fees paid for permanent impacts	Compensation is provided for permanent impacts to sensitive vegetation communities Sensitive vegetation communities temporarily

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
recontouring and seeding and/or planting with native plants that comprise the sensitive natural community impact. Prior to seeding and/or planting the temporary ground-disturbance areas, the approved biologist shall review the seeding/plant palette to ensure that seeding/planting does not contain non-native or invasive plant species, as identified in the most recent version of the California Invasive Plant Inventory for the region. The California Department of Water Resources (DWR) shall ensure recontouring and revegetation of disturbed portions of sensitive vegetation communities in areas temporarily affected by construction within 1 year of demobilization by the contractor during the appropriate seasonal period for revegetation. Mitigation for permanent impacts to sensitive natural communities shall occur at a mitigation bank or within an in-lieu fee program, and shall occur at a ratio no less than 1:1 for the impacts to sensitive natural communities.		After Project completion: • Temporarily disturbed areas are restored within 1 year of contractor demobilization	disturbed are restored to pre-Project conditions
BIO-4: Minimize Temporary Impacts on Potential Vernal Pool Fairy Shrimp Habitat. Prior to constructing the temporary toe access road adjacent to potential vernal pool fairy shrimp habitat at Clifton Court Forebay Dam (i.e., 5.36-acre wetland outboard of Stations 32 + 00 to 64 + 00), an approved biologist shall direct the placement of erosion control fencing along the downstream (southern) perimeter of the access road to avoid sedimentation of adjacent habitat. The biologist shall also direct the placement of rinsed gravel and covering with geotextile fabric over any depressions overlapping the road's footprint to minimize damage to the soils and protect existing contours. Erosion control fencing and temporary fill shall be removed within 72 hours of the completion of burrow remediation activities at this location.	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR	<u>At Clifton Court Forebay Stations 32+00 to 64+00</u> Prior to construction of the temporary toe access • Erosion control fencing placed At completion of burrow remediation • Erosion control fencing removed within 72 hours	Erosion control and temporary fill is placed in applicable areas prior to project activities and fencing is removed upon completion

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
BIO-5: Avoid and Minimize Impacts to California Tiger Salamander and California Red-legged Frog. This mitigation measure identifies two separate sets of requirements—one for Clifton Court Forebay Dam and the other for both Dyer Dam and Patterson Dam. Clifton Court Forebay Dam: The following measure shall be implemented to avoid take of individual California tiger salamanders in low-quality grassland and iodine bush scrub upland habitat south of-Clifton Court Forebay Dam: • California Tiger Salamander Take Avoidance. The Project shall be performed during daylight hours, and work along the southern dam embankment (Stations 3+15 to 85+00) shall begin on or after June 1 and be completed by October 31 of each year. Within seven days prior to clearing existing vegetation for the staging areas in this area, an approved biologist shall survey for the presence of potential underground refugia for California tiger salamander (i.e., small mammal burrows). If potential refugia are observed, they shall be excavated by hand (e.g., shovels and non-powered hand tools) to confirm California tiger salamander absence. An approved biologist shall monitor all refugia excavation. All excavated burrows shall be backfilled after the biologist confirms that tiger salamanders are absent. If any California tiger salamanders are found, the approved biologist shall stop any Project activities that could potentially result in California tiger salamander take and reinitiate consultation with USFWS and CDFW. No tiger salamanders would be captured or relocated under this measure. If no tiger salamanders are found during burrow excavation, temporary exclusion fencing shall be installed along the boundary of the Project where burrows were excavated to prevent amphibians from entering. Exclusion fencing shall be a minimum of 2.5	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR	At Clifton Court Forebay Stations 3+15 to 85+00 Prior to Project activities: • Within 7 days prior to clearing existing vegetation for staging areas, qualified biologist shall conduct surveys for potential California tiger salamander refugia • Any potential refugia are excavated by hand, with monitoring by the qualified biologist, backfilled if tiger salamanders are absent and exclusion fencing installed • If tiger salamanders are present, all Project activities that could result in take shall be stopped until consultation is complete During Project activities • Project activities may occur only between June 1 and October 31 and only during daylight hours • If exclusion fencing must be removed temporarily, it is replaced within 72 hours of completion of work	Take of California tiger salamander and California red-legged frog is avoided

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
feet tall and the bottom 6 inches shall be buried to prevent amphibians from crawling under the fence. During work hours, a portion of the fencing around upland staging areas may be removed to facilitate Project activities, but must be reinstalled at the end of the day and the bottom secured with sandbags or other heavy material. When sections are removed, the section shall be reviewed for resting or hiding species prior to removal. Exclusion fencing shall be removed within 72 hours of completion of work. Dyer Dam and Patterson Dam: The following measures shall be implemented to avoid and minimize impacts on California tiger salamander and California red-legged frog at Dyer Dam and Patterson Dam: • Work Window. The Project shall be performed during daylight hours, and any work in wetted areas shall occur between May 1 and October 31. • Access Road Burrow Protection. Any burrows or large cracks in the ground that may be traversed by heavy equipment traffic over unimproved access roads shall be covered with minimum 5/8-inch-thick plywood to prevent burrow collapse. • Relocation Plan. Prior to implementation of this measure, a relocation plan shall be developed that outlines the specific methods for safely capturing, holding, transporting, and releasing California tiger salamanders and California red-legged frogs, including equipment sterilization techniques. The plan shall also outline where relocated individuals will be moved and a process for reducing oversaturation. • Morning Inspections. An approved biologist shall survey the work area for California red-legged frogs and California tiger salamanders each morning prior to Project activities. Any California red-legged frog or		At Dyer Dam and Patterson Dam: Prior to Project activities • Relocation plan prepared • Exclusion fencing installed • Plywood covers placed over burrows and large cracks that may be traversed by heavy equipment During Project activities • Project activities may occur only in daylight hours between May 1 and October 31 • Qualified biologist conducts surveys each morning prior to work beginning • Vegetation and sediment removed from drainages examined approved biologists prior to disposal	

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
California tiger salamander found in the work area shall be captured, transported to a predetermined relocation site, and released. Only approved biologists shall capture and handle frogs or salamanders. The biologist shall monitor any relocated frog or salamander until such time that the animal is safe from any obvious or immediate hazard or danger. • Amphibian Exclusion Fencing. Exclusion fencing shall be installed between work areas and adjacent habitat for California red-legged frog and California tiger salamander. The fence shall be a minimum of 2.5 feet tall and the bottom 6 inches shall be buried to prevent amphibians from crawling under the fence. Placement and installation of fencing around drainage work areas shall be coordinated with any sediment control fencing requirements of other resource agency permits. During work hours, a portion of the fencing around upland staging areas may be removed to facilitate Project activities, but must be reinstalled at the end of the day and the bottom secured with sandbags or other heavy material. When sections are removed, the section shall be reviewed for resting or hiding species prior to removal. The exclusion fencing shall be maintained until all construction activities are completed and removed within 72 hours of the completion of work. • Vegetation Removal Inspections. Vegetation and sediment removed from drainages shall be carefully placed in the dump truck bed and examined for frogs and salamanders by approved biologists prior to disposal. • Impacts on areas determined to be habitat for California tiger salamander and California red-legged frog shall be fully mitigated, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife.			

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BIO-6: Avoid and Minimize Impacts to Western Pond Turtle. To minimize impacts on western pond turtles known to nest at the northeastern corner of Clifton Court Forebay, burrow remediation activities adjacent to the drainage along the toe access road (Stations 230+00 to 262+00, approximately) shall occur from May 1 to June 15 and September 1 to October 15 to avoid the peak nesting period (mid-June to August) and minimize mortality of hatchlings overwintering in nest sites (approximately November to April).	**Implementation:** DWR, construction contractor(s) **Monitoring:** DWR	At Clifton Court Forebay Stations 230+00 to 262+00 During Project activities • Work may only occur between May 1 and June 15 and between September 1 and October 15	Impacts to western pond turtle are minimized
BIO-7: Avoid and Minimize Impacts to Special-Status and Non-Special-Status Birds. The following measures shall be implemented throughout the Project to avoid and minimize impacts to nesting birds, including special-status species: • A qualified biologist shall conduct preconstruction surveys for nesting birds no more than 7 days prior to any construction activity involving vegetation removal (i.e., grubbing of herbaceous vegetation and grass, removal of trees or shrubs) that begins between March 15 and August 31 and shall resurvey if there is a four-day or more lapse in construction activities during this period. Surveys shall cover the construction footprint and suitable habitat within 100 feet for all birds, 300 feet for raptors (including white-tailed kite and northern harrier) and tricolored blackbird, and 0.25 miles for Swainson's hawk. If the biologist does not find any nests but suitable habitat would be removed, the biologist shall conduct a final survey of such habitat and areas within 100 feet of the habitat within 48 hours of the activity to confirm the absence of nests. Any construction activity that occurs from September 1 to March 14 shall not require preconstruction nesting bird surveys. Work along the southern dam embankment at Clifton Court Forebay between Stations 3+15 to 85+00 shall begin on or after June 1 and be completed by October 31 of each year.	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR	Prior to Project activities • Preconstruction nesting bird surveys conducted no more than 7 days prior • Nondisturbance buffer zone established if active nests are located During Project activities • Nesting bird surveys repeated if there is a 4-day or more lapse in construction activities • No Project activities occur within nondisturbance zones • Work at the southern dam embankment at Clifton Court Forebay between Stations 3+15 to 85+00 may occur only between June 1 and October 31 of each year	Disturbance of nesting birds is avoided

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
• If nests are located during preconstruction surveys, impacts shall be minimized by establishing an appropriate nondisturbance buffer zone around active nests or vegetation patches supporting nesting birds. The size of the buffer shall be determined by the biologist based on the species' sensitivity to disturbance, time of year, and planned work activities in the vicinity. The buffer shall remain in effect until the nest is no longer active. Buffers for Swainson's hawk nests shall be based on the guidance in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (SHTAC 2000).			
BIO-8: Avoid and Minimize Impacts to Burrowing Owl. The following measures shall be implemented throughout the Project to avoid and minimize impacts to burrowing owl: • A qualified biologist shall conduct a burrowing owl take avoidance survey no more than 14 days prior to the initiation of any construction activities within burrowing owl habitat areas as identified during 2021 field surveys (Appendix B). Surveys shall cover the construction footprint and suitable habitat within 250 feet. • If an active burrow is found during the nesting season (March 15 to August 31), clear, visible markers will be placed on the roadways to clearly demarcate the burrow location so vehicles traveling either direction on the road and workers at the project site will avoid disturbing the area. If the burrow is in a proposed work area and work cannot be postponed until after the nesting season, a no-activity zone will be established by a qualified biologist and will at a minimum be 250-feet radius from the occupied burrow, following recommendations in the CDFW Staff Report on Burrowing Owl Mitigation (CDFG 2012).	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR, USFWS, CDFW	Prior to Project activities • Burrowing owl take avoidance survey conducted no more than 14 days prior • Avoidance markers are placed by qualified biologist if active burrows are located during the nesting season • No activity zone is established by qualified biologist if burrowing owls are present during the non-breeding season • If no-activity zone is infeasible, qualified biologist develops an impact avoidance plan During Project activities • No work occurs within avoidance/no-activity zones	Impacts to burrowing owl are avoided or minimized

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
• If burrowing owls are present at the site during the non-breeding period, a qualified biologist will establish a no-activity zone of at least 160 feet. • If an effective no-activity zone cannot be established in either case, a qualified biologist will develop a site-specific plan (i.e., a plan that considers the type and extent of the proposed activity, the duration and timing of the activity, the sensitivity and habituation of the owls, and the dissimilarity of the proposed activity with background activities) to minimize the potential to affect the reproductive success of the owls.			
BIO-9: Avoid and Minimize Impacts to San Joaquin Kit Fox. Any potential kit fox dens identified during 2021 field surveys (Appendix B) that are on California Department of Water Resources (DWR) property and located within 50 feet of the Project site shall be temporarily blocked with burlap bags or filled with soil (after three consecutive nights of tracking or game camera monitoring have confirmed that the den is not currently in use) to prevent access to these dens during Project activities. If a den is determined to be a natal den, then exclusion may not occur until the family has moved to another den location. A 100-foot exclusion zone shall be marked around any known kit fox dens within the survey area using lathe and flagging. The U.S. Fish and Wildlife Service (USFWS) Standardized Recommendations for the Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance (January 2011) or the latest guidance from the USFWS shall be referenced when implementing this measure.	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s) **Monitoring:** DWR	Prior to Project activities within 50 feet of potential kit fox den sites • Potential kit fox dens are subject to three consecutive nights of tracking or game camera monitoring • Dens not currently in use are temporarily blocked • A 100-foot exclusion zone is marked around any active dens • Blocking of natal dens occurs only after the family has relocated During Project activities No work occurs within exclusion zones	Unused fox dens shall be blocked during construction and construction activities shall not occur within 100 feet of any active dens
BIO-10: Avoid and Minimize Impacts to American Badger. Within 14 days prior to the initiation of Project activities within 100 feet of potential badger dens identified during 2021 field surveys (Appendix B) and concurrent with the take avoidance surveys for burrowing owl, a qualified	**Implementation:** DWR, approved qualified biologist(s),	Prior to Project activities within 100 feet of potential badger dens • Areas within 100 feet of potential badger dens are	Unused badger dens are blocked during construction and seasonal limitations/exclusion areas/passive relocation is

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
biologist shall perform a survey to identify the presence of active or inactive American badger dens. If this species is not found, no further mitigation shall be required. If badger dens are identified within the construction footprint during the surveys or afterwards, dens shall be inspected and closed as follows: • When unoccupied dens are encountered outside of work areas but within 100 feet of proposed activities, vacated dens shall be inspected to ensure they are empty and temporarily covered using plywood sheets or similar materials. If badger occupancy is determined at a given site within the work area, work activities at that site shall be halted. Depending on the den type, reasonable and prudent measures to avoid harming badgers shall be implemented and may include seasonal limitations on Project construction near the site (i.e., restricting the construction period to avoid spring–summer pupping season), and/or establishing a construction-exclusion zone around the identified site, or resurveying the den at a later time to determine species presence or absence. • Badgers may be passively relocated using burrow exclusion (e.g., installing one-way doors on burrows) or similar California Department of Fish and Wildlife–(CDFW-) approved exclusion methods. In unique situations it might be necessary to actively relocate badgers (e.g., using live traps) to protect individuals from potentially harmful situations. Such relocation shall be performed with advance CDFW coordination and concurrence.	construction contractor(s) **Monitoring:** DWR CDFW if active relocation is needed	surveyed within 14 days prior to start of construction in that area • Unoccupied dens are inspected and covered if empty • Seasonal limitations and/or exclusion zones are established for occupied dens; passive relocation may be used • Active relocation may only be used to protect individuals from potentially harmful situations, subject to CDFW coordination and concurrence During Project activities • All work is consistent with any seasonal limitations and exclusion zones	used for occupied dens such that impacts to American badger are avoided or minimized
BIO-11: Avoid, Minimize, and Mitigate Impacts to Jurisdictional Waters. All temporary impacts to jurisdictional waters of the United States/state shall be restored on site. Restoration shall include recontouring and erosion control with a native seed mix, where applicable. Prior to seeding temporary ground-disturbance areas, the approved biologist	**Implementation:** DWR, approved qualified biologist(s), construction contractor(s)	Prior to Project activities • Mitigation bank credits are obtained or a permittee-responsible mitigation plan is	No net loss of functions and values of jurisdictional waters occurs

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
shall review the seeding palette to ensure that no seeding of non-native or invasive plant species, as identified in the most recent version of the California Invasive Plant Inventory for the region, will occur. The California Department of Water Resources (DWR) shall ensure recontouring and revegetation of disturbed portions of jurisdictional areas in areas temporarily affected by construction prior to demobilization by the contractor at the end of Project construction. • Compensatory mitigation for permanent impacts to prevent net loss of functions and values at Clifton Court Forebay, Dyer Reservoir, and Patterson Reservoir shall occur either at an approved mitigation bank (e.g., Cayetano Mitigation Bank [approval pending]), within an in-lieu fee program (e.g., National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program), or through on-site or off-site permittee-responsible mitigation. Where on-site or off-site permittee-responsible mitigation is pursued, it shall include establishment, restoration, or enhancement of aquatic resources at a ratio no less than 1:1 for the impacts to jurisdictional waters or at a ratio determined in the jurisdictional waters permits. Under any permittee-responsible mitigation effort, a Compensatory Mitigation and Monitoring Plan shall be prepared that outlines the compensatory mitigation to address permanent loss, including functions and values, of aquatic resources in compliance with requirements from applicable regulatory agencies (i.e., U.S. Army Corps of Engineers [USACE], Regional Water Quality Control Board [RWQCB], and California Department of Fish and Wildlife [CDFW]). The Compensatory Mitigation and Monitoring Plan shall be developed in coordination with CDFW, USACE, and RWQCB and shall include the following:	**Monitoring:** DWR, USACE, CDFW, RWQCB	approved by jurisdictional agencies • If salvage and relocation/propagation is implemented, special-status plant salvage, relocation, and propagation plan is prepared and propagules are collected before the existing long-styled sand-spurrey population is disturbed At completion of Project activities • Temporary impacts to jurisdictional waters are restored • If a permittee-responsible mitigation plan has been approved, that plan is implemented and monitoring occurs for at least 5 years	

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• Compensatory Description. A description of the quantity (acres and linear feet) affected by the project; aquatic resource types and amounts (acres and linear feet) for which compensatory mitigation is being provided, the type of compensation (i.e., restoration, establishment, enhancement, and/or preservation); and the process in which the resource functions of the compensatory mitigation efforts would address the needs of the watershed or ecoregion. • Site Selection. A description of the factors considered in the site selection process, including demonstrating that an attempt to select a site within the same watershed and documentation of the characteristics of the site that would support restoration and/or establishment of aquatic resources. A description of the final proposed mitigation site(s) and site-specific plans to compensate for aquatic resources losses resulting from the project. • Performance Standards. A description of the minimum performance standards that must be met at or before the end of monitoring to ensure no net loss of functions and values of aquatic resources. The description shall also include a description for annual success criteria, including a minimum percent cover of native vegetation within the compensatory mitigation area. • Monitoring and Reporting Specification. A description of the monitoring obligations, monitoring periods (not less than annual reports for 5 years), and reporting specifications. • Adaptive Management. A description of the adaptive management strategy to address changes in site conditions or other components of the compensatory mitigation efforts. • Financial Assurances. A description of financial assurances which would be provided for the success of compensatory mitigation.			

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
Cultural Resources			
CUL-1: Unanticipated Archaeological Resources. A Worker Environmental Awareness Training for cultural resources shall be prepared and provided to all construction workers prior to initiation of work. The training shall generally summarize the protocols provided below that must be followed in the event that there is an inadvertent discovery of cultural resources and/or potential tribal cultural resources. In the event that cultural resources (e.g., sites, features, or artifacts) are exposed during construction activities, all ground disturbing work occurring within 100 feet of the find shall immediately stop until a qualified specialist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. Prehistoric archaeological deposits may be indicated by the presence of discolored or dark soil, fire-affected material, concentrations of fragmented or whole freshwater bivalves shell, burned or complete bone, non-local lithic materials, or the characteristic observed to be atypical of the surrounding area. Common prehistoric artifacts may include modified or battered lithic materials; lithic or bone tools that appeared to have been used for chopping, drilling, or grinding; Projectile points; fired clay ceramics or non-functional items; and other items. Historic-age deposits are often indicated by the presence of glass bottles and shards, ceramic material, building or domestic refuse, ferrous metal, or old features such as concrete foundations or privies. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5[f]; California Public Resources Code, Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation	**Implementation:** DWR, qualified archaeologist **Monitoring:** DWR	Prior to Project activities • All construction workers receive Worker Environmental Awareness Training During Project activities • Construction activities within 100 feet of potential archaeological resources, if any are exposed, is stopped • Qualified specialist determines significance of potential archaeological resources • Qualified specialist records the resource or develops treatment plan as warranted by significance	Adverse effects to significant archaeological resources are avoided

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
of an archaeological treatment plan, testing, or data recovery, may be warranted.			
CUL-2: Unanticipated Human Remains. In accordance with Section 7050.5 of the California Health and Safety Code, if potential human remains are found, the county coroner shall be immediately notified of the discovery. No further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the county coroner has made their determination regarding the appropriate next steps to be taken. This determination must be completed within 2 working days of notification of the discovery. If the county coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the Native American Heritage Commission in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete his or her inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains.	**Implementation:** DWR, County coroner **Monitoring:** DWR	During Project activities • If any potential human remains construction activities near the find are immediately stopped • County coroner is immediately notified upon the discovery of unanticipated human remains • If remains are believed to be Native American, County coroner notifies Native American Heritage Commission, who notifies persons believed to be the most likely descendant to provide disposition recommendations	Adverse effects to Native American human remains are avoided
Geology and Soils			
GEO-1 : Unanticipated Paleontological Resources. In the event that paleontological resources (e.g., fossils) are exposed during construction activities for the Project, all construction work occurring within 50 feet of the find shall immediately stop until a qualified paleontologist meeting the professional standards of the Society of Vertebrate Paleontology (SVP) can evaluate the significance of the find and determine whether additional study is warranted. If the discovery is clearly not significant, the paleontologist may	**Implementation:** DWR, qualified paleontologist **Monitoring:** DWR	During Project activities • Construction activities within 50 feet of potential paleontological resources, if any are exposed, is stopped • Qualified paleontologist determines significance of potential paleontological resources	Direct or indirect destruction of any unique paleontological resources is avoided

Mitigation Measure	Implementation and Monitoring Responsibility	Timing	Performance Evaluation Criteria
document the find and allow work to continue. If the discovery may consist of or include unique paleontological resources as defined under the California Environmental Quality Act, a qualified paleontologist shall evaluate the resource and prepare a proposed mitigation plan in accordance with SVP guidelines (1995) sufficient to ensure that the project does not result in the direct or indirect destruction of any unique paleontological resources. The proposed mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings.		• Qualified paleontologist develops treatment plan if resource is significant	
Hydrology and Water Quality			
HYD-1: Avoid or Minimize Increased Erosion. To avoid or minimize the potential for increased erosion downstream of the low-level drainage outlet improvements at Patterson Dam, the California Department of Water Resources (DWR) shall complete a fluvial geomorphology study for the drainage outlet that evaluates the physical shape of the outlet and the properties (e.g., velocity, volume, and flow resistance) of water and sediment transport through the drainage outlet. The fluvial geomorphology study shall also provide design criteria for the proposed improvements that will ensure the Project does not increase erosion within or downstream of the affected segment.	**Implementation:** DWR **Monitoring:** DWR	Prior to Project activities • Fluvial geomorphology study prepared	Project does not increase erosion within or downstream of the drainage outlet