# PROPOSED MITIGATED NEGATIVE DECLARATION

# PROJECT: MUD SLOUGH RESTORATION PROJECT

# LEAD AGENCY: SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

Under the California Environmental Quality Act (CEQA), the lead agency is the public agency with primary responsibility over approval of the project. The San Luis & Delta-Mendota Water Authority (Water Authority) is the CEQA lead agency and Project sponsor because it is responsible for implementation and operation of the Mud Slough Restoration Project.

# PROJECT DESCRIPTION AND DISCUSSION

### Project Objective and Location

The Mud Slough Restoration Project (Proposed Project) objective is to restore and enhance wildlife habitat on the China Island Unit of the North Grasslands Wildlife Management Area and on the Newman Land Company property by reestablishing Mud Slough flows to portions of those lands that were isolated from Mud Slough as a result of the Grassland Bypass Project (GBP). The Proposed Project would replace the water supplies to Newman Lake (up to 1,663 acre-feet) through the restoration of the hydrologic connection between Mud Slough and the Lake. Natural erosion effects of flow in Mud Slough have caused the normal water level to drop to approximately four feet below the Newman Lake water level. Therefore, hydraulic modification is required. See Figure 1, Mud Slough Restoration Project, Location Map for the Project Area location within Merced County, California and for key hydrologic features and roadways. The Proposed Project is located east of Route 33 and northwest of Highway 140. It is located east of Newman in an area designated as Agricultural land use in Merced County, California. The Project Area includes the area of evaluation for potential direct and indirect impacts, an area that includes approximately 368 acres, mostly in the China Island Unit of the North Grasslands Wildlife Management Area.

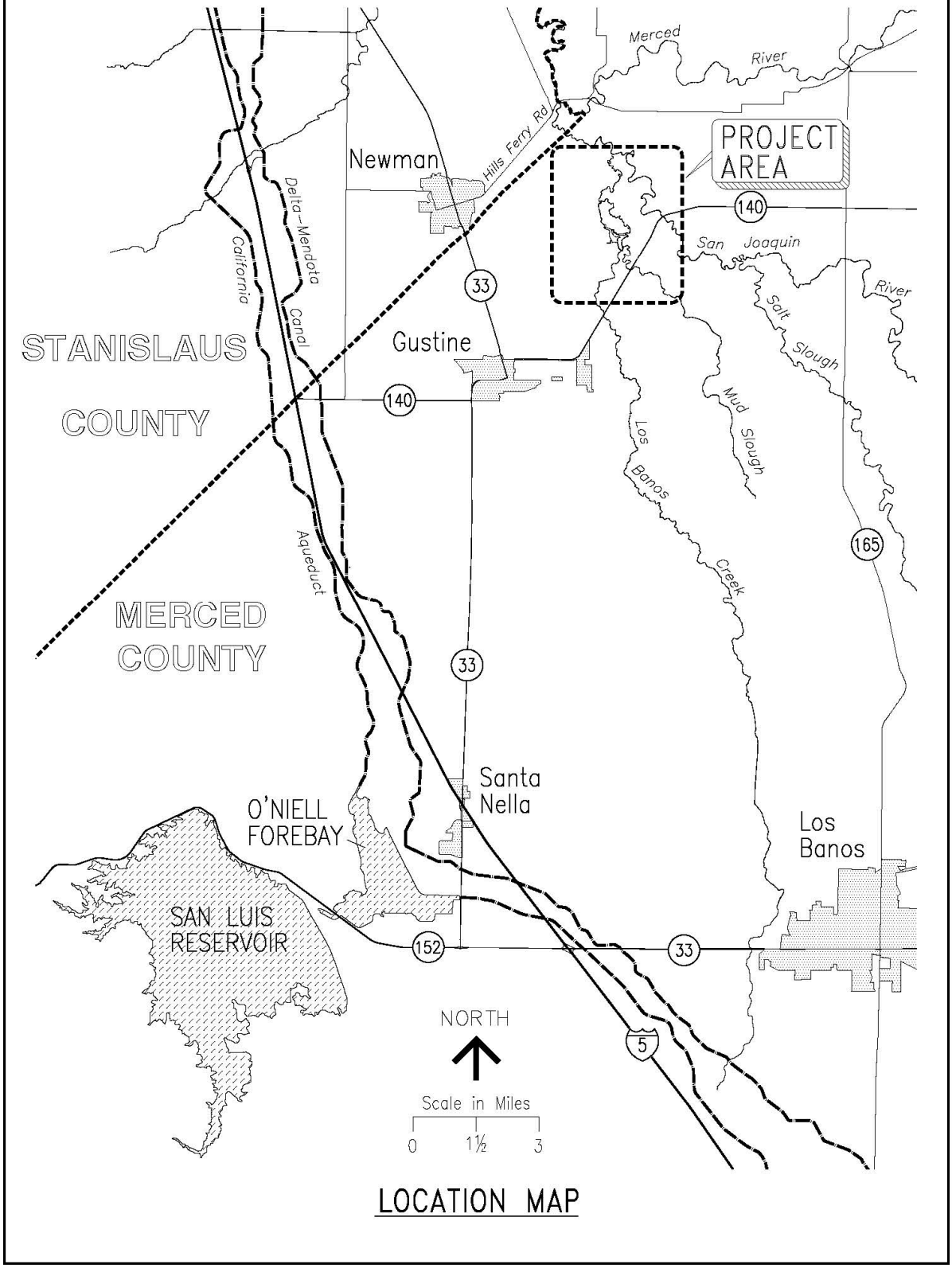
### Description

Construction and Operation: The Proposed Project would construct a new diversion structure in Mud Slough, approximately 300 feet downstream of the confluence with Los Banos Creek. The structure would span the width of Mud Slough to raise the water level in the slough in order to divert water into Newman Lake through a side channel connecting to Los Banos Creek. The structure would be designed as a reinforced concrete, broad-crested weir check with overshot spill structure to fine-tune upstream water levels and maintain downstream flow. The crest elevation would be designed to pass normal high flows without exceeding the Mud Slough channel capacity. High flows would spill and inundate primarily the easterly floodplain with localized inundation of seasonal wetland areas adjacent to the west bank of Mud Slough upstream of the proposed control structure, which is consistent with current conditions. An existing spill structure in Los Banos Creek would be removed. Figure 2, Proposed Project, illustrates the Project features (and "E" refers to existing features).

Water delivered to Newman Lake would be a combination of Los Banos Creek flows and Mud Slough flows, depending on hydraulic conditions at the time in both waterways. Excess flows in Newman Lake would flow out the existing spill dam at the north end of the lake.

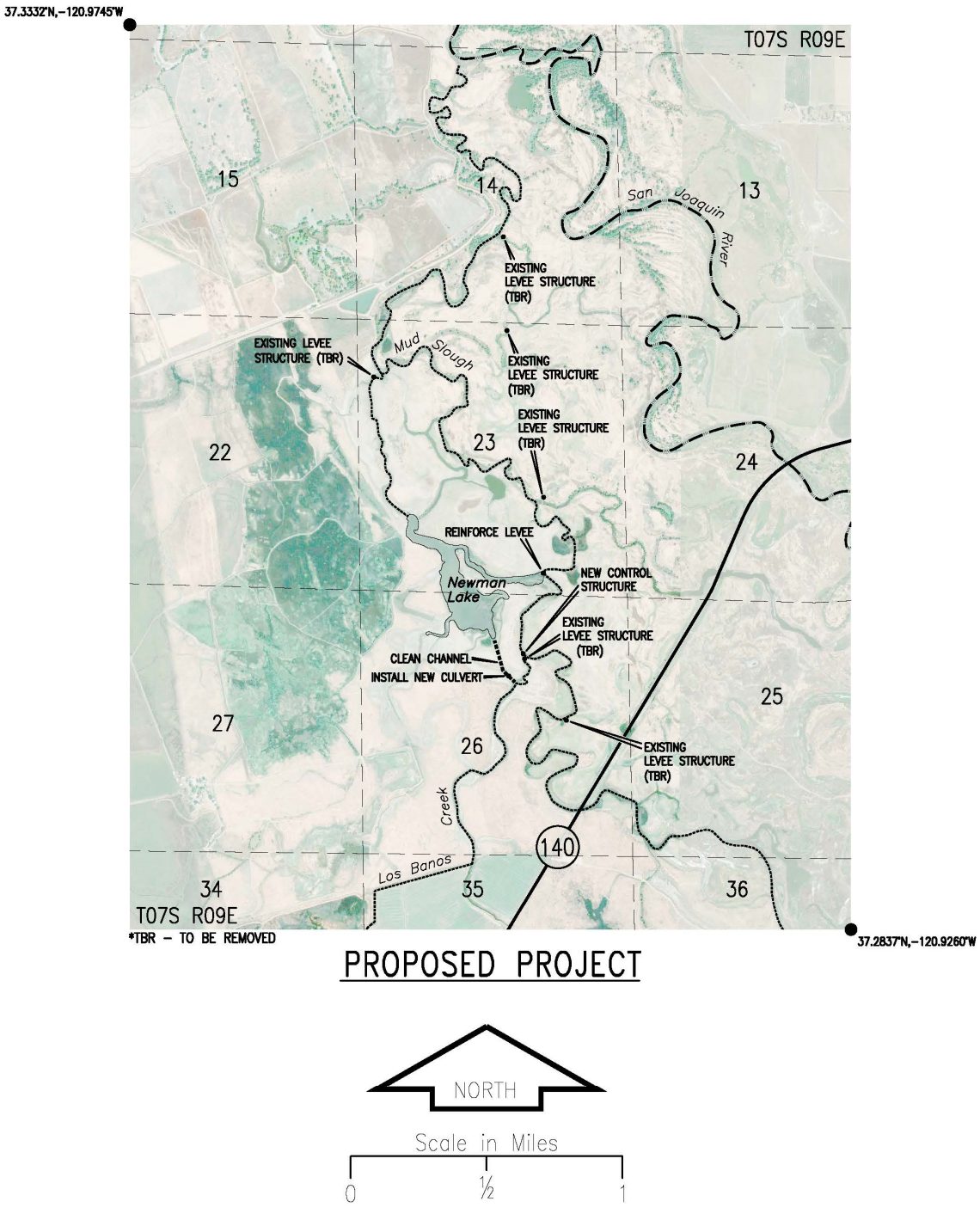
Minimal channel excavation would be required to key the diversion structure into the channel bed and banks. The total construction footprint (including staging area) is estimated to be 1.4 acres.

**FIGURE 1**




LOCATION MAP

**FIGURE 2**




PROPOSED PROJECT

Modifications to the existing side channel connecting Los Banos Creek to Newman Lake include the installation of a new culvert and road crossing and the removal of accumulated silt for the initial 200 feet of the side channel at Los Banos Creek. The silt would be removed and spread along the adjacent levee.

Additional activities include the removal of five abandoned water control structures within the China Island refuge and the reinforcement of the existing Newman Dam at Mud Slough.

The overshot gate would be managed to divert up to 1,663 acre-feet of combined Mud Slough and Los Banos Creek flow into Newman Lake via the side channel connecting Los Banos Creek to Newman Lake. A majority of the diversion, estimated to be 1,523 acre-feet plus another 40 acre-feet to offset seepage and evaporation, would occur during the fall-winter period (September 5 – January 10). Diverted flow would not exceed 10 cubic feet per second (cfs). In extremely dry years, Mud Slough flows would be insufficient to support both downstream flows and the entire Newman Lake water demand. When Mud Slough flows are less than 20 cfs, half of the flow would be devoted to Newman Lake water demands and the remaining half would continue downstream. In situations where Mud Slough flow exceeds 20 cfs, the full diversion of 10 cfs would occur at Newman Lake; and the remainder would continue downstream.

Outside the diversion period (January 11 to September 4), 100 acre-feet of water would be diverted as available for maintaining the water level in Newman Lake. The control gate in the Mud Slough diversion would be lowered (opened to allow all the flow through the structure) except during periods of short duration to allow replenishment water to be diverted to Newman Lake. This replenishment would occur monthly for a period of approximately seven days each time. The actual timing would depend on the water availability, but in no case would the diversion occur for more than seven days at a time during the summer period of operation (June through August). Flows would be maintained downstream equal to half of the total flow as during the primary diversion period.

The Proposed Project would raise the water levels in Mud Slough between the new proposed diversion structure and Highway 140 when the overshot gate is raised during seasonal operations. This area is often inundated during high flow conditions. The Proposed Project would inundate up to 7.21 acres more than under existing conditions for low to winter median flows (10-120 cfs) during seasonal operations.

Operation of the Proposed Project would require periodic (<1 per week) visits to inspect conditions and remove trash, which is not different from existing conditions.

In summary, the Proposed Project includes the following construction components:

- Install a culvert in the Newman Lake Connection Channel to facilitate the access of construction equipment to the proposed Mud Slough diversion structure.
- Clean silt from confluence of Newman Lake Connection Channel at Los Banos Creek to facilitate flow.
- Remove the existing Los Banos Creek spill structure at the confluence of Los Banos Creek and Mud Slough and restore the channel and creek banks.
- Dewater the diversion structure work area with temporary sheetpile cofferdams and bypass pipe.
- Construct the Mud Slough diversion structure downstream of the confluence of Los Banos Creek and Mud Slough.
- Recompact and armor the existing Newman Lake Dam.
- Remove abandoned water control structures within the China Island wildlife refuge.

Best Management Practices: Best Management Practices (BMPs) refer to methods of controlling primarily for water pollutants for storm and surface water management (but also for soil and biological resource protection) that are inherent in implementation of a project of this type. BMPs are defined as schedules of activities, prohibitions of practices, maintenance procedures, and structural and/or managerial practices, that when used singly or in

combination, prevent or reduce the release of pollutants to surface waters. The types of BMPs by general category are source control, runoff treatment, and flow control.

The following BMPs have been developed for implementation as part of the Proposed Project. They apply to all construction, operations, and maintenance activities. To simplify compliance during construction, implementation of the Project BMPs and permits issued by the State Water Resources Control Board (SWRCB) and CDFW will be incorporated into construction contracts. Day-to-day compliance and reporting responsibilities would be the responsibility of each construction contractor, who would maintain records of compliance for review by the Water Authority and the regulatory agencies.

- Implementation of BMPs. Construction, operations, and maintenance will comply with standard pollution prevention and minimization measures (best management practices).
- Riparian vegetation. The Mud Slough channel construction sites will be accessed via areas where riparian vegetation will be avoided.
- Runoff. Potential downstream runoff from the site will be controlled with sand bags, fiber mats, or other methods.
- Concrete containment. Washout areas for vehicles will be located at least 100 feet removed from Mud Slough, Los Banos Creek and the Connection Channel in areas where concrete materials cannot runoff into the channel.
- Concrete management. All concrete work will be washed and cured prior to coffer dam or other barrier removal to reduce potential for leaching.
- Fuel containment. All fueling and maintenance of construction equipment will occur at least 100 feet removed from the Mud Slough channel. If this is not feasible, containment materials will be used.
- Equipment leaks. When working in the channel or where there may be runoff to the channel, construction equipment will be fitted with absorbent materials at potential fuel, oil, and other fluid leak spots.
- Leaks. When construction equipment is used within Mud Slough, Los Banos Creek and the Connection Channel, all such equipment will be fitted with secondary containment materials at potential oil/fuel leakage sites.
- Leak containment. All construction equipment will be inspected prior to each work day to ensure that oil and/or gas/diesel fuel are not leaking from equipment.
- Spill containment and isolation. During construction and post-construction maintenance involving use of equipment in or adjacent to Mud Slough, Los Banos Creek and the Connection Channel, sand bags will be stockpiled on site so that they may be immediately filled and placed around any spill. In addition, any spills not contained within the maintenance area will immediately be isolated from the active channel. Spill material will be removed from the site.
- Storage. Secondary containment for fueling and chemical storage areas will be provided during construction.
- Re-grading. All channel margins and upland disturbed areas will be regraded to pre-Project contours and restored as a river bank.
- Channel protection. The construction zone will be isolated from the active channel during in-water construction activity using a cofferdam.
- Wash water containment. Secondary containment for equipment wash water will be provided to ensure that wash water is not allowed to run off the site.
- Silt containment. Silt traps, ponds, sediment management methods, and/or other means will be provided to prevent runoff from the construction site.
- Stockpile runoff. Material stockpiles will be covered to prevent runoff.
- Soil erosion. Loose soils will be protected from potentially erosive runoff.

For potential leaks of hazardous materials, an existing Spill Prevention Plan provides for onsite cleanup of small spills and proper disposal of the spill material in compliance with local regulations. It will be required as a standard management practice for equipment and vehicle use for the Proposed Project as well.

**Mitigation Measures:** Mitigation measures are defined as specific feasible actions to avoid, minimize, rectify, reduce, eliminate, or compensate for any potentially adverse effects (impacts) from any part of the Proposed Project. Although not a mitigation measure under CEQA, monitoring of a resource or condition ensures that the conclusions regarding no impacts continue to be addressed over the Project life.

Mitigation measures for potential impacts to biological, cultural, and paleontological resources identified below are hereby incorporated into the Proposed Project, and no significant unavoidable impacts occur. To ensure that these measures or changes in the Project are implemented, the San Luis & Delta-Mendota Water Authority will adopt a program for monitoring or reporting on the measures to mitigate or avoid potentially significant environmental impacts as required under the CEQA Guidelines (Section 15097 (a)).

Biological Resources

The following mitigation measures are part of the Proposed Project in order to avoid or reduce potentially significant impacts to biological resources to less than significant. The mitigation measures are listed by impact under the following sections: vegetation, fish, wildlife, and riparian and sensitive natural communities including wetlands.

### Vegetation

Direct impacts to Coulter's goldfields from equipment movement on access roads and staging areas during construction and soil compaction, and indirect impacts on Coulter's goldfields, alkali milk vetch, crownscale and Delta button celery from the introduction of invasive plant species that may result from the Proposed Project would be significant. ***With implementation of Mitigation Measure PLANT BIO-1, the impact of the Proposed Project on special-status plants will be reduced to less than significant.***

**Mitigation Measure PLANT BIO-1(a).** The Project shall be designed to avoid or substantially reduce the potential for direct impacts to special-status plants on the Study Area. Measures to avoid or substantially reduce direct impacts to special-status plants shall include the following:

1. No vegetation shall be removed unless necessary to implement the Project as described in Part 10 of the Project Description, and in accordance with Mitigation Measure PLANT BIO-1(a), #2-4.
2. Earthwork for Project construction shall be located outside of special-status plant populations;
3. The use of access roads, staging/storage areas and other Project ground disturbance located in or adjacent to special-status plant occurrences shall be conducted in the summer and fall after annual special-status plant species (such as alkali milk-vetch and Coulter's goldfields) have already completed their life cycle and set seed.
4. When work is conducted within 50 feet of special-status plant populations, temporary fencing (orange construction fencing or similar materials) shall be installed around special-status plant populations to ensure no equipment, materials, or construction personnel stray from the work area and impact special-status plants. The fencing shall be removed after Project construction is complete.

**Mitigation Measure Plants BIO-1(b).** In order to avoid or substantially reduce indirect impacts to special-status plants, seed mixes used for erosion control or soil stabilization shall not contain any species listed on the California Invasive Plant Council (Cal-IPC) Inventory. Any straw or other erosion control materials shall be certified weed free.

### Fish

The direct and indirect impacts of construction of the Proposed Project on resident and migratory fish, including special-status fishes and their habitats including EFH[1] for Pacific salmon, inhabiting Mud Slough were considered to be significant. ***With implementation of Mitigation Measure FISH BIO-2, the direct and indirect construction-related impacts of the Proposed Project on fish and their habitat will be reduced to less than significant.***

Mitigation Measure FISH BIO-2

1. **Fish and wildlife rescue.** Installation of the temporary cofferdam has the potential to isolate juvenile salmon and other fish and wildlife from Mud Slough, and the potential for those fish and wildlife to be stranded and lost as a result of dewatering. To avoid or substantially reduce the potential adverse impacts to fish during dewatering, a fish and wildlife rescue and relocation effort will be implemented by a qualified biologist[2] engaged by the applicant (Water Authority) during installation of the cofferdam and initial dewatering of the work area. The fish and wildlife rescue and relocation will be conducted in accordance with standard methods to reduce harm, harassment, and mortality of fish and wildlife from cofferdam construction and dewatering associated with in-water construction activities.
2. **Seasonal Work Window**. In-water construction-related activities with the potential to temporarily affect aquatic habitats will be limited to a June 1 through October 31 seasonal work window of a single year. During this period, water temperatures in Mud Slough typically exceed the temperature thresholds for suitable habitat conditions for juvenile and adult Chinook salmon including Central Valley spring-run ESU Chinook salmon.

Based on implementation of the mitigation measures identified above, the short term of the construction and construction window, and the small size and relatively low quality of habitat to be temporarily disturbed, impacts on fish, are reduced to be less than significant. With a fish rescue effort during dewatering, and the construction June 1 to October 31 seasonal work window, the potential for direct injury or lethality of fish, including any listed and special-status fish species, resulting from construction-related activities is insubstantial.

Wildlife

Construction-related direct impacts on **California tiger salamander** (CTS) that may result from the Proposed Project would be significant. Temporary inundation in grassland habitat outside of the breeding season could result in upland over-summering habitat to become inundated, causing California tiger salamanders to flush from retreats and seek new upland habitat. If present within the inundation areas, this could result in harassment, stress, increased energy expenditure, and increased risk of predation. ***With implementation of Mitigation Measure CTS BIO-4, the impact of the Proposed Project on California tiger salamander will be reduced to less than significant.***

**Mitigation Measure CTS BIO-4.** Impacts on California tiger salamander will be avoided or substantially reduced by implementing the following measures.

1. **Seasonal Avoidance.** Construction shall occur between June 1 and October 31 outside of the California tiger salamander breeding season when adult individuals are not migrating overland to and from breeding sites.

[1] Essential Fish Habitat

[2] A qualified biologist is defined as an individual who has a minimum of five years academic training and professional experience in biological sciences and related resource management activities with a minimum of two years of survey experience with the subject species.

2. **Environmental Awareness Training.** Prior to the start of construction, a qualified biologist engaged by the applicant (Water Authority) who is experienced in the ecology and biology of California tiger salamanders shall conduct an environmental awareness training program for all construction personnel including subcontractors. The training will include, at a minimum, a description of the California tiger salamander and its habitat; sensitive habitats within the Study Area; an explanation of the status and protection under state and federal laws; the measures to be implemented to avoid impacts; communication and work stoppage protocols in case a listed species is observed within the Study Area; and an explanation of the environmentally sensitive areas and wildlife exclusion fencing and the importance of maintaining these structures. A fact sheet conveying this information shall be prepared and distributed to all construction personnel. Upon completion of the training, personnel shall sign a form stating that they attended the training and understand all the avoidance measures and implications of the governing environmental regulations.
3. **Designation of Environmentally Sensitive Areas (ESA).** Prior to the start of construction, ESAs— defined as areas containing sensitive habitats adjacent to or within construction work areas where physical disturbance is not allowed— shall be clearly delineated by a qualified biologist using high-visibility orange safety fencing. Construction work areas include the active construction site and all access roads, vehicle parking and staging areas. The qualified biologist shall work with the contractor to determine where ESA fencing will be installed. The ESA fencing shall remain in place throughout the duration of the Project, while construction activities are ongoing, and be regularly inspected and fully maintained at all times. The final Project plans shall depict all locations where ESA fencing will be installed and shall provide installation specifications. The bid solicitation package shall clearly describe acceptable fencing materials and prohibited construction-related activities, including vehicle operation, material and equipment storage, and other surface-disturbing activities within ESAs.
4. **Proper Use of Erosion Control Devices.** To prevent California tiger salamanders from becoming entangled or trapped in erosion control materials, plastic mono-filament netting (i.e., erosion control matting) or similar material shall not be used within the Study Area.
5. **Preconstruction and Daily Surveys.** Immediately prior to the initiation of any construction activities that may result in take of California tiger salamanders (e.g., vegetation clearing, grubbing, grading, cut and fill, removal of riprap or other ground-disturbing activities), a qualified biologist shall conduct preconstruction surveys for California tiger salamanders. After vegetation removal and removal of riprap, the qualified biologist shall conduct clearance surveys at the beginning of each day to ensure California tiger salamanders are not present in the active construction areas.
6. **Biological Monitoring.** The qualified biologist shall be present on site to monitor for California tiger salamanders while construction is occurring. The qualified biologist shall have the authority to halt construction if a California tiger salamander is observed within or near the work area.
7. **Protocol if California Tiger Salamander is Observed Onsite.** If a California tiger salamander is observed onsite, all work within 50 feet of the individual shall cease immediately. If the qualified biologist is not on site, the Resident Engineer shall immediately notify the qualified biologist. California tiger salamanders shall not be handled without authorization from the USFWS/CDFW and shall be allowed to exit the work area on their own. Based on the professional judgment of the qualified biologist, if Project activities can be conducted without injuring or harassing the animal, it may be left at the location of discovery and monitored by the biologist while work continues. If construction activities pose a risk to the animal, work shall not proceed until the animal has left the area on its own accord. All Project personnel shall be notified, and at no time shall work occur within 50 feet of the California tiger salamander(s) without a qualified biologist present.

8. **Avoidance of Entrapment.** To prevent inadvertent entrapment of California tiger salamanders during construction, all excavated, steep-walled holes or trenches more than 2-foot deep shall be covered with plywood or similar materials at the close of each working day or provided with one or more escape ramps constructed of earth fill or wooden planks. The qualified biologist shall inspect all holes and trenches at the beginning of each workday and before such holes or trenches are filled. All staged materials, equipment, and vehicles shall be inspected by the biologist prior to moving.
9. **Construction Site Management Practices.** The following site restrictions shall be implemented to avoid or substantially reduce impacts on California tiger salamanders and their habitat:
    a. A speed limit of 15 miles per hour (mph) in unpaved surfaces of the Study Area shall be enforced to reduce dust and excessive soil disturbance. The exception is on county roads and State and Federal highways. Night-time construction, if applicable, shall be minimized to the extent possible. However, if it does occur, then the speed limit shall be reduced to 10-mph. Off-road traffic outside of the Proposed Project construction area shall be prohibited.
    b. Construction access, staging, storage, and parking areas, shall be located outside of any designated ESA or in areas environmentally cleared by the contractor. Access routes and the number and size of staging and work areas will be limited to the minimum necessary to construct the proposed Project. Routes and boundaries of roadwork shall be clearly marked prior to initiating construction or grading.
    c. All food and food-related trash items shall be enclosed in sealed trash containers and properly disposed of off-site.
    d. No pets from Project personnel shall be allowed anywhere in the Study Area during construction.
    e. No firearms shall be allowed on the Project site except for those carried by authorized security personnel, or local, State or Federal law enforcement officials.
    f. A Spill Response Plan shall be prepared. Hazardous materials such as fuels, oils, solvents, etc. shall be stored in sealable containers in a designated location that is at least 50 feet from hydrologic features.
    g. All equipment shall be properly maintained and free of leak. Servicing of vehicles and construction equipment including fueling, cleaning, and maintenance will occur at least 50 feet from any hydrologic features unless it is an existing gas station.

The **giant garter snake** (GGS) has the potential to be affected by noise, vibrations, and visual disturbance associated with the operation of the construction equipment, workers, vehicles and the movement, staging and placement of materials, which could alter normal behavior. This could result in decreased fitness, reduce foraging efficiency, cause individuals to flush from refugia or increase dispersal time away from cover, and make individuals more vulnerable to predators and being crushed (by vehicles, equipment, and construction workers). Construction-related activities associated with removal of the Los Banos Creek spill structure and restoration of the natural channel, construction of the Mud Slough diversion structure, culvert installation, Newman Lake Dam reinforcement, clearing of the Connection Channel, and the removal of abandoned water control structures (L2, L11 and L13-15) have the potential to result in the injury to or mortality of any giant garter snakes if these activities are conducted in occupied upland and aquatic habitat. Cleaning of the Connection Channel between Los Banos Creek and Newman Lake could directly impact giant garter snakes if present in the work area by injuring or killing individual snakes. Clearing of the channel also has the potential to harass giant garter snakes and cause flushing from habitat and temporary disturbance of the impact area. Routine operation and maintenance would require infrequent visits to the diversion structure and other elements of the Project to regulate water flows and verify proper operation, flows, and quantities. This would require vehicles and personnel to use access roads for short (less than 1-day) visits. Due to the amount of aquatic and adjacent upland habitat, it is possible that giant garter snakes could be subject to injury, mortality or harassment from vehicle traffic and human presence. Therefore, Project construction (including channel cleaning), and long-term

operations and maintenance activities can produce impacts on giant garter snake that would be significant. ***With implementation of Mitigation Measure GGS BIO-5, the impact of the Proposed Project on giant garter snake will be reduced to less than significant.***

Mitigation Measure GGS BIO-5. The following measures shall be implemented to avoid or substantially reduce impacts to giant garter snakes.

1. Implementation of Mitigation Measures FISH BIO-2 (1-2), CTS BIO-4 (1-4, 8-9).
2. Wildlife Exclusion Fencing (WEF). Prior to the start of any construction that will take longer than 2 days, WEF shall be installed along the active construction footprint, including the Los Banos Creek spill structure, Mud Slough diversion structure, culvert installation, Newman Lake Dam, restoration of natural channel. WEF is not required for the removal of abandoned water control structures L2, L11, and L13-15 or clearing of the Connection Channel. A WEF Plan shall be prepared by a qualified biologist engaged by the applicant (Water Authority), detailing the location, fencing and installation specifications and monitoring and repair criteria. The WEF Plan shall be submitted to the California Department of Fish and Wildlife for review and approval prior to the start of construction. Vegetation shall be cleared at least 3 feet from the non-Project side of the WEF and kept clear for the duration of the Project. The fencing shall extend at least 36-inch above ground and be keyed into the ground a minimum of 4 inches and backfilled with soil to prevent giant garter snakes from accessing the Project site by passing under the fence. WEF and erosion/sediment control fencing shall not be layered together for multifunctional purposes as it creates pockets that can trap, injure or kill snakes and other species. Stakes shall be installed on the Project side of the fence to prevent giant garter snakes from using these features to climb over the WEF. Jump-outs or one-way exits will be incorporated into the WEF design to allow giant garter snakes to exit the Project site if present within the active construction site. The WEF specifications, installation, and maintenance criteria shall be included in the final Project plans and bid solicitation package (from the Water Authority). The WEF shall remain in place throughout the duration of the Project and be regularly inspected and fully maintained. Repairs to the WEF shall be made within 48 hours of discovery. Upon Project completion the WEF shall be completely removed, the area cleaned of debris and trash, and the area returned to natural conditions.
3. Preconstruction Surveys and Biological Monitoring. A qualified biologist shall survey work areas within 200 feet of giant garter snake aquatic habitat for snakes immediately prior to the start of construction activities and each morning construction activity occurs. The qualified biologist shall visually check for giant garter snakes under vehicles and equipment prior to contractors moving them. The biologist shall ensure that the contractor caps all materials onsite (culverts, pipes, etc.), precluding wildlife from becoming entrapped. The biologist shall check any crevices or cavities in the work area where individuals may be present including stockpiles that have been left for more than 24 hours where cracks/crevices may have formed. The qualified biologist shall remain on site to monitor for giant garter snakes while active construction is occurring.
4. Vegetation Removal. Any vegetation that is within the cut and fill line or growing in locations where permanent or temporary structures are to be placed (e.g., retaining wall or temporary road bypass) shall be cleared. Vegetation shall be cleared only when necessary and shall be cut above soil level except in areas that will be excavated for roadway construction. This will allow plants that reproduce vegetatively to resprout after construction. All clearing and grubbing of woody vegetation will occur by hand or by light construction equipment outside of the bird nesting season and prior to the rainy season, if feasible. If for any reason this schedule cannot be met, surveys for nesting migratory birds will be conducted before clearing begins. All nest avoidance requirements of the Migratory Bird Treaty-Act (MBTA) and California Fish and Game Code will be observed. A qualified biologist will be present during all grubbing and vegetation clearing activities. If at any point a giant garter snake or other listed species is discovered during these activities, all work will cease until the individual has left the work area. After Project

completion, all temporarily affected areas shall be protected with erosion control measures, and revegetated with native species appropriate for the region and habitat communities on site.

5. **Protocol if Giant Garter Snake is Observed Onsite.** If a giant garter snake is observed onsite, all work within 50 feet of the individual shall cease immediately. Giant garter snakes shall not be handled without authorization from the USFWS/CDFW and shall be allowed to exit the work area on its own. Based on the professional judgment of the qualified biologist, if Project activities can be conducted without injuring or harassing the animal, it may be left at the location of discovery and monitored by the biologist while work continues. If construction activities pose a risk to the animal, work shall not proceed until the animal has left the area on its own accord. All Project personnel shall be notified, and at no time shall work occur within 50 feet of the giant garter snake(s) without a qualified biologist present.

Routine operations and maintenance would require infrequent visits to the diversion structure and other elements of the Project to regulate water flows and verify proper operation, flows, and quantities. This would require vehicles and personnel to use access roads for short (less than 1-day) visits and could subject **greater sandhill cranes** (GSHC) to temporary harassment from vehicle traffic and human presence, a significant impact. ***With implementation of Mitigation Measure GSHC BIO-6, the impact of the Proposed Project on greater sandhill crane will be reduced to less than significant.***

**Mitigation Measure GSHC BIO-6**

Implement the seasonal work window in Mitigation Measure CTS BIO-4 (2, 9).

Impacts of construction and long-term operations and maintenance on **San Joaquin kit fox** (SJKF) that may result from the Proposed Project from equipment movement and ground disturbance would be significant. ***With implementation of Mitigation Measure SJKF BIO-7, the impact of the Proposed Project on San Joaquin kit fox will be reduced to less than significant.***

**Mitigation Measure SJKF BIO-7.** The following measures shall be implemented to avoid or substantially reduce impacts to San Joaquin kit fox.

1. **Implementation of Mitigation Measures CTS BIO-4 (2-3, 9).**
2. **Implementation of Preconstruction Surveys.** No earlier than 14 days and no more later than 30 days prior to the commencement of vegetation- and ground-disturbing activities, a qualified biologist engaged by the applicant (Water Authority) shall conduct pre-construction den surveys within suitable habitat in the project footprint and temporary access roads to determine if any burrows or dens potentially used by San Joaquin kit fox are present. If likely dens are located, the den shall be flagged and the qualified biologist shall determine the status of the den pursuant to USFWS protocols and definitions for San Joaquin kit fox (USFWS 1999) and appropriate avoidance measures taken pursuant to USFWS protocols (USFWS 2011). For dens determined to be "known" or "natal" dens (as defined by USFWS 1999), den avoidance measures include establishing construction exclusion zones around burrows/dens potentially used by kit foxes pursuant to the exclusion zone design and setback distances defined in USFWS 2011, shall be implemented. The exclusion zones shall be maintained until all construction related disturbances have been terminated.
3. **Avoidance of Entrapment.** Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe shall not be moved until the USFWS has been consulted. If necessary, and under the direct supervision of the qualified biologist, the pipe may be moved only once to remove it from the path of construction activity, until the fox has escaped.

4. **Restriction on Use of Rodenticides and Herbicides.** Use of rodenticides and herbicides in the 367.62-acre Study Area shall be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds shall observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation. If rodent control must be conducted, zinc phosphide shall be used because of a proven lower risk to kit fox than other rodenticides.
5. **Escape of Trapped Animals.** In the case of trapped animals, escape ramps or structures shall be installed immediately to allow the animal(s) to escape.

Construction-related impacts on **Swainson's hawk** (SWHA) that may result from the Proposed Project include noise, vibrations, and visual disturbance associated with the operation of the construction equipment, workers, vehicles and the movement, staging and placement of materials, which could disturb nesting activity (if present) and reduce foraging efficiency, would be significant. ***With implementation of Mitigation Measure SWHA BIO-8, the impact of the Proposed Project on Swainson's hawk will be reduced to less than significant.***

Mitigation Measure SWHA BIO-8

1. Implement Mitigation Measures CTS BIO-4 (2, 9).
2. If Project construction begins during the breeding season, i.e., March 1 and September 15, preconstruction surveys shall be conducted within the Project footprint and a ½-mile radius, by a qualified biologist no more than two weeks prior to equipment or material staging, pruning/grubbing or surface-disturbing activities. Surveys shall be conducted in accordance with the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (CDFG 2000), as follows:
    a. All potential nest trees within a ½-mile radius shall be surveyed for presence of nests. If nests are found during the breeding season, a Monitoring and Mitigation Plan shall be prepared in consultation with CDFW and the lead agency, identifying appropriate buffers and avoidance of disturbance to adjacent foraging habitat. Surveys shall be conducted for at least two of the following periods immediately prior to Project initiation:
        - Period 1: One survey January-March 20 (optional)
        - Period 2: Three surveys March 20-April 15 (nest-building)
        - Period 3: Three surveys April 5-20 (egg-laying)
        - Period 4: Monitor known nest sites only April 21-June 10
        - Period 5: Three surveys June 10-July 30 (fledging, post-fledging)

3. If active nests (i.e., nests in the egg laying, incubating, nestling or fledgling stages) are found within ½-mile of the Project footprint, non-disturbance buffers shall be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the nesting pair's tolerance to disturbance and the type/duration of potential disturbance. No work shall occur within the non-disturbance buffers until the young have fledged as determined by a qualified biologist. Buffer size shall be determined in cooperation with CDFW and USFWS based on the type of work activity to be performed and the sensitivity of the species/individual(s) to disturbance. If buffers are established and it is determined that Project activities are resulting in nest disturbance, work shall cease immediately and the CDFW and USFWS shall be contacted for further guidance.

Tricolored blackbirds have the potential to be affected by noise, vibrations, and visual disturbance associated with the operation of the construction equipment, workers, vehicles and the movement, staging and placement of materials, which could reduce foraging efficiency and cause flushing from the nest. Construction-related disturbance of nesting tri-colored blackbird (TRBB) that may result from the Proposed Project would be a significant impact. ***With implementation of Mitigation Measure TRBB BIO-9, the impact of the Proposed Project on tricolored blackbird will be reduced to less than significant.***

Mitigation Measure TRBB BIO-9

Implement Mitigation Measures CTS BIO-4 (2, 9) and WTK BIO-10 (2-4).

White-tailed kites have the potential to be affected by noise, vibrations, and visual disturbance associated with the operation of the construction equipment, workers, vehicles and the movement, staging and placement of materials. Construction-related impacts on nesting white-tailed kite (WTK) that may result from the construction or removal of Proposed Project components would be significant. ***With implementation of Mitigation Measure WTK BIO-10, the impact of the Proposed Project on white-tailed kite will be reduced to less than significant.***

Mitigation Measure WTK BIO-10

1. Implement Mitigation Measures CTS BIO-4 (2, 9).
2. If tree removal, pruning, or grubbing activities are necessary, such activities shall be conducted during the non-breeding season (i.e., between September 1st and January 31st) to avoid impacts to nesting white-tailed kites.
3. If Project construction begins during the breeding season (February 1 to August 31), preconstruction surveys shall be conducted within the Project footprint and a 300-foot buffer, by a qualified biologist no more than 2 weeks prior to equipment or material staging, pruning/grubbing, and surface-disturbing activities including creation of temporary access roads. If no active nests are found, no further mitigation is necessary. Should a delay in construction activities of greater than 14 days occur at any of the proposed impact areas, a follow-up nesting bird and raptor survey shall be performed to document the presence of any new active nests or observed nesting behaviors.
4. If active nests (i.e., nests with eggs or young birds present) are found, non-disturbance buffers shall be established at a distance sufficient to minimize disturbance based on the nest location, topography, cover, the nesting pair's tolerance to disturbance and the type/duration of potential disturbance. The non-disturbance zone may be further reduced if a biological monitor is present to educate workers about the sensitivity of working in proximity to active nests and be onsite to monitor the nest during work adjacent to the buffer to determine if Project activities are causing nest disturbance. The monitor shall conduct regular monitoring visits to document nest phenology and potential for disturbance during the different nest stages. If buffers are established and it is determined that Project activities are resulting in nest disturbance, work shall cease immediately and the CDFW and the USFWS Migratory Bird Regional Permit Office shall be contacted for further guidance. A Service approved biologist shall be present for tree removal and initial ground disturbing activities.

Project construction will utilize heavy machinery, require on site workers, vehicles and materials which could directly impact western spadefoot, should they be present in the vicinity of the proposed Project components during construction. Impacts could include mortality, injury or harassment of individuals. Construction-related impacts on western spadefoot (WS) that may result from the Proposed Project would be significant. ***With implementation of Mitigation Measure WS BIO-13, construction-related impacts of the Proposed Project on western spadefoot will be reduced to less than significant.***

Mitigation Measure WS BIO-13

Implement Mitigation Measures CTS BIO-4 (1-6, 8-9) and GGS BIO-5 (2) to reduce construction-related impacts.

Construction-related, channel cleaning, and infrastructure removal activities that could injure or kill western pond turtle (WPT) may result directly from the Proposed Project and would be significant impacts independent from any other activities in the Project vicinity. *With implementation of Mitigation Measure WPT BIO-14, the impact of the Proposed Project on western pond turtle will be reduced to less than significant.*

Mitigation Measure WPT BIO-14. Impacts to western pond turtles from Project construction, cleaning, and removal activities will be avoided or substantially reduced by implementing the following measures:

1. Implement Mitigation Measures Fish BIO-2 (1), CTS BIO-4 (2-6, 9), GGS BIO-5 (2),
2. A qualified biologist shall conduct a preconstruction survey for western pond turtles immediately prior to work activities at the Los Banos Creek spill structure, Mud Slough diversion structure, culvert installation, Newman Lake Dam, clearing of the Connection Channel, restoration of natural channel, and the removal of abandoned water control structures L2, L11 and L13-15. If western pond turtles are detected within the work area, no work shall occur until they are outside of the work area. The qualified biologist shall determine in if capturing and translocating the individual(s) is necessary. If authorized by CDFW, only a biologist in possession of a valid Scientific Collecting Permit shall handle or translocate the turtles.
3. Prior to ground disturbing activities at Los Banos Creek spill structure and restoration of the natural channel, Mud Slough diversion structure, culvert installation, Newman Lake Dam, clearing of the Connection Channel, and the removal of abandoned water control structures L2, L11 and L13-15, detection dogs trained to identify western pond turtle nests shall be used to survey the area within 50 feet of each location. If a nest is located, it shall be flagged and a buffer zone established at a sufficient distance to ensure Project activities do not harm the nest. A biological monitor shall be onsite during construction activities being conducted within 200 feet of a western pond turtle nest. If trained detection dogs are not available, the preconstruction survey shall be conducted by a qualified biologist with experience conducting surveys for western pond turtle.

Construction-related and operations and maintenance impacts on San Joaquin coachwhip that may result from the Proposed Project would be significant. *With implementation of Mitigation Measure SJC BIO-15, the impact of the Proposed Project on San Joaquin coachwhip will be reduced to less than significant.*

Mitigation Measure SJC BIO-15

Implement Mitigation Measures CTS BIO-4 (2-6, 8-9), and GGS BIO-5 (2-5).

Construction-related impacts on nesting native birds (NNB) that may result from the Proposed Project would be significant. *With implementation of Mitigation Measure NNB BIO-16, the impact of the Proposed Project on nesting native birds will be reduced to less than significant.*

Mitigation Measure NNB BIO-16

Implement Mitigation Measures CTS BIO-4 (2-3), WTK BIO-10 (1-3), and GGS BIO-4 (4).

Construction-related impacts on roosting special-status bats (BATS) that may result from the Proposed Project would be significant. ***With implementation of Mitigation Measure BATS BIO-17, the impact of the Proposed Project on special-status bats will be reduced to less than significant.***

Mitigation Measure BATS BIO-17

Implement Mitigation Measures CTS BIO-4 (1-6, 9), WTK BIO-10 (1-3), and GGS BIO-4 (4).

Riparian and Sensitive Natural Communities

Concerning riparian and sensitive natural communities including jurisdictional wetlands, the discharge of fill material into Coastal and Valley Freshwater Marsh wetlands and Open Water (if not completely avoidable), and the temporary disturbance of Coastal and Valley Freshwater Marsh, Cismontane Alkali Marsh and Open Water (if not completely avoidable) would both be significant. ***With implementation of Mitigation Measure WET BIO-18, the impact of the Proposed Project on special-status natural communities including potentially jurisdictional wetlands and other waters will be reduced to less than significant.***

Mitigation Measure WET BIO-18. The fill of jurisdictional wetlands will be avoided to the extent feasible. Authorization for any unavoidable impacts to waters of the U.S. and state shall be obtained by the applicant prior to the start of construction. Either of these impacts would result in compensatory mitigation for the permanent loss of wetlands and other waters that shall be accomplished through one of the following options: 1) the purchase of credit at an approved mitigation bank, 2) payment through an in-lieu fee program, or 3) the creation of wetland and open water habitat within the Study Area. Compensatory mitigation through one of these options will be at not less than a 1:1 replacement to loss ratio, consistent with USACE and SWRCB "no net loss" policies. Mitigation for temporary disturbance of wetland and other habitats shall be accomplished by removing temporary fills and revegetating areas disturbed during construction through the application of native plant seed mixes.

1. Compensatory mitigation for permanent impacts. Compensatory mitigation to offset the permanent loss of 0.21 acres of Coastal and Valley Freshwater Marsh wetlands and 0.07 acres of Open Water shall be accomplished offsite through the purchase of wetland credit at a USACE-approved mitigation bank ***or*** through payment into a USACE-approved In-Lieu Fee Program fund at not less than a 1:1 replacement to loss ratio, subject to approval by the regulatory agencies. The applicant (Water Authority) shall provide documentation of agency approval and payment for bank or in-lieu fee program mitigation credit prior to the start of construction.

   If compensatory mitigation credit is not available at an approved bank or through the In-Lieu Fee Program, compensatory mitigation will be implemented by the applicant (Water Authority) within the Study Area through the creation, restoration, and re-establishment of Coastal and Valley Freshwater Marsh, Cismontane Alkali Marsh and Open Water at not less than a 1:1 replacement to loss ratio. The mitigation goal will be to create, restore and re-establish aquatic habitat with habitat values greater than or equal to those that will be impacted by the Proposed Project consistent with the USACE's "no net loss" policy. Compensatory mitigation within the Study Area could be accomplished at the following locations:

   a. West Bank of Los Banos Creek. Create approximately 0.28 acres of Coastal and Valley Freshwater Marsh and Cismontane Alkali Marsh wetlands by excavating 0.28 acres of existing upland, Non-native Grassland along the west bank of Los Banos Creek near the confluence with the Connection Channel. The excavated area would conform to the elevations of adjacent wetland habitats and would transition to the elevation of Non-native Grassland at the western boundary of the wetland creation area.
   b. Confluence of Los Banos Creek and Mud Slough. Re-establish 0.05 acres of Coastal and Valley Freshwater Marsh and Open Water in the restored channel following removal of the Los Banos

Creek spill structure, culvert and levee which presently supports Non-native Grassland. An additional 0.11 acres of existing Coastal and Valley Freshwater Marsh and other waters would be restored in place at this location with the excavation of the structures, and restoration of the bed and banks of Los Banos Creek and Mud Slough.

c. East Bank of Mud Slough. Approximately 0.23 acres of Coastal and Valley Freshwater Marsh and Open Water habitat would be constructed by excavating 0.23 acres of existing upland, Non-native Grassland to match the elevations of the adjacent wetlands and other waters upstream and east of the proposed Diversion Structure.

Prior to ground disturbance, a compensatory wetland mitigation plan for wetland mitigation within the Study Area would be prepared by a qualified biologist engaged by the applicant (Water Authority). The plan would include appropriate measures, activities, and best management practices to be implemented prior to and during ground disturbance to ensure that no direct or indirect impacts to special-status plants, fish, wildlife, or riparian or sensitive natural communities would occur.

The Project's compensatory wetland mitigation plan would be submitted to the USACE, SWRCB, and CDFW for review and approval prior to the start of construction, and would:

- Be prepared consistent with the Final Regional Compensatory Mitigation and Monitoring Guidelines (USACE 2015);
- Define the location of all restoration activities;
- Describe measures that would ensure that adjacent land uses would not adversely affect the restored wetland habitat;
- Provide evidence of adequate hydrology to support restored wetland habitat;
- Identify the species, quantity, and location of plants to be installed in the restoration area;
- Identify the time of year for planting and method for supplemental watering, if any, during the establishment period;
- Identify the monitoring period, which shall be not less than five years for wetland restoration;
- Define success criteria that will be required for restoration efforts to be deemed a success, including:
    - Minimum standards for the establishment of native wetland plant cover measured three and five years after construction,
    - Establish not less than 0.21 acres of Coastal and Valley Freshwater Marsh and 0.07 acres of Open Water habitat,
    - Non-native invasive plant cover standards,
    - Standards to assess bed, bank and slope stability, and
    - Performance absent substantial maintenance measures.
- Define adaptive management and maintenance activities, including weeding, supplemental irrigation, site protection; and
- Define responsibility for maintaining, monitoring and ensuring the preservation of the mitigation site in perpetuity.

Construction of compensatory wetland mitigation within the Study Area would result in the conversion of approximately 0.56 acres of Non-native Grassland to Coastal and Valley Freshwater Marsh, Cismontane Alkali Marsh and Open Water. The conversion of Non-native Grassland, which is dominated by non-native grasses and forbs that are adapted to disturbance is abundant in the Study Area, would represent a loss of 0.3 percent of this vegetation community from the Study Area, and replacement with valuable wetland and open water habitats. The impact would be less than significant. No additional mitigation would be required.

Compensatory wetland mitigation construction within the Study Area would utilize heavy machinery and could result in direct impacts to California tiger salamanders, giant garter snake, San Joaquin kit fox, Swainson's hawk, tricolored blackbird, white-tailed kite, western spadefoot, western pond turtle, San Joaquin coachwhip, and nesting native birds as described in Impacts CTS BIO-4a, GGS BIO-5a, SJKF BIO-7a, SWHA BIO-8, TRBB BIO-9, WTK BIO-10, WS BIO-13a, WPT BIO-14a, SJC BIO-15a, and NBB BIO-16. Construction-related impacts on these species would be significant, but implementation of the mitigation measures described below would reduce these impacts to less than significant.

*With implementation of Mitigation Measures CTS BIO-4, GGS BIO-5, SJKF BIO-7, SWHA BIO-8, TRBB BIO-9, WTK BIO-10, WS BIO-13, WPT BIO-14, SJC BIO-15, and NBB BIO-16, the impact of compensatory wetland mitigation construction within the Study Area on California tiger salamanders, giant garter snake, San Joaquin kit fox, Swainson's hawk, tricolored blackbird, white-tailed kite, western spadefoot, western pond turtle, San Joaquin coachwhip, and nesting native birds would be reduced to less than significant.*

2. Restoration of temporary impacts. The temporary cofferdams, riprap and other fill materials utilized during Project construction will be removed, and areas subject to temporary disturbance will be restored consistent with *Appendix A, Mud Slough Restoration Project Drawings* to the Initial Study. Wetland, grassland and open water habitats temporarily disturbed by earthwork during Project construction will be revegetated with locally native seed mixes before the start of the rainy season. A qualified biologist engaged by the applicant (Water Authority) will prepare a temporary impacts restoration plan that describes restoration actions, methods, performance criteria and performance criteria. The plan will be submitted to the USACE, SWRCB and CDFW for review and approval prior to the start of construction.

Cultural Resources

Investigations of the Project Area found that no historic properties or historical resources would be affected by the Proposed Project. An archaeological pedestrian survey did not identify prehistoric or historic-era archaeological sites, features, or isolated artifacts on the ground surface. Presence/absence testing of soils to a depth of 2 meters (approximately six feet below ground surface) yielded no cultural material.

To ensure that no unknown pre-historic resources or undiscovered archaeological resources would be significantly impacted during Project construction, the following mitigation measure applies. The Water Authority will add this measure to Project construction contracts:

> Consistent with state and federal statutes, in the unlikely event that archaeological resources (sites, features, or artifacts) are encountered during Project development or ground-disturbing activities in the APE, all construction work occurring within 15 meters (50 feet) of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether additional study is warranted. This work exclusion buffer may be adjusted by the qualified archaeologist in consultation with the Water Authority. Depending upon the significance of the find under CEQA (14 CCR 15064.5(f); Public Resources Code section 21082), the archaeologist may simply record the find and allow work to continue. Prior to any disturbing investigative techniques, the feasibility of resource avoidance shall be considered. If the discovery proves significant, additional work, such as preparation of an archaeological treatment plan, testing, or data recovery may be warranted and would be implemented by the Water Authority.

The cultural resource investigation did not identify the presence of human remains. However, the California Health and Safety Code, Section 7050.5(b) addresses the event of discovery or recognition of any human remains in any location other than a dedicated cemetery. Work must stop until the county coroner can make a determination that the remains are not subject to provisions of Section 27491 of the Government Code. Therefore, the following mitigation measure will be included by the Water Authority in its contract with the Project construction firm to ensure no significant impact to unidentified human remains:

If human remains are uncovered during construction, the Merced County Coroner is to be notified immediately to arrange their proper treatment and disposition. If the remains are identified on the basis of archaeological context, age, cultural associations, or biological traits to be those of a Native American, then the California Health and Safety Code 7050.5 and Public Resource Code 5097.98 require that the county coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendant, who will be afforded the opportunity to recommend treatment of the human remains following protocols in California Public Resources Code 5097.98.

Paleontological Resources

The Dos Palos Alluvium, and therefore the entire Project Area, has Low Potential for unique paleontological resources. While the subsurface extent of the Dos Palos Alluvium is not currently known, the maximum proposed depth of Project-related ground disturbance is 5 feet bgs (below ground surface), which would not likely impact deposits old enough to bear significant fossils. This suggests a less-than-significant impact to a unique paleontological resource. However, there is the potential to encounter unanticipated fossils during construction. The following mitigation measures are included herein to ensure no significant impact to a potential fossil resource.

1. Worker Environmental Awareness Program (WEAP) training of construction workers is necessary in order to recognize unanticipated fossils, if present, during Project construction. The Water Authority will include this requirement in the construction contractor solicitation for proposals (bids) for the Project. If the contracted workers have not received this training previously, then training will be initiated prior to the start of construction. The WEAP training must be given by a qualified paleontologist.
2. If unanticipated fossils are encountered during construction, all ground-disturbing activities within the area of the find will cease and the Water Authority would need to retain a qualified paleontologist to oversee the documentation of the extent and potential significance of the find as well as recovery efforts. If the fossil is significant per SVP (2010) criteria, then paleontological monitoring would be conducted for further ground-disturbing activities in the Project Area. The frequency and duration of construction monitoring would be determined by the Water Authority in consultation with the project paleontologist on the basis of the nature and extent of the initial significant paleontological find.

## Project Evaluation of Environmental Impacts

The Proposed Project has been evaluated in an Initial Study ("IS") with respect to each item in the environmental checklist set forth in Appendix "G" to the CEQA Guidelines. This completed IS reflects research and analysis conducted in 2020-2021 to examine the interrelationship between the Proposed Project and the physical environment. The information contained in the IS, and five appendices to the IS, as well as any technical studies referenced in the IS, combine to form a record indicating that the IS has been completed in compliance with the California Environmental Quality Act (CEQA) and CEQA Guidelines.

Any determination of "Potentially Significant Impact" in an IS indicates that a specific adverse environmental effect has been identified in a category which is of sufficient magnitude to be of concern. Such an effect may be inherent in the nature and magnitude of the project or may be related to the design and characteristics of the individual project. No effects rated in this manner were identified for the Proposed Project. The effects analyzed in the Proposed Project are not sufficient in themselves to require the preparation of an Environmental Impact Report and/or have been mitigated to less-than-significant impacts.

Within the Project Area and vicinity, all new development activity and many ongoing activities may contribute directly or indirectly toward a cumulative impact on the physical environment. The incremental effect contributed by this environmental restoration Project towards such a cumulative effect is not considered substantial in itself.

The Proposed Project is not expected to result in any significant adverse effects in terms of the factors considered on the environmental checklist, including any such factors for which insubstantial impacts have been identified.

Cumulative effects of a significant nature are also not expected. The Proposed Project will not result in any adverse effects which fall within the "Mandatory Findings of Significance" contained in Section 15065 of the State CEQA Guidelines. Therefore, the overall conclusion is made that although the Proposed Project could have a potentially significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made and specific mitigation measures have been identified that reduce all potentially significant impacts to less than significant. As such, the Authority proposes to adopt a Mitigated Negative Declaration (following public review). The mitigation identified above will be implemented to avoid potentially significant effects. A mitigation monitoring or reporting program will be adopted at the time of Project approval.

# FINDINGS

An Initial Study has been prepared to assess the Mud Slough Restoration Project's potential impacts on the environment and the significance of those impacts. Based on the Initial Study, it has been determined that the Proposed Project would not have any significant effects on the environment once mitigation measures are implemented. The conclusion is supported by the following findings:

1. The Project would have no impacts related to aesthetics, agriculture and forestry resources, energy resources, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire.
2. The Project would have a less-than-significant impact on air quality, cultural resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise, and paleontological resources.
3. Mitigation is required to reduce potentially significant impacts related to biological resources to less-than-significant levels. While impacts to known cultural and paleontological resources are less than significant based on pre-construction investigations, the potential for unidentified resources to be unearthed during construction resulted in additional mitigation measures to ensure no significant impacts.

Pursuant to Section 21082.1 of the California Environmental Quality Act, the San Luis & Delta-Mendota Water Authority has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the Project and finds that the Initial Study and Mitigated Negative Declaration reflects the independent judgment of the Water Authority and further finds that the Project mitigation measures shall be implemented as stated in the Mitigated Negative Declaration.

I hereby approve the Mud Slough Restoration Project:

_____ _____

Federico Barajas, Executive Officer Date

San Luis and Delta-Mendota Water Authority

(Note: To be signed upon approval of the Project after the public review period is completed and changes made if needed.)