M&T CHICO RANCH/LLANO SECO RANCHO FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT

(SCH NO. 2012092050)

FINAL ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (MODIFICATIONS TO THE PUBLIC DRAFT AND RESPONSE TO COMMENTS)

Prepared for:

Prepared by:

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JULY 2014

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State of California
Natural Resources Agency
Department of Fish and Wildlife

MITIGATED NEGATIVE DECLARATION

The California Department of Fish and Wildlife (CDFW) has independently reviewed and analyzed the Proposed Project described below to determine whether it may have a significant effect on the environment as a result of project completion. A "significant effect on the environment" is characterized as a substantial, potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

In evaluating the significance of the environmental effect of the Proposed Project, CDFW has considered direct physical changes in the environment which may be caused by the project and the reasonably foreseeable indirect physical changes in the environment, as well as potential cumulative impacts to which the project could contribute.

Name of Project: M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project

Project File Number: State Clearinghouse Number 2012092050

Project Description: CDFW and the U.S. Fish and Wildlife Service (USFWS), along with the M&T Chico Ranch and Llano Seco Rancho, are proposing to implement interim measures to protect and maintain the viability of the M&T Chico Ranch/Llano Seco Rancho fish screen and pumping facility (M&T/Llano Seco Pumps Facility) to meet existing CDFW and National Marine Fisheries Service (NMFS) fish screen criteria and to provide a reliable water supply to farmland, Federal wildlife management areas, and a State wildlife area. These areas include the eastern portion of the Llano Seco Rancho, which is under conservation easement and is served by the M&T/Llano Seco Pumps Facility. The facility provides Sacramento River water to wetlands and associated habitats owned or managed by USFWS, CDFW and Llano Seco Rancho, which creates wetland habitat for waterfowl, shorebirds, and other wetland-dependent and special-status species.

Sediment deposition has posed, and continues to pose, a threat to the normal operation of the existing M&T/Llano Seco Pumps Facility and the City of Chico's wastewater treatment plant (WWTP) outfall. As a result of continued sediment deposition in the vicinity of the intake screens on the M&T/Llano Seco Pumps Facility, there is an imminent threat of inundation by encroaching sediment and the ability to maintain sufficient sweeping velocities parallel to the screen, which would render the screens out of compliance with CDFW and NMFS fish screen criteria, and potentially result in adverse impacts to anadromous salmonids in the Sacramento River and/or impacts to water deliveries by the ranches. Additionally, although river meander away from the pumping facility is being controlled by the temporary rock-toe and tree revetment that was installed during 2007, the continued presence of the revetment is necessary until further

technical and environmental evaluations are completed to determine whether this short-term measure should be incorporated as part of the long-term solution.

The Proposed Project includes: (1) implementation of up to two additional maintenance dredging operations; (2) a time extension for the temporary rock-toe and tree revetment to remain in place on the USFWS Capay Unit of the Sacramento River National Wildlife Refuge (SRNWR), and what is now The Nature Conservancy (TNC) fee title property immediately south of the Capay Unit until a long-term solution is developed and completed; and (3) ongoing monitoring and maintenance of the revetment, which would extend until a long-term solution is developed and completed. These measures, in concert, are intended to sustain the viability of the M&T/Llano Seco Pumps Facility, including meeting existing fish screen criteria, and water supply and delivery responsibilities, as well as to maintain the viability of a range of alternatives under consideration for a long-term solution.

In-river Dredging and Spoils Disposal Operations

Under the Proposed Project, dredging would entail removing in-river sedimentation from the Sacramento River to allow parallel sweeping flows at the pumping site in order to maintain the functionality of the M&T/Llano Seco Pumps Facility while continuing to meet NMFS and CDFW fish screen criteria. It is anticipated that up to two dredge cycles (during separate years) could occur, potentially removing up to 100,000 cubic yards of material per cycle, in the area immediately upstream, adjacent to, and downstream of the M&T/Llano Seco Pumps Facility via suction dredge. The first dredge cycle could not occur prior to 2015. Dredging operations (e.g., equipment mobilization, site set-up, in-river dredging, spoils disposal, and demobilization) would be conducted between June 16 and October 28, and work would occur about 12 hours per day, seven days per week. The in-river work period would extend from July 1st through October 15th, which has been identified as being protective of fisheries resources in the Sacramento River.

The Proposed Project would utilize a swinging ladder suction dredge with a rotating cutterhead at the end of a ladder used to dislodge sediment for capture by a suction pipe. The dredged material would be pumped through a pipeline system to two confined containment areas, bounded by 6-foot high berms, located upland from the dredge site and approximately 1,500 feet to the east on the M&T Chico Ranch property. In addition to the dredging site within the Sacramento River, equipment staging and access areas would be necessary. Two areas would be utilized for material staging and assembly of the dredge pipeline system on the east bank of the river, including a gravel parking lot at the M&T/Llano Seco Pumps Facility and an area within the vicinity of the existing spoils location.

Rock-toe and Tree Revetment Monitoring and Maintenance

The Proposed Project includes approval for the continued presence of the revetment installed during the fall of 2007 to persist, as well as implementation of maintenance activities that may be required while the revetment remains in place until a long-term solution is completed. Because the revetment was designed as an interim and temporary measure, there was an expectation that some maintenance would be required; however, monitoring conducted to date indicates that the revetment is performing as designed. Therefore, maintenance activities associated with the revetment are not anticipated to occur frequently.

If maintenance-related repairs are required, work would be conducted in a manner that would return the revetment to the condition in which it was originally designed and constructed. Types of maintenance would include the following: (1) inspecting for movement of revetment due to slippage of the underlying bank, and making repairs to stabilize the area; (2) repairing areas of localized scour and erosion, particularly in the toe zone, by adding rock and other materials; (3) dispersing large build-ups of debris to eliminate eddy currents; and (4) re-anchoring or replacing woody material and brush structures if they become rotted, disintegrated, or washed out due to high flow events. Construction work would be completed within one week, and in-river work activities associated with revetment maintenance would be conducted from July 1st through October 15th.

Additionally, according to the Glenn County Assessor's Parcel Map, approximately 245 feet along the southern portion of the revetment is presently located on property owned, in fee title, by TNC. Landowner permission was obtained during July 2013 when TNC and the ranches finalized an access agreement to continue to have and maintain the portion of the revetment on TNC property until a long-term solution is developed and completed. Landowner permission will automatically expire on July 18, 2016, unless extended in writing by TNC. Access would be limited to the fee title Stile property only.

Project Location: The Proposed Project is located in both Glenn and Butte Counties, just west of the confluence of Big Chico Creek on the Sacramento River, River Mile 192.5. A portion of the Proposed Project would be located on the Capay Unit of the SRNWR, and what is now TNC fee title property immediately south of the Capay Unit.

Mailing Address and Phone Number of Contact Person:

The CEQA Initial Study and the proposed Mitigated Negative Declaration (MND) were circulated for a 45-day public review and comment period beginning on December 18, 2013. Written comments or questions regarding the CEQA Initial Study or the proposed MND were to be submitted no later than 5:00 p.m. on January 31, 2014, to the name and address indicated below.

Ms. Katherine Hill
California Department of Fish and Wildlife, Region 2
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670
Telephone: (916) 358-2935
Katherine.Hill@wildlife.ca.gov

The proposed MND, along with the comments that were received, were considered by CDFW prior to a decision on the project. Copies of the MND, the Notice of Determination, and other materials related to the Proposed Project also are maintained at the above address.

Findings:

CDFW and the USFWS have prepared a joint NEPA Environmental Assessment/CEQA Initial Study (EA/IS) to assess the Proposed Project's potential effects on the environment and the significance of those effects. Based on the CEQA Initial Study, CDFW has determined that all potentially significant environmental impacts have either been eliminated through project design,

or incorporation of best management practices (BMPs), environmental commitments and mitigation measures that have been integrated into the Proposed Project and would clearly reduce potential impacts to a less-than-significant level. This conclusion is supported by the following findings:

- The M&T Chico Ranch and Llano Seco Rancho pumping plant was constructed as part of the M&T Pump Relocation and Fish Screen Project (Relocation Project). The original objectives of the Relocation Project would be undermined unless additional measures are taken to address affects of river meander and sedimentation. The relocated diversion was designed with a state-of-the-art fish screen system. Continued sedimentation reduces sweeping velocities across the screen potentially rendering the screens out of compliance with NMFS and CDFW fish screen criteria.

  Since the 1997 relocation, the M&T/Llano Seco Pumps Facility has provided a reliable water supply to the M&T Chico Ranch and Llano Seco Rancho, as well as habitat acreage owned and managed by USFWS and CDFW. As described in Chapter 1 of the Draft EA/IS, the combined acreage of the M&T and Llano Seco Ranches which is potentially irrigable by the M&T/Llano Seco Pumps Facility is approximately 21,000 acres. Virtually all of the Llano Seco acreage is protected by conservation and agricultural easements to permanently preserve the Ranch's wildlife and its farming culture. In addition to serving the ranches, the pumping facility provides water to approximately 2,200 acres in fee title owned and managed by USFWS. Included in these fee title lands, approximately 933 acres has been developed in wetlands and associated habitat. In addition, CDFW owns approximately 1,500 acres in fee title that includes approximately 952 acres developed into wetlands and associated habitat. These habitat areas provide wetland habitat for waterfowl, shorebirds, and other wetland-dependent and special-status species. A reduction of pumping may jeopardize the water supply to these valuable habitats. The Proposed Project is expected to achieve a benefit to the environment by maintaining the integrity of the relocated pumping plant.

  In the event of a water cut-off emergency at the M&T/Llano Seco Pumps Facility on the Sacramento River, the pumping plant on Big Chico Creek would be used to divert water until the ranches were able to resume diverting water from the M&T/Llano Seco Pumps Facility on the Sacramento River. Because alternative sources of water supply have not been identified for USFWS and CDFW wetland management and restoration purposes, it is expected that USFWS and CDFW will limit delivery of Llano Seco's available supplies, as was the practice prior to relocation of the M&T/Llano Seco Pumps Facility in 1997.

  In addition, as part of the 1997 relocation, the M&T Chico Ranch/Llano Seco Rancho agreed not to divert 40 cfs of their long held water right from Butte Creek to support Butte Creek fisheries, but only so long as replacement water is provided at the new diversion. Reductions in pumping at the M&T/Llano Seco Pumps Facility may also result in a diminution of flows in Butte Creek.

  Overall, the purpose of the Proposed Project is to continue to: (1) secure the water supply to the ranches, a State wildlife area, and Federal wildlife management areas; (2) protect the fisheries resources of Big Chico Creek; (3) preserve the enhancement of

instream flows on Butte Creek for the protection of salmonids, including spring-run Chinook salmon (Federally and State threatened) and steelhead (Federally threatened); and (4) protect the significant investments made by Federal, State and private parties.

☐ Based upon the information and analyses presented in the EA/IS, it was determined that all significant adverse environmental impacts have either been eliminated through project design or BMPs, environmental commitments and mitigation measures that have been integrated into the Proposed Project and would clearly reduce impacts to a less-than-significant level.

Provided below is a summary of the measures which have been incorporated into the Proposed Project to avoid and minimize impacts to the environment. Detailed descriptions of these impact avoidance measures are provided in the Mitigation, Monitoring and Reporting Program (see Appendix A of the Final EA/IS).

- Fisheries and Aquatic Resources (see ***Environmental Commitments FAR-1 – FAR-4***, ***Environmental Commitment WQ-3*** and NMFS (2014) non-discretionary terms and conditions to implement RPM-1 – RPM-3, as described in Appendix A of the Final EA/IS)
    - A qualified biologist will conduct environmental awareness training for project personnel.
    - Implement procedures for decontaminating field gear and in-river equipment to avoid introduction of invasive species.
    - Conduct entrainment monitoring if fish are identified in the dredge slurry.
    - Implement measures to minimize the injury or mortality of fish in the immediate work area associated with rock-toe and tree revetment maintenance activities.
    - Implement standard water pollution prevention measures to avoid potential water quality-related significant effects on fisheries and aquatic resources.
    - Submerge the cutterhead to the extent practicable within the substrate when the dredge pumps are engaged and reduce the dredge ladder swing speed, to the extent practicable, to avoid/minimize the potential for entrainment of juvenile fish into the suction dredge.
    - Implement protective measures described in NMFS 2014 Biological Opinion for this project, including adherence to NMFS' non-discretionary terms and conditions to implement RPM-1 through RPM-3.
- Terrestrial Resources (Botanical and Wildlife) (see ***Environmental Commitments TR-1 – TR-6*** in Appendix A of the Final EA/IS)
    - A qualified biologist will conduct environmental awareness training for project personnel.

- Avoid the flight season for the Valley Elderberry Longhorn Beetle (March 15th to June 15th) by commencing dredging equipment mobilization and site set-up on June 16th.
- Implement protective measures to avoid and minimize potential effects to Valley Elderberry Longhorn Beetle and its habitat, including measures described in the USFWS letter of concurrence dated March 5, 2014, for this project.
- Place temporary construction netting and/or cyclone fencing around nearby vegetation to provide protection from construction activities.
- Remove materials placed in natural areas and temporary structures and return affected areas to pre-construction elevations. These areas will also be re-contoured to pre-project conditions and replanted with a vegetation ratio of 3:1 from pre-project conditions. Monitoring of planting success will occur for two seasons following the re-vegetation. A detailed restoration plan will be approved by CDFW.
- Submit a written report to the NMFS within thirty (30) working days of the completion of each dredging period at the proposed project site and restoration of the site to pre-project conditions.
- Only native grasses will be used for any necessary re-seeding resulting from revetment maintenance activities. Seed mix will be determined by CDFW and USFWS biologists utilizing appropriate native species collected from local ecotypes.
- Avoid and minimize the spread of non-native weeds through pressure washing of construction equipment prior to entering the project site.
- Avoid and minimize potential adverse effects to terrestrial resources through the implementation of the following protective measures: (1) strategic placement of construction staging locations (e.g., delineating and avoiding sensitive habitats); and (2) time activities to avoiding peak migratory bird, bank swallow, and raptor nesting seasons. Conduct work to avoid disturbing nesting cuckoos.
- Conduct pre-construction floristic plant survey and pre-construction surveys for sensitive biological resources, including western pond turtle, and nesting raptors (if construction timing necessitates) by a qualified biologist prior to initiation of construction activities.
- Implement construction BMPs and avoid, to the extent feasible, potential bank swallow habitat areas.
- CDFW and/or USFWS will be contacted for additional review and consultation prior to implementation of any activities that could result in impacts to listed species or sensitive habitats.

- Recreation and Navigation Safety (see ***Environmental Commitments REC-1 – REC-4*** in Appendix A of the Final EA/IS)

- Post notices alerting recreationalists to the dredge activities beginning two weeks prior to the proposed dredging and throughout the duration of the activity. A notice also will be published in local newspapers approximately one week prior to commencement of in-river activities.

- Post signs on the Capay Unit of the SRNWR prior to, and during revetment maintenance activities to alert the public of potential hazards and trail closures.

- Use lighting and warning signs consistent with U.S. Coast Guard rules and regulations to identify the location of the dredge boat and any associated in-river hazards, which will be in place during all in-river construction activities.

- Hydrology and Water Quality (see ***Environmental Commitments WQ-1 – WQ-3*** in Appendix A of the Final EA/IS)

  - Implement standard water pollution prevention measures (e.g., erosion and sediment control measures, proper maintenance of equipment and storage of materials, proper control of non-stormwater discharges).
  - Prepare and implement a Storm Water Pollution Prevention Plan in compliance with NPDES Water Quality Certification Standard Conditions.
  - Prepare and implement an Erosion Control Plan and Post Construction Storm Water Management Plan.
  - Minimize the potential for increased sediment and turbidity by reducing the cutterhead dredge speed and/or the ladder swing speed, as conditions warrant.

- Cultural Resources (see ***Environmental Commitments CULT-1 – CULT-3*** in Appendix A of the Final EA/IS)

  - Should buried resources, human remains, or submerged archaeological or historic resources be discovered during construction, potential historic and cultural resources impacts will be reduced through immediate contact and consultation with the appropriate agencies (i.e., State Historic Preservation Officer, the County Coroner, and/or the California State Lands Commission).

- Air Quality and Greenhouse Gasses (see ***Environmental Commitments AQ-1, AQ-2*** and ***GHG-1***, and ***Mitigation Measure AQ-1*** in Appendix A of the Final EA/IS)

  - Implement standard minimization and mitigation measures, and best available construction management practices (e.g., maintaining all construction equipment in proper tune according to manufacturer's specifications, minimizing the amount of disturbed area and the amount of materials actively worked) during construction operations.

- Prepare and implement a dust control plan.
- Prepare an Air Quality Control Plan to reduce NO_x emissions.
- Implement standard BMPs for reducing GHG emissions.

- Hazards and Hazardous Materials (see ***Environmental Commitments HAZ-1 and HAZ-2*** in Appendix A of the Final EA/IS)
  - Prepare and implement a Hazardous Materials Control, Spill Prevention, and Response Plan to reduce the potential effects of hazardous materials use and spills.
  - Implement fire risk reduction measures (e.g., maintaining staging areas, welding areas, or other areas identified for construction work clear of combustible materials in order to maintain a firebreak) throughout the construction period.

- Traffic and Circulation (see ***Environmental Commitments TRAF-1 – TRAF-3*** in Appendix A of the Final EA/IS)
  - Develop and implement a Traffic Control Plan to avoid potential delays or safety issues on SR45, County Rd. 23, River Road or other haul routes.
  - Maintain and/or repair, if necessary, the local access road on the Capay Unit of the SRNWR following completion of revetment maintenance activities.

The California Department of Fish and Wildlife finds that implementing the Proposed Project will have no significant environmental impact. Stated another way, there is no substantial evidence indicating that the Proposed Project may have significant environmental impacts.

This Mitigated Negative Declaration is filed pursuant to Section 21080 of the California Environmental Quality Act and Section 15072 of the Guidelines for the Implementation of the California Environmental Quality Act.

Recommended by:

Katherine Hill
CDFW Program Manager

Aug 7, 2014
Date

Approved by:

Tina Bartlett
Regional Manager, Region 2

Aug 11, 2014
Date

U.S. Department of the Interior
Fish and Wildlife Service
Sacramento River National Wildlife Refuge

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
for the
M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project

The U.S. Fish and Wildlife Service (USFWS, or Service) and California Department of Fish and Wildlife (CDFW), along with the M&T Chico Ranch and Llano Seco Rancho, are proposing to implement interim measures to protect and maintain the viability of the M&T Chico Ranch/Llano Seco Rancho fish screen and pumping facility (M&T/Llano Seco Pumps Facility) to meet existing CDFW and National Marine Fisheries Service (NMFS) fish screen criteria and to provide a reliable water supply to farmland, Federal wildlife management areas, and a State wildlife area. These areas include the eastern portion of the Llano Seco Rancho, which is under conservation easement and is served by the M&T/Llano Seco Pumps Facility. The facility provides Sacramento River water to of wetlands and associated habitats owned or managed by USFWS, CDFW and Llano Seco Rancho, which creates wetland habitat for waterfowl, shorebirds, and other wetland-dependent and special-status species. Key wetland habitat for these species depends upon a reliable water supply that is made available from the M&T/Llano Seco Pumps Facility on the Sacramento River. A reduction of pumping may jeopardize the water supply to these valuable habitats.

Sediment deposition has posed, and continues to pose, a threat to the normal operation of the existing M&T/Llano Seco Pumps Facility and the City of Chico's wastewater treatment plant (WWTP) outfall. As a result of continued sediment deposition in the vicinity of the intake screens on the M&T/Llano Seco Pumps Facility, there is an imminent threat of inundation by encroaching sediment and the ability to maintain sufficient sweeping velocities parallel to the screen, which would render the screens out of compliance with CDFW and NMFS fish screen criteria, and potentially result in adverse impacts to anadromous salmonids in the Sacramento River and/or impacts to water deliveries by the ranches. Additionally, although river meander away from the pumping facility is being controlled by the temporary rock-toe and tree revetment that was installed during 2007, the continued presence of the revetment is necessary until further technical and environmental evaluations are completed to determine whether this short-term measure should be incorporated as part of a long-term solution. A Federal action would be required to authorize the continued presence of the temporary revetment on the USFWS Capay Unit, as well as activities that may be required to maintain the revetment, until a long-term solution is developed and completed.

Decision

Following comprehensive review and analysis, the Service selects the Proposed Action for implementation because it is the alternative that best achieves the purpose and need (for additional information, see the Draft and Final Environmental Assessment/Initial Study (EA/IS), which are incorporated by reference).

The Proposed Action will continue to: (1) secure the water supply to the ranches, Federal wildlife management areas, and a State wildlife area; (2) protect the fisheries resources of Big

Chico Creek; (3) preserve the enhancement of instream flows on Butte Creek for the protection of salmonids, including spring-run Chinook salmon (Federally and State threatened) and steelhead (Federally threatened); and (4) protect the significant investments made by Federal, State and private parties.

The Proposed Action will benefit the USFWS by contributing to the purposes of the Sacramento National Wildlife Refuge Complex (SNWRC) and by enabling the Service to maintain and restore the ecological integrity of the habitats and populations on the SNWRC.

Alternatives Considered

No Action Alternative

The No Action Alternative includes the actions, practices, and land uses that would be assumed to occur at the project site if the Proposed Action is not approved and there is no change in current management direction or level of management intensity. Under the No Action Alternative, alternate sources of funding would be necessary before M&T Chico Ranch/Llano Seco Rancho could implement maintenance activities required to ensure that Federal and State fish screening criteria are met. Additionally, as a commitment described in the 2007 Temporary Maintenance Project Final EA/IS (CDFG and USFWS 2007), the existing temporary rock-toe and tree revetment would be removed and erosion of the right (west) bank of the Sacramento River would continue.

Dredging Would Not Occur

If the encroaching in-river sedimentation renders the M&T/Llano Seco Pumps Facility non-functional prior to implementation of a long-term solution, the M&T Chico Ranch/Llano Seco Rancho would divert the entirety of their Butte Creek and Sacramento River water right entitlements from the Parrott-Phelan Dam on Butte Creek and from the pumping facility on Big Chico Creek.

In accordance with the 1996 Agreement to provide flows for fisheries and wildlife purposes associated with the relocation of the M&T/Llano Seco Pumps Facility, if M&T Chico Ranch/Llano Seco Rancho's ability to pump water from the Sacramento River is lost, flows in Butte Creek dedicated under the 1996 Agreement likely would be reduced, which could potentially impact listed species such as spring-run Chinook salmon and steelhead that use Butte Creek. Compared to the total amount of Sacramento River water presently diverted at the M&T/Llano Seco Pumps Facility, diversion of the previously dedicated water for environmental enhancement purposes of up to 40 cfs from Butte Creek under the No Action Alternative would be sufficient to irrigate only a small portion of farmland, which would result in economic damage to the ranch. The available Butte Creek water supply would also not be sufficient to maintain the existing managed wetlands.

Under the No Action Alternative, it also may be necessary to return to the existing diversion facility on Big Chico Creek, approximately 0.75 miles upstream from the confluence with the Sacramento River. In the event of a water cut-off emergency at the M&T/Llano Seco Pumps Facility on the Sacramento River, the pumping plant on Big Chico Creek would be used to divert water until the ranches were able to resume diverting water from the M&T/Llano Seco Pumps Facility on the Sacramento River. Because alternative sources of water supply have not been identified for USFWS and CDFW wetland management and restoration purposes, it is expected

that USFWS and CDFW will limit delivery of Llano Seco's available supplies, as was the practice prior to relocation of the M&T/Llano Seco Pumps Facility in 1997.

The No Action Alternative would adversely affect the ability of the M&T/Llano Seco Pumps Facility to deliver adequate, or any, water supplies to the ranches, Federal wildlife management areas, and a State wildlife area that depend on the pumps for their water supply while meeting existing fish screening criteria.

Removal of the Temporary Rock-toe and Tree Bank Revetment Installed in 2007

Under the No Action Alternative, the temporary 1,520-foot long rock-toe and tree revetment installed during 2007 would be removed once available funding was secured and appropriate regulatory compliance activities (e.g., permitting) are completed. Revetment removal would occur during a five week period between July 1 and October 15.

Since installation of the revetment in 2007, The Nature Conservancy (TNC) has acquired ownership, in fee title, of the property immediately south of the USFWS Capay Unit (referred to as the Stile property). According to the Glenn County Assessor's Parcel Map, approximately 245 feet along the southern portion of the revetment is presently located on the Stile property that is owned, in fee title, by TNC. Revetment removal under the No Action Alternative would require access to the southernmost 245 feet of the revetment presently located on TNC property. Landowner permission was obtained during July 2013 when TNC and the ranches finalized an access agreement, which states "*The Conservancy hereby grants the Ranch permission to continue to have and maintain the stone toe and tree revetment on the Property until such time as a Project is approved. The Ranch will continue to be obligated to repair any damage to the Property caused or arising out of the Ranch's use thereof and the Ranch shall repair or make compensation for any damage to agricultural crops, fences, and irrigation and drainage systems within the easement area that occur as a result of the Ranch's maintenance or removal activities...This permission shall automatically expire on July 18, 2016 unless extended in writing by the Conservancy.*"

Following revetment removal, erosion of the west bank would likely continue to occur and the Sacramento River would continue to migrate to the west. Continued in-river sedimentation and deposition on the east (left) bank of the river could compromise the operation of the City of Chico's WWTP outfall and the M&T/Llano Seco Pumps Facility, reducing the amount of water supplied to private, State and Federal wetland habitat areas – some of which are used by ESA-listed species. Based on observed bank erosion rates at the site between 1996 and 2006 (annual erosion rates have ranged from about 20 to 60-feet per year, with up to 100-feet per year during wet winters), erosion of 100-feet and 500-feet could occur over a subsequent five-year period (CDFG and USFWS 2007).

This alternative was not selected because of the potential to affect the ability of the M&T/Llano Seco Pumps Facility to provide adequate water supplies to the ranches, Federal wildlife management areas, and a State wildlife area, as well as the potential to affect in-river critical habitat and special-status fish species, and operation of the City of Chico's WWTP outfall.

Proposed Action

The Proposed Action includes: (1) implementation of up to two additional maintenance dredging operations; (2) a time extension for the temporary rock-toe and tree revetment to remain in place on the USFWS Capay Unit of the SRNWR, and what is now a TNC fee title property

immediately south of the Capay Unit until a long-term solution is developed and completed; and (3) ongoing monitoring and maintenance of the revetment, which would extend until a long-term solution is developed and completed. These measures, in concert, are intended to sustain the viability of the M&T/Llano Seco Pumps Facility, including meeting existing fish screen criteria, and water supply and delivery responsibilities, as well as to maintain the viability of a range of alternatives under consideration for a long-term solution.

In-river Dredging and Spoils Disposal Operations

Under the Proposed Action, dredging would entail removing in-river sedimentation from the Sacramento River to allow parallel sweeping flows at the pumping site in order to maintain the functionality of the M&T/Llano Seco Pumps Facility while continuing to meet NMFS and CDFW fish screen criteria. It is anticipated that up to two dredge cycles (during separate years) could occur, potentially removing up to 100,000 cubic yards of material per cycle, in the area immediately upstream, adjacent to, and downstream of the M&T/Llano Seco Pumps Facility via suction dredge. The first dredge cycle could not occur prior to 2015. Dredging operations (e.g., equipment mobilization, site set-up, in-river dredging, spoils disposal, and demobilization) would be conducted between June 16 and October 28, and work would occur about 12 hours per day, seven days per week. The in-river work period would extend from July 1 through October 15, which has been identified as being protective of fisheries resources in the Sacramento River.

The Proposed Action would utilize a swinging ladder suction dredge with a rotating cutterhead at the end of a ladder used to dislodge sediment for capture by a suction pipe. The dredged material would be pumped through a pipeline system to two confined containment areas, bounded by 6-foot high berms, located upland from the dredge site and approximately 1,500 feet to the east on the M&T Chico Ranch property. In addition to the dredging site within the Sacramento River, equipment staging and access areas would be necessary. Two areas would be utilized for material staging and assembly of the dredge pipeline system on the east bank of the river, including a gravel parking lot at the M&T/Llano Seco Pumps Facility and an area within the vicinity of the existing spoils location.

Rock-toe and Tree Revetment Monitoring and Maintenance

The Proposed Action includes approval for the revetment installed during the fall of 2007 to persist, as well as implementation of maintenance activities that may be required while the revetment is in place until a long-term solution is completed. Because the revetment was designed as an interim and temporary measure, there was an expectation that some maintenance would be required; however, monitoring conducted to date indicates that the revetment is performing as designed. Therefore, maintenance activities associated with the revetment are not anticipated to occur frequently.

If maintenance-related repairs are required, work would be conducted in a manner that would return the revetment to the condition in which it was originally designed and constructed. Types of maintenance would include the following: (1) inspecting for movement of revetment due to slippage of the underlying bank, and making repairs to stabilize the area; (2) repairing areas of localized scour and erosion, particularly in the toe zone, by adding rock and other materials; (3) dispersing large build-ups of debris to eliminate eddy currents; and (4) re-anchoring or replacing woody material and brush structures if they become rotted, disintegrated, or washed out due to high flow events. Construction work would be completed within one week, and in-river work activities associated with revetment maintenance would be conducted from July 1 through

October 15.

Additionally, according to the Glenn County Assessor's Parcel Map, approximately 245 feet along the southern portion of the revetment is presently located on property owned, in fee title, by TNC. Landowner permission was obtained during July 2013 when TNC and the ranches finalized an access agreement to continue to have and maintain the portion of the revetment on TNC property until a long-term solution is developed and completed. Landowner permission will automatically expire on July 18, 2016 unless extended in writing by TNC. Access would be limited to the fee title Stile property only.

Environmental Consequences of Implementing the Proposed Action

A summary of the potential effects of implementing the Proposed Action is provided below. To ensure that no significant adverse effects to the environment would result from the Proposed Action, BMPs, environmental commitments and mitigation measures have been incorporated into the project design. A detailed description of the resource-specific environmental commitments and mitigation measures, including: (1) identification of the responsible implementing entity(s); (2) the timeframe for implementation; (3) identification of the responsible monitoring entity(s)/agency; and (4) reporting requirements, is provided in the Mitigation, Monitoring and Reporting Program, which is included as Appendix A of the Final EA/IS.

Fisheries and Aquatic Resources

Dredging and Spoils Disposal

Activities associated with dredging and spoils disposal have the potential to affect fisheries resources nearby and downstream of the activity areas. The removal, transport, and placement of dredged sediments, in addition to general construction-related activities associated with access, staging, storage and disposal areas have the potential to affect fish species of focused evaluation due to the potential for: (1) sedimentation and turbidity; (2) hazardous materials and chemical spills; (3) underwater noise; (4) entrainment; (5) reduced prey availability; (6) physical habitat modification; (7) increased susceptibility to predation; and (8) spreading or introducing invasive aquatic species. Implementation of best management practices (BMPs) and impact avoidance measures, including the in-water construction work window of July 1 – October 15 and a Hazardous Materials Control, Spill Prevention and Response Plan, in addition to the use of specific design elements and construction techniques, including but not limited to utilization of a slow cutterhead rotation speed where feasible and conducting entrainment monitoring if fish are identified in dredge slurry, are anticipated to minimize the potential for impacting fish species of focused evaluation associated with the Proposed Action. With implementation of ***Environmental Commitments FAR-1 – FAR-4***, ***Environmental Commitment WQ-3*** and NMFS (2014) non-discretionary terms and conditions to implement reasonable and prudent measures (RPM-1 – RPM-3), as described in Appendix A of the Final EA/IS, suction dredging and spoils disposal activities associated with the Proposed Action would have a less than significant impact on fisheries and aquatic resources.

Additionally, as described in Chapter 3 of the Draft EA/IS (CDFW and USFWS 2013), potential impacts to fish species of focused evaluation due to dredging-related activities would be temporary and/or minimal with respect to changes in prey availability and permanent physical habitat modification.

Bank Revetment Monitoring and Maintenance

Construction-related activities associated with revetment maintenance include the potential for impacts to fish and aquatic resources from erosion, sedimentation and turbidity, hazardous materials and chemical spills, vibration and pressure waves, direct harm, and increased susceptibility to predation. However, because construction activities associated with periodic maintenance of the rock-toe and tree revetment could be accomplished from the landward side, and because no bank grading is anticipated at the site, the potential for short-term construction-related impacts to fish and aquatic resources would be minimal with implementation of impact avoidance measures. Therefore, with implementation of ***Environmental Commitments FAR-1 – FAR-3***, as described in Appendix A of the Final EA/IS, bank revetment monitoring and maintenance activities associated with the Proposed Action would have a less than significant impact on fisheries and aquatic resources.

Terrestrial Resources (Botanical and Wildlife)

Dredging and Spoils Disposal

The potential short-term construction-related impacts to botanical and wildlife resources associated with the Proposed Action are considered relative to: (1) timing of project activities; (2) physical habitat disturbance and short-term changes in habitat conditions; (3), potential for direct physical injury; (4) hazardous spills; and (5) the known or assumed presence of species and habitats within the project area. Potential impacts to terrestrial resources associated with dredging and spoils disposal primarily include noise-related impacts, although to a lesser extent, other potential terrestrial resource impacts could occur as a result of: (1) sediment removal and containment; (2) spoils disposal; and (3) equipment access, staging, and egress. In addition to conducting pre-construction surveys, implementation of BMPs and impact avoidance measures, including the in-water construction work window of July 1 – October 15 and a Hazardous Materials Control, Spill Prevention and Response Plan, is anticipated to minimize potential impacts to botanical and wildlife resources associated with the Proposed Action. Therefore, with implementation of ***Environmental Commitments TR-1 – TR-6***, as described in Appendix A of the Final EA/IS, dredging and spoils disposal activities associated with the Proposed Action would have a less than significant impact on terrestrial resources.

Bank Revetment Monitoring and Maintenance

Construction-related activities associated with revetment maintenance include physical habitat disturbance, potential for physical injury, hazardous materials and chemical spills, short-term changes in habitat conditions, and the disruption of habitat utilization by special-status species. Replacement of the rock or brush, as needed, on the revetment would incorporate project commitments, including impact avoidance/minimization measures, consistent with those described in the 2007 Temporary Maintenance Project Final EA/IS (CDFG and USFWS 2007). As previously described, these measures include BMPs and standard construction practices to avoid direct physical harm. With implementation of ***Environmental Commitments TR-1 – TR-6***, as described in Appendix A of the Final EA/IS, bank revetment monitoring and maintenance activities associated with the Proposed Action would have a less than significant impact on terrestrial resources.

Recreation and Navigation Safety

While in the Sacramento River (during both the 10-hour dredge operation period and the 14-hour non-working period), the suction dredge barge and the floating dredge pipeline represent an obstacle to watercraft navigation. Therefore, several precautionary measures are incorporated into the Proposed Action, including public noticing, placement of warning buoys, installation of lighting on the dredge barge and in-river section of the pipeline, among others. These measures would be in place prior to and during the dredging operations that would occur in the Sacramento River. Additionally, signs will be placed on the Capay Unit of the SRNWR prior to, and during revetment maintenance activities to alert the public of potential hazards and trail closures. Therefore, with implementation of ***Environmental Commitments REC-1 – REC-4***, as described in Appendix A of the Final EA/IS, the Proposed Action would have a less than significant impact on recreation and navigation safety.

Hydrology and Water Quality

Dredging operations under the Proposed Action have the potential to cause some temporary degradation to surface waters as concentrations of turbidity, total suspended solids, and other wastes may increase as bottom sediments are disturbed in the excavation process. Potential impacts due to dredging also may include short-term decreases in dissolved oxygen and increases in nutrient concentrations as a result of resuspension of sediment and sediment-bound organic material. These impacts would be temporary, generally confined to the dredging area, and would return to baseline levels following dredging activities in the immediate area (USACE 2011). Additionally, construction activities associated with maintaining or repairing the rock-toe and tree revetment may require some in-river work, which would result in generally similar water quality impacts if appropriate measures are not implemented to minimize the effects of the project. Implementation of the BMPs incorporated into the Proposed Action, compliance with CWA Section 401 certification requirements, and implementation of a Stormwater Pollution Prevention Plan are anticipated to minimize the potential for water quality impacts associated with the Proposed Action. With implementation of ***Environmental Commitments WQ-1 – WQ-3***, as described in Appendix A of the Final EA/IS, the Proposed Action would have a less than significant impact on hydrology and water quality.

Geology, Geomorphology and Soils

Vegetation clearing and placement of construction materials associated with revetment maintenance and dredging would result in ground and soil disturbance. These disturbances would increase the hazard of erosion and could temporarily increase erosion and sedimentation rates. Most earthwork would be conducted on or immediately adjacent to the top of the western river bank. Potential impacts on Sacramento River geomorphology would be minimal. To address potential short-term impacts related to soil and erosion, standard water pollution prevention measures, including erosion and sediment control measures, proper maintenance of equipment and storage of materials, proper control of stormwater discharges, and hazardous spill prevention and response measures will be implemented, as described in the sections of this FONSI that address Hydrology and Water Quality, and Hazards and Hazardous Materials.

Aesthetics/Visual Resources

The presence of construction equipment would temporarily degrade the visual quality of scenic vistas from the top of the river bank and in the immediate vicinity along the Sacramento River.

However, this effect would last no longer than the construction period. Because the Proposed Action is not expected to degrade the visual character or quality of the site and its surroundings, potential impacts would be less-than-significant.

Cultural Resources

Although unlikely, if historic properties, cultural resources or unique archaeological resources are discovered, potential impacts on these resources could be significant if they are destroyed or are determined eligible for listing in the National Register of Historic Places or the California Register of Historical Resources, and if the impact would affect their eligibility. Therefore, to minimize potential impacts, impact avoidance measures will be implemented if human remains, or buried historic or cultural resources are inadvertently discovered during ground-disturbing activities. With implementation of ***Environmental Commitments CULT-1 – CULT-3***, as described in Appendix A of the Final EA/IS, the Proposed Action would have a less than significant impact on cultural resources.

Air Quality and Greenhouse Gas Emissions

Construction-related activities associated with the Proposed Action would result in the temporary generation of reactive organic gases (ROG), oxides of nitrogen (NO_x), and particulate matter smaller than or equal to 10 micros in diameter (PM_{10}), resulting in temporary, short-term impacts to air quality. However, once the in-river dredging is completed, no additional emissions would be generated by the Proposed Action. Modeled construction emissions of ROG, PM_{10} and NO_x would each be less than the *de minimis* thresholds established by the EPA for Federal air quality conformity analyses.

Potential sources of GHG emissions associated with the Proposed Action would be limited to exhaust from construction vehicles and equipment (including CO_2 and NO_x). Construction activities associated with both dredging and spoils disposal and monitoring and maintenance of the revetment would result in temporary, short-term air quality and GHG emissions that would be limited to the construction time period.

Based on the results of air quality emissions modeling, NO_x emissions would exceed Butte County Air Quality Management District (BCAQMD) "Level B" state CEQA significance thresholds, potentially resulting in significant air quality effects. To address potential air quality concerns related to NOx emissions, the Proposed Action has been designed to incorporate measures to minimize the total quantity of air quality pollutants emitted during construction-related operations. BMPs, standard mitigation measures and best available mitigation measures, as defined by the BCAQMD in the *CEQA Air Quality Handbook* (January 2008), are incorporated into the Proposed Action. Therefore, with implementation of ***Environmental Commitments AQ-1*** and ***AQ-2*** and ***Mitigation Measure AQ-1***, as described in Appendix A of the Final EA/IS, the Proposed Action would have a less than significant impact on air quality and greenhouse gas emissions.

Hazards and Hazardous Materials

During construction activities associated with the Proposed Action, there would be a remote possibility of accidental spills of fuel or oil from the equipment used. Implementation of best construction practices for hazardous materials, including preparation of a spill prevention and response plan, training of construction personnel to comply with the plan, and the availability of on-site hazmat cleanup equipment and materials, would minimize the potential risk to health and

worker safety due to exposure to hazards and hazardous materials. Therefore, with implementation of ***Environmental Commitments HAZ-1 and HAZ-2***, as described in Appendix A of the Final EA/IS, the Proposed Action would have a less than significant impact on hazards and hazardous materials.

Traffic and Circulation

Construction activities associated with dredging operations would temporarily result in a slight increase in traffic levels from worker commutes and transportation of construction equipment and materials. However, once dredging equipment and machinery are on-site, it would remain on-site until completion of construction activities. Additionally, while maintenance activities would be limited in effort and duration, trucks and other construction equipment required for the periodic maintenance of the rock-toe and tree revetment may result in temporary traffic delays along roads in the vicinity of the project site as trucks hauling materials are entering and leaving the project area. Although roadway safety problems should be minimal, implementation of traffic control measures (e.g., signs, flaggers), as appropriate, would minimize and avoid potential traffic-related impacts. With implementation of ***Environmental Commitments TRAF-1 – TRAF-3***, as described in Appendix A of the Final EA/IS, the Proposed Action would have a less than significant impact on transportation and circulation.

Noise

There are no significant impacts to the environment from construction noise. Noise and vibration would be short-term and intermittent, limited to daytime hours and would not subject nearby residences to prolonged noise exposure above 55 to 65 dBA, or severe noise levels above 80 dBA.

Cumulative Effects

As discussed above and in Chapter 3 of the Draft EA/IS, all potential impacts related to the Proposed Action would be mitigated to below a level of significance through the incorporation of specific measures into the scope of the project.

Because the majority of the potential impacts associated with the Proposed Action are temporary and these, as well as all other potential impacts, would be mitigated to below a level of significance, the Proposed Action would not significantly contribute to cumulative impacts related to the aforementioned resources.

Measures Incorporated into the Proposed Action to Mitigate Adverse Effects

All adverse environmental impacts have either been eliminated through project design, or BMPs, environmental commitments and mitigation measures that have been integrated into the Proposed Action and would reduce impacts to a less-than-significant level. Provided below is a summary of the measures which have been incorporated into the Proposed Action to avoid and minimize impacts to the environment. A detailed description of each resource-specific impact avoidance measure is provided in the Mitigation, Monitoring and Reporting Program (Appendix A of the Final EA/IS).

- ☐ Fisheries and Aquatic Resources (see ***Environmental Commitments FAR-1 – FAR-4***, ***Environmental Commitment WQ-3,*** and NMFS (2014) non-discretionary terms and conditions to implement RPM-1 – RPM-3 in Appendix A of the Final EA/IS)
  - A qualified biologist will conduct environmental awareness training for project personnel.
  - Implement procedures for decontaminating field gear and in-river equipment to avoid introduction of invasive species.
  - Conduct entrainment monitoring if fish are identified in the dredge slurry.
  - Implement measures to minimize the injury or mortality of fish in the immediate work area associated with rock-toe and tree revetment maintenance activities.
  - Implement standard water pollution prevention measures to avoid potential water quality-related significant effects on fisheries and aquatic resources.
  - Submerge the cutterhead to the extent practicable within the substrate when the dredge pumps are engaged and reduce the dredge ladder swing speed, to the extent practicable, to avoid/minimize the potential for entrainment of juvenile fish into the suction dredge.
  - Implement protective measures described in the NMFS' (2014) Biological Opinion for this project, including adherence to NMFS' non-discretionary terms and conditions to implement RPM-1 through RPM-3.

- ☐ Terrestrial Resources (Botanical and Wildlife) (see ***Environmental Commitments TR-1 – TR-6*** in Appendix A of the Final EA/IS)
  - A qualified biologist will conduct environmental awareness training for project personnel.
  - Avoid the flight season for the Valley Elderberry Longhorn Beetle (March 15 to June 15) by commencing dredging equipment mobilization and site set-up on June 16.
  - Implement protective measures to avoid and minimize potential effects to Valley Elderberry Longhorn Beetle and its habitat, including measures described in the USFWS letter of concurrence dated March 5, 2014for this project.
  - Place temporary construction netting and/or cyclone fencing around nearby vegetation to provide protection from construction activities.
  - Remove materials placed in natural areas and temporary structures and return affected areas to pre-construction elevations. These areas will also be re-contoured to pre-project conditions and replanted with a vegetation ratio of 3:1 from pre-project conditions. Monitoring of planting success will occur for two seasons following the re-vegetation. A detailed restoration plan will be approved by CDFW.
  - Submit a written report to the NMFS within thirty (30) working days of the completion of each dredging period at the proposed project site and restoration of the site to pre-project conditions.
  - Only native grasses will be used for any necessary re-seeding resulting from revetment maintenance activities. Seed mix will be determined by CDFW and USFWS biologists utilizing appropriate native species collected from local ecotypes.

- Avoid and minimize the spread of non-native weeds through pressure washing of construction equipment prior to entering the project site.
- Avoid and minimize potential adverse effects to terrestrial resources through the implementation of the following protective measures: (1) strategic placement of construction staging locations (e.g., delineating and avoiding sensitive habitats); and (2) time activities to avoiding peak migratory bird, bank swallow, and raptor nesting seasons. Conduct work to avoid disturbing nesting cuckoos.
- Conduct pre-construction floristic plant survey and pre-construction surveys for sensitive biological resources, including western pond turtle, and nesting raptors (if construction timing necessitates) by a qualified biologist prior to initiation of construction activities.
- Implement construction BMPs and avoid, to the extent feasible, potential bank swallow habitat areas.
- CDFW and/or USFWS will be contacted for additional review and consultation prior to implementation of any activities that could result in impacts to listed species or sensitive habitats.

❑ Recreation and Navigation Safety (see ***Environmental Commitments REC-1 – REC-4*** in Appendix A of the Final EA/IS)

- Post notices alerting recreationalists to the dredge activities beginning two weeks prior to the proposed dredging and throughout the duration of the activity. A notice also will be published in local newspapers approximately one week prior to commencement of in-river activities.
- Post signs on the Capay Unit of the SRNWR prior to, and during revetment maintenance activities to alert the public of potential hazards and trail closures.
- Use lighting and warning signs consistent with U.S. Coast Guard rules and regulations to identify the location of the dredge boat and any associated in-river hazards, which will be in place during all in-river construction activities.

❑ Hydrology and Water Quality (see ***Environmental Commitments WQ-1 – WQ-3*** in Appendix A of the Final EA/IS)

- Implement standard water pollution prevention measures (e.g., erosion and sediment control measures, proper maintenance of equipment and storage of materials, proper control of non-stormwater discharges).
- Prepare and implement a Storm Water Pollution Prevention Plan in compliance with NPDES Water Quality Certification Standard Conditions.
- Prepare and implement an Erosion Control Plan and Post Construction Storm Water Management Plan.
- Minimize the potential for increased sediment and turbidity by reducing the cutterhead dredge speed and/or the ladder swing speed, as conditions warrant.

- ☐ Cultural Resources (see ***Environmental Commitments CULT-1 – CULT-3*** in Appendix A of the Final EA/IS)
  - Should buried resources, human remains, or submerged archaeological or historic resources be discovered during construction, potential historic and cultural resources impacts will be reduced through immediate contact and consultation with the appropriate agencies (i.e., State Historic Preservation Officer, the County Coroner, and/or the California State Lands Commission).

- ☐ Air Quality and Greenhouse Gasses (see ***Environmental Commitments AQ-1, AQ-2*** and ***GHG-1***, and ***Mitigation Measure AQ-1*** in Appendix A of the Final EA/IS)
  - Implement standard minimization and mitigation measures, and best available construction management practices (e.g., maintaining all construction equipment in proper tune according to manufacturer's specifications, minimizing the amount of disturbed area and the amount of materials actively worked) during construction operations.
  - Prepare and implement a dust control plan.
  - Prepare an Air Quality Control Plan to reduce NO_x emissions.
  - Implement standard BMPs for reducing GHG emissions.

- ☐ Hazards and Hazardous Materials (see ***Environmental Commitments HAZ-1 and HAZ-2*** in Appendix A of the Final EA/IS)
  - Prepare and implement a Hazardous Materials Control, Spill Prevention, and Response Plan to reduce the potential effects of hazardous materials use and spills.
  - Implement fire risk reduction measures (e.g., maintaining staging areas, welding areas, or other areas identified for construction work clear of combustible materials in order to maintain a firebreak) throughout the construction period.

- ☐ Traffic and Circulation (see ***Environmental Commitments TRAF-1 – TRAF-3*** in Appendix A of the Final EA/IS)
  - Develop and implement a Traffic Control Plan to avoid potential delays or safety issues on SR45, County Rd 23, River Road or other haul routes.
  - Maintain and/or repair, if necessary, the local access road on the Capay Unit of the SRNWR following completion of revetment maintenance activities.

The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 because:

Since the 1997 relocation, the M&T/Llano Seco Pumps Facility has provided a reliable water supply to the M&T Chico Ranch and Llano Seco Rancho, as well as habitat acreage owned and managed by USFWS and CDFW. As described in Chapter 1 of the Draft EA/IS, the combined acreage of the M&T and Llano Seco Ranches which is potentially irrigable by the M&T/Llano Seco Pumps Facility is approximately 21,000 acres. Virtually all of the Llano Seco acreage is protected by conservation and agricultural easements to permanently preserve the Ranch's wildlife and its farming culture. In addition to serving the ranches, the pumping facility provides

water to approximately 2,200 acres in fee title owned and managed by USFWS. Included in these fee title lands, approximately 933 acres has been developed in wetlands and associated habitat. In addition, CDFW owns approximately 1,500 acres in fee title that includes approximately 952 acres developed into wetlands and associated habitat. These habitat areas provide wetland habitat for waterfowl, shorebirds, and other wetland-dependent and special-status species.

As discussed in Chapter 3 of the Draft EA/IS (Section 3.4 – Terrestrial Resources), the Proposed Action would not result in significant adverse effects on Federal wetlands, riparian habitat or other sensitive natural communities in the Project Area.

Additionally, as described in Chapter 3 of the Draft EA/IS (Section 3.6 – Hydrology and Water Quality), the hydraulics and sediment transport characteristics of the project reach have been modeled extensively for a wide range of flows (10,000 cfs to 134,000 cfs). The hydraulics and sediment transport results from the entire suite of numerical and physical models are summarized in Tetra Tech (2012). Although the existing gravel stockpile area is located in the floodplain, the area is a backwater under flood flows and the drainage pattern or quantity of direct run-off was not altered by the stockpile placement. Under the Proposed Action, dredged material removed from the Sacramento River would be placed on top of the existing stockpile. Because the top of the existing stockpile is higher in elevation than the existing flood control levee, the placement of new material on the top of the existing stockpile would occur above the area of the existing floodplain that is subject to inundation. Therefore, storage of dredged material will not significantly impede or redirect flows because the stockpile storage area is within a backwater of the floodplain.

Project Coordination

Consistent with NEPA and CEQA regulatory requirements, the Proposed Action and associated environmental documentation were prepared in consideration and coordination with interested and/or affected parties, including:

- ❑ California Department of Fish and Wildlife
- ❑ California State Lands Commission
- ❑ California Department of Boating and Waterways
- ❑ California Department of Water Resources
- ❑ Butte County Air Quality Management District
- ❑ Glenn County Air Pollution Control District
- ❑ Sacramento River Conservation Area Forum
- ❑ Central Valley Flood Protection Board
- ❑ Central Valley Regional Water Quality Control Board
- ❑ U.S. Fish and Wildlife Service
- ❑ National Marine Fisheries Service
- ❑ U.S. Army Corps of Engineers
- ❑ California State Parks
- ❑ City of Chico
- ❑ The Nature Conservancy
- ❑ Ducks Unlimited
- ❑ Sacramento River Preservation Trust

Public Availability

The supporting Environmental Assessment was available for public review and comment for a 45-day period beginning on December 18, 2013. The document was distributed to Federal, State and local agencies, public libraries, potentially affected landowners, and private groups and

individuals upon their request. Comments were received through January 31, 2014. The Environmental Assessment and FONSI are available from:

U.S. Fish and Wildlife Service
Sacramento National Wildlife Refuge Complex
752 County Road 99W
Willows, CA 95988
Phone: 530-934-2801
or
http://sacramentovalleyrefuges.fws.gov

Other Statutory Compliance Requirements

Prior to considering signature of the FONSI, Section 7 consultation by USFWS and NMFS for species covered by the Endangered Species Act, and by CDFW for species covered by the California Endangered Species Act was completed. The USFWS issued a letter of concurrence dated March 5, 2014. NMFS issued a biological opinion on June 20, 2014. All environmental commitments, mitigation measures, reasonable and prudent measures, non-discretionary terms and conditions, and conservation recommendations included in these consultation documents have been incorporated into the Proposed Action, and are included in the Final EA/IS and the Mitigation, Monitoring and Reporting Program for the project. Prior to construction, permits from the U.S. Army Corps of Engineers (including a Section 404 permit under the Clean Water Act and Section 10 under the River and Harbors Act), Regional Water Quality Control Board, California State Lands Commission, Central Valley Flood Protection Board and others, as appropriate, will be obtained.

Conclusions

Based on information contained in the Environmental Assessment and the supporting references, it is my determination that the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment, within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969, as amended. As such, an environmental impact statement is not required. The attached Environmental Assessment has been prepared in support of this finding.

Supporting References

BCAQMD. 2008. CEQA Air Quality Handbook: Guidelines for Assessing Air Quality Impacts for Projects Subject to CEQA Review. January 2008.

CDFG and USFWS. 2007. M&T Chico Ranch/Llano Seco Rancho Pumping Plant Maintenance of Channel Alignment River Mile 192.5 Final Environmental Assessment/Initial Study. Prepared by HDR|SWRI. Prepared for M&T Chico Ranch. October 2007.

CDFW and USFWS. 2013. M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project Draft Environmental Assessment/Initial Study. December 2013.

CDFW and USFWS. 2014. M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project Final Environmental Assessment/Initial Study. July 2014.

National Marine Fisheries Service (NMFS). 2014. Biological Opinion for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project. National Marine Fisheries Service, Southwest Region. SWR2013SA00330. June 20, 2014.

Tetra Tech. 2012. Summary Report, M&T/Llano Seco Fish Screen Facility, Short-Term/Long-Term Protection Project; Alternatives Evaluation. Prepared for Ducks Unlimited, Inc. June 25, 2012.

USFWS. 2014. Letter from the Sacramento Fish and Wildlife Office, Sacramento, California to the Refuge Manager at the Sacramento National Wildlife Refuge Complex, Willows, California Regarding Informal Intra-agency Consultation Under Section 7(a)(2) of the Endangered Species Act for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project, Butte and Glenn Counties, California.

Assistant Regional Director, Refuges
Pacific Southwest Region

8.12.14
Date

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M&T CHICO RANCH/LLANO SECO RANCHO FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT

(SCH NO. 2012092050)

FINAL ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (MODIFICATIONS TO THE PUBLIC DRAFT AND RESPONSE TO COMMENTS)

Prepared for:

Prepared by:

HDR

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JULY 2014

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M&T CHICO RANCH/LLANO SECO RANCHO FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT

FINAL ENVIRONMENTAL ASSESSMENT/INITIAL STUDY (MODIFICATIONS TO THE PUBLIC DRAFT AND RESPONSE TO COMMENTS)

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1.0 INTRODUCTION

This Final EA/IS has been prepared following the close of the Draft EA/IS public review period and includes, among other items, the comments received on the Draft EA/IS and responses to those comments, and clarifications or modifications to information provided in the Draft EA/IS.

The United States Fish and Wildlife Service (USFWS), as the lead agency under the National Environmental Policy Act (NEPA), is responsible for finalizing the EA and issuing a Finding of No Significant Impact (FONSI). The Draft and Final EA and FONSI will serve as the basis for decision-making by USFWS and other Federal permitting and regulatory agencies. The California Department of Fish and Wildlife (CDFW), as the lead agency under the California Environmental Quality Act (CEQA), is responsible for approving the IS and issuing a Mitigated Negative Declaration (MND). The Draft and Final IS and MND will serve as the basis for decision-making by CDFW and other State permitting and regulatory agencies. The Lead Agencies will consider the comments received during the review period prior to adopting the FONSI and MND.

This Final EA/IS consists of: (1) a section discussing modifications to the public review Draft EA/IS; (2) the comments received on the Draft EA/IS; (3) responses to comments; and (4) literature cited to support the responses to comments. This document incorporates by reference the Draft EA/IS dated December 2013. For the Lead Agencies' decision-making purposes, the information contained in this Final EA/IS should be considered in concert with the information presented in the Draft EA/IS.

2.0 MODIFICATIONS TO THE PUBLIC DRAFT ENVIRONMENTAL ASSESSMENT/INITIAL STUDY

Changes to the Draft EA/IS are intended to provide additional clarification regarding Proposed Project elements and/or analyses, incorporate additional detail regarding Proposed Project features or mitigation measures and make minor corrections. Related to the Draft EA/IS, the Proposed FONSI, and the Proposed MND that were distributed for public review, there were no specific changes to project elements, the analyses, mitigation requirements, or minor corrections identified during the public comment process. Several relatively minor project-related changes were identified through the Section 7 Endangered Species Act (ESA) consultations that were conducted with the USFWS and National Marine Fisheries Service (NMFS) for the project, which are discussed below. Overall, the changes identified by both the USFWS and NMFS are designed to be more protective of the listed species that may be found within the project area. Thus, there are no changes to the document that would alter the impact conclusions that were presented in the Draft EA/IS.

On December 26, 2013, the USFWS entered into Informal Intra-agency Consultation under Section 7(a)(2) of the ESA regarding the Proposed Project. As a result of that ESA consultation

process, and to address concerns regarding avoidance measures for elderberry bushes near the containment sites in the vicinity of the gravel stockpile, two minor project changes have been identified to better avoid potential impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*) (VELB).

As a result of a site visit conducted by representatives from the USFWS Sacramento River National Wildlife Refuge, the USFWS Sacramento Fish and Wildlife Office and Ducks Unlimited on January 29, 2014, and review of the location for the suction dredge pipe and protective fencing, the Lead Agencies have decided to move the location of the suction dredge pipe approximately 15 feet south of the remnant habitat including elderberry bushes, as shown in **Figure 1**. While construction activities will occur near elderberry bushes, no ground disturbance activities will occur within five feet of their drip line. In addition, because riparian vegetation containing elderberry bushes exists along the pipeline alignment and to the west of the containment areas, the proposed plastic orange environmental fencing will be replaced with a more substantial cyclone fencing material in this area (Figure 1) to prevent damage to elderberry bushes. The two minor changes for project design enhancement purposes described above will provide equivalent or more effective protection to VELB and its habitat. By incorporating the modifications described above, it was determined that the Proposed Project may affect, but would not be likely to adversely affect VELB under the ESA. In a letter dated March 5, 2014, the USFWS concurred with that determination (USFWS 2014a).

Consequently, minor revisions to the Draft EA/IS, including the project description and the terrestrial resources environmental commitments (pages 2-37 to 2-41 of the Draft EA/IS and on pages I-17 to I-23 of Appendix I of the Draft EA/IS) have been incorporated into the project as a result of the USFWS ESA consultation (see below). Other changes related to specific environmental commitments also are provided below, with additions shown in underline and removed text shown in strikethrough, as appropriate. Additionally, all changes described below have been incorporated into the Final Mitigation, Monitoring and Reporting Program (**Appendix A)**.

Chapter 2 (Project Description)

The Draft EA/IS indicated that equipment mobilization and site set up would commence on June 14. To avoid the flight season for the VELB (March 15 to June 15), and to be consistent with the March 5, 2014 USFWS concurrence letter, preparatory activities including dredging equipment mobilization and site set-up will commence June 16. In-river dredging and spoils disposal would occur from July 1 through October 15, which has been identified as being protective of fisheries resources in the Sacramento River. Demobilization would be conducted between October 15 and October 28. Work would occur about 12 hours per day, seven days per week.

The only other change in the project schedule is associated with the potential initial dredge cycle. The previous project description indicated that the first dredge cycle was contemplated during 2014, although presently the first dredge cycle could not occur prior to 2015.

No other changes to the dredging construction schedule and characteristics would occur. The results of the individual resource impact analyses would not be significantly altered by this change in construction scheduling. In fact, the slightly shorter duration (2 days) for construction mobilization would, if anything, reduce the potential for impacts across all resource categories. Therefore, this change does not constitute a new or changed project condition.

Environmental Commitment TR-1: *Avoid and minimize potential adverse effects to Valley Elderberry Longhorn Beetle and its habitat.*

If suitable habitat for VELB occurs on a project site, or within close proximity where beetles will be affected by the project, these areas must be designated as avoidance areas and must be protected from disturbance during the construction and operation of the project. Protective measures are identified in USFWS' 1999 guidelines to avoid and minimize potential project effects on VELB. Complete avoidance (i.e., no adverse effects) may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants containing stems measuring 1.0 inch or greater in diameter at ground level (USFWS 1999). In buffer areas, construction-related disturbance should be minimized and any damaged area should be promptly restored following construction. The USFWS must be consulted before any disturbances within the buffer area are considered. In addition, the Service must be provided with a map identifying the avoidance area and written details describing avoidance measures (USFWS 1999).

Any VELB habitat that cannot be avoided should be considered impacted and appropriate minimization measures should be implemented (USFWS 1999). The Proposed Project will avoid and minimize impacts to VELB by implementing the protective measures that are prescribed in the USFWS (2014a) letter titled "*Informal Intra-agency Consultation Under Section 7(a)(2) of the Endangered Species Act for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project, Butte and Glenn Counties, California*", which have been incorporated into the measures ~~Biological Opinion that will be prepared for this project, as well as those~~ described below.

- Preparatory activities including dredging equipment mobilization and site set-up will commence June 16, to avoid the flight season for the VELB (March 15 to June 15).
- The project engineer will stake the limits of the construction footprint that is in proximity to potential VELB habitat (i.e., elderberry shrubs) at the project site. Elderberry shrubs located within 100 feet from the edge of access roads and containment areas in the Action/Project Area will be protected. Temporary construction netting (e.g., high-visibility plastic fencing) will be placed around nearby vegetation by the contractor to provide protection from construction activities.

  As an additional level of protection identified through the ESA Section 7 consultation process, USFWS (2014a) states "*Riparian vegetation exists along the pipeline alignment and to the west of the containment areas. Elderberry shrubs exist within the riparian habitat. The riparian vegetation will be fenced with chain link fencing to keep equipment out of the beetle habitat, thereby avoiding damaging the elderberry*

shrubs." Therefore, the area of riparian vegetation containing elderberry shrubs shown in **Figure 1** will be fenced using cyclone fencing (e.g., chain link) to provide additional protection from construction activities.

- A biological monitor (see Appendix A for additional detail) will be on site during mobilization to assist the project engineer with identifying suitable locations for placement of construction equipment, staging, and containment areas that avoid elderberry shrubs. The biologist will direct activities to occur away from the drip line of all elderberry shrubs and to avoid shrubs at a distance of 100 feet if possible.

Protective measures identified in USFWS 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle include:

- Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the USFWS, provide a minimum setback of at least 20 feet from the drip line of each elderberry plant.
- Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements.
- Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment."
- The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction.
- Instruct work crews about the status of the beetle and the need to protect its elderberry host plant.

Restoration and maintenance measures identified in USFWS 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle include:

- Restore any damage done to the buffer area (area within 100 feet of elderberry plants) during construction. Provide erosion control and re-vegetate with appropriate native plants.
- Buffer areas must continue to be protected after construction from adverse effects of the project. Measures such as fencing, signs, weeding, and trash removal are usually appropriate.
- No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant should be used in the buffer areas, or within 100 feet of any elderberry plant with one or more stems measuring 1.0 inch or greater in diameter at ground level.

- The applicant must provide a written description of how the buffer areas are to be restored, protected, and maintained after construction is completed.
- Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing should occur within five feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment).
    - Additionally, if new elderberry shrubs are identified or any shrubs cannot be avoided during implementation of the Proposed Action/Project, the appropriate resource agency (i.e., CDFW and/or USFWS) will be contacted for additional review and consultation to determine the potential significance of any anticipated impact, and whether additional impact avoidance measures exceeding those described in USFWS (1999) are necessary.
    - In addition to the protective measures described above, minimization measures (e.g., planting replacement habitat, or conservation planting), may be needed (USFWS 1999). Elderberry plants must be transplanted if they can not be avoided by the Proposed Project. All elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level must be transplanted to a conservation area (USFWS 1999). At USFWS discretion, a plant that is unlikely to survive transplantation because of poor condition or location, or a plant that would be extremely difficult to move because of access problems, may be exempted from transplantation. In cases where transplantation is not possible, the minimization ratios in Table 1 of USFWS (1999) may be increased to offset the additional habitat loss. The numbers of elderberry seedlings/cuttings and associated riparian native trees/shrubs to be planted as replacement habitat are determined by stem size class of affected elderberry shrubs, presence or absence of exit holes, and whether a project lies in a riparian or non-riparian area (USFWS 1999).

On October 2, 2012, the USFWS issued a proposed rule to remove VELB from the Federal list of endangered and threatened wildlife and to remove the designation of critical habitat (77 FR 60237). Generally, the protective measures described above would be implemented as part of the Proposed Action/Project until such time that the USFWS issues a Final Rule removing VELB from the Federal list of threatened and endangered species. However, because the Capay Unit of the SRNWR was established, in part, for VELB habitat restoration purposes, these protective measures would likely remain in place on the Capay Unit regardless of a Final Ruling to remove VELB from listing under the ESA (K. Moroney, USFWS, 2013, pers. comm.).

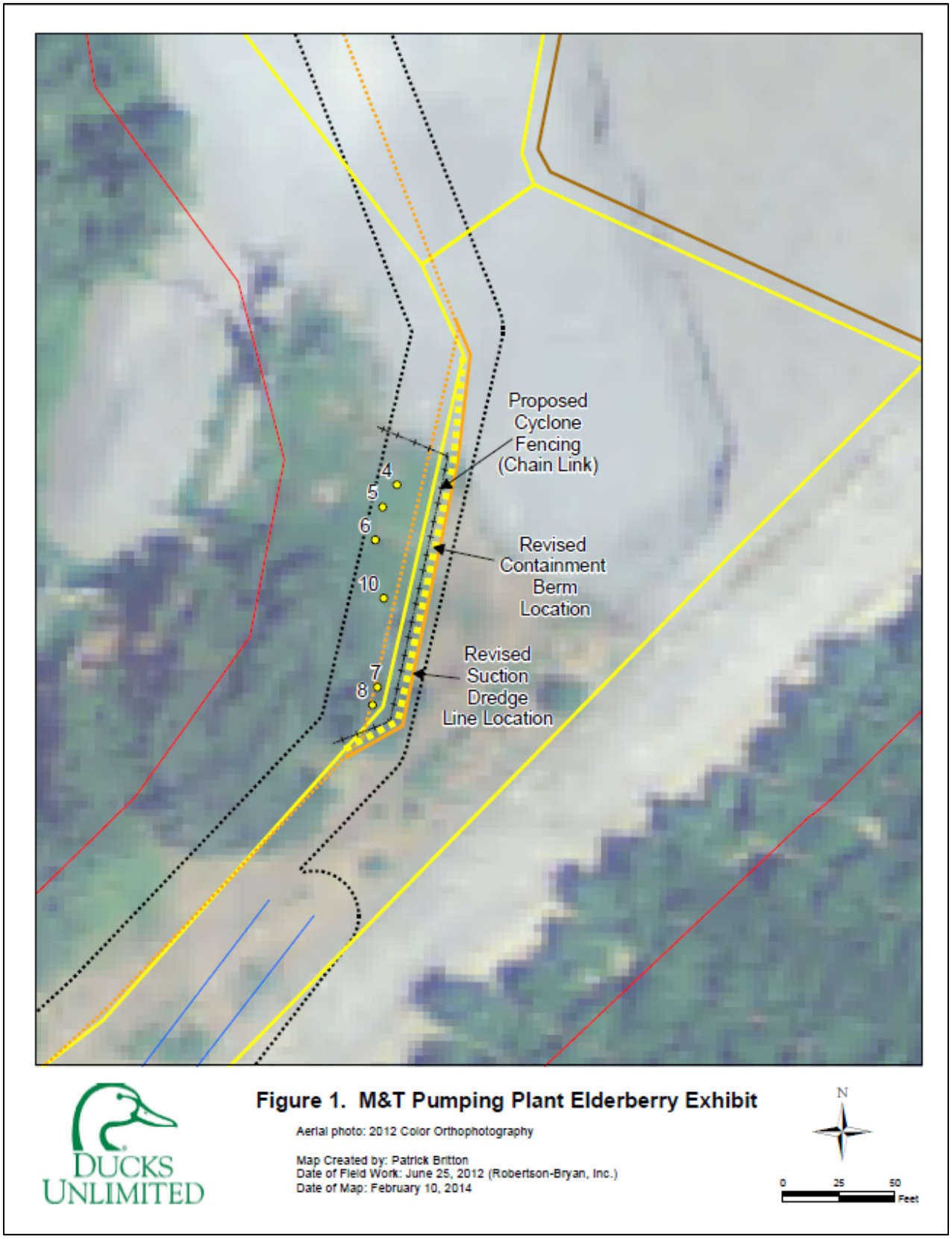

Figure 1. Location of cyclone fencing (chain link) proximate to the suction dredge line and the containment berm.

Environmental Commitment TR-3: *Maintain existing project conditions to the extent feasible.*

- Materials placed in natural areas and all temporary structures will be removed in their entirety and the affected areas returned to pre-construction elevations.
- ~~These affected areas will be revegetated, as appropriate, to stabilize the environment and to prevent erosion and will be detailed in a restoration plan approved by CDFW.~~ Pursuant to the 2014 NMFS BO, after dredging activities are completed, any temporary fill or debris shall be removed and disturbed areas restored to their pre-project conditions. An area subject to "temporary" disturbance includes any area that is disturbed during project activities, but that, after Proposed Project completion, will not be subject to further disturbance and has the potential to be re-vegetated. These areas will also be re-contoured to pre-project conditions and replanted with a vegetation ratio of 3:1 from pre-project conditions. Monitoring of planting success will occur for two seasons following the re-vegetation. A detailed restoration plan will be approved by CDFW.
- Also pursuant to the 2014 NMFS BO, USFWS will submit a written report to the NMFS within thirty (30) working days of the completion of each dredging period at the Proposed Project site and restoration of the site to pre-project conditions.

Environmental Commitment TR-4: *Avoid and minimize potential adverse effects to terrestrial resources.*

- Conduct a pre-construction floristic plant survey according to CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009) during the spring of 2014 to investigate whether botanical species identified as having the potential to occur in the Action/Project Area are present. If special status botanical species (see Chapter 3) are identified, then CDFW and USFWS will be notified, survey results will be provided to CDFW and USFWS, the locations of individual plants or populations will be identified, and these locations will be clearly identified as avoidance areas (e.g., exclusionary fencing and signage) prior to initiation of construction.
- To avoid take of birds and/or their nests, if construction is to occur during the nesting season (February 1 – August 31), conduct pre-construction surveys within 15 days prior to initial mobilization. Surveys for raptors will be conducted within 500 feet of the project area, other nesting bird surveys will be conducted within the project footprint. All work will be conducted to avoid disturbing nesting cuckoos.

  The results of the survey shall be emailed to Tracy.McReynolds@wildlife.ca.gov.

  If no active nests are detected during these surveys, no additional measures are required.

  If active nests are found in the survey area, avoidance measures will be developed in coordination with CDFW (and USFWS).

- If a lapse in project-related work of 15 days or longer occurs, another focused survey shall be required before project work can be reinitiated. Concurrent with ***Environmental Commitment TR-1***, a pre-construction survey for WPT shall be conducted by a qualified biologist the morning of initiation of construction activities. If a western pond turtle is observed in the project area during construction activities, the contractor will temporarily halt construction until the turtle has moved itself to a safe location outside of the construction limits. If construction is to occur during the nesting season (late June–July), a pre-construction survey will be conducted by a qualified biologist to locate any western pond turtles or their nests. This survey will be conducted within suitable habitat within the project footprint no more than two days prior to the start of construction activities in suitable habitat. If a pond turtle nest is found, the biologist will flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, in consultation with CDFW, a no-disturbance buffer zone may be established around the nest until the young have left the nest.

  The monitoring biologist shall be contacted immediately in the event that a turtle or eggs are encountered during the work period. Any dead or injured turtles shall be immediately reported to the CDFW. The treatment of any injured or dead turtles shall be coordinated with the CDFW.

- Coordinate with CDFW (and USFWS as appropriate) if the aforementioned pre-construction surveys identify other special status species (see Chapter 3) in the Action/Project Area prior to the onset of construction activities.

  As previously discussed, the results of site assessments and biological surveys are often considered valid by the USFWS and/or CDFW for a period of two years, unless determined otherwise on a case-by-case basis by the appropriate USFWS or CDFW office. Depending on the timing of when revetment maintenance and a second dredge cycle may become necessary, additional terrestrial resource pre-construction surveys (e.g., nesting raptors, WPT, VELB habitat) may need to be conducted if these activities occur two or more years in the future.

On December 19, 2013, the USFWS requested formal consultation from NMFS under Section 7(a)(2) of the ESA regarding the Proposed Project. As a result of that ESA consultation process, NMFS issued a Biological Opinion (BO) on June 20, 2014 (herein referred to as the 2014 NMFS BO). The 2014 NMFS BO concluded that the project is not likely to jeopardize winter-run Chinook salmon, spring-run Chinook salmon, steelhead, or green sturgeon, or adversely modify their designated critical habitat. NMFS included an incidental take statement that identified reasonable and prudent measures (RPMs) and non-discretionary terms and conditions to minimize incidental take of listed fish resulting from the implementation of the Proposed Project.

The conservation and avoidance measures outlined in the 2014 NMFS BO have been incorporated into the project description to avoid and/or minimize potential adverse effects on listed fish species and their designated critical habitats. Environmental Commitments WQ-1

through WQ-3, FAR-1 through FAR-3, and TR-3 (as modified above and described in Appendix A) are inclusive of, and address NMFS' conservation measures.

As described on page 105 of the 2014 NMFS BO, NMFS determined that the following three RPMs are necessary to minimize take of listed fish resulting from implementation of the project.

2014 NMFS BO Reasonable and Prudent Measures

- RPM-1: (a) Measures shall be taken to further conservation measures and to minimize injury and mortality to listed anadromous salmonids from the in-stream Project dredging and where Sacramento River access and staging are being completed.
- RPM-2: (a) Measures shall be taken to minimize impacts to listed salmonids and green sturgeon from the amount and duration of sedimentation from the construction, and to monitor the range and magnitude of sediment load from all activities so as to reduce the impact to listed fish by halting dredging if sediment loads exceed 20 percent of baseline level NTUs for more than 3 hours on more than 4 occasions.
- RPM-3: (a) Measures shall be taken to monitor all Project elements and conservation measures throughout the life of the Project to ensure their effectiveness.

The non-discretionary terms and conditions on pages 105 through 107 of the 2014 NMFS BO implement the RMPs described above and identify prescribed monitoring and reporting requirements. The terms and conditions have been incorporated into the Final Mitigation, Monitoring and Reporting Program (Appendix A).

2014 NMFS BO Terms and Conditions

Terms and Conditions to implement RPM-1

Take of listed fish in the Project area will be avoided with these measures:

(1) USFWS or its contractor will implement work windows and BMPs to reduce impacts to the stream channel from sedimentation. All construction equipment including fuels are to be stored at designated staging areas.

(2) Spoils materials must be compiled and stored in designated areas away from the Sacramento River.

Terms and Conditions to implement RPM-2

To avoid impacts from the dredging operations placement and diversion removal:

(1) Monitors shall conduct grab samples at three stations for each project "zone", as described in the Project Description section of the 2014 NMFS BO. The first sample should be taken 100 feet upstream of the construction zone, or wherever possible that will establish a baseline suspended sediment "level" that is free of construction turbidity effects. The second sample should be taken with [*sic*] twenty feet of the lowest point of effluent in the construction zone (such as below the heavy equipment

that is operating). The third sample should be taken at 1,000 feet below the construction site. These samples should be taken during Project construction to monitor the change in NTUs so that measurable increases stay within ≤ 20 percent of baseline levels.

(2) If work in the channel exceeds the NTU standard up to 1,000 feet downstream of the Project for greater than 3 hours, silt curtains or other methods designed to prevent the transport of suspended sediment will be employed to ensure that turbidity is reduced below this threshold.

(3) NMFS must be notified, and if NTUs > 20 percent above baseline levels is documented for more than 3 hours on more than 4 occasions, work must be halted and NMFS must be notified. If NMFS in conjunction with the Resource Agencies determine that the exceedance cannot be fully mitigated, activities will be halted until NMFS can determine with USFWS how to correct it.

Terms and Conditions to implement RPM 3

(1) A detailed report of the post-dredging evaluation and assessment of the channel function with information on the functionality of the fish screen function shall be submitted to NMFS within 60 days from test completion. The report shall be sent to NMFS address below.

Assistant Regional Administrator
NMFS Central Valley Area Office
Fax at (916) 930-3623)
or by phone at: (916) 930-3600

A follow-up written notification shall also be submitted to NMFS which includes the date, time, and location that the carcass or injured specimen was found, a color photograph, the cause of injury or death, if known, and the name and affiliation of the person who found the specimen. Written notification shall be submitted to:

Assistant Regional Administrator
Central Valley Area Office
National Marine Fisheries Service
650 Capitol Mall, Suite 5-100
Sacramento, California 95814

The changes to the project description and environmental commitments described above resulting from the USFWS and NMFS ESA consultations are designed to be more protective of listed species, and do not constitute new significant information or result in new significant impacts or mitigation measures for the purposes of CEQA and NEPA.

3.0 RESPONSES TO COMMENTS RECEIVED ON THE PUBLIC DRAFT ENVIRONMENTAL ASSESSMENT/ INITIAL STUDY

3.1 DOCUMENT REVIEW AND AVAILABILITY

The Draft EA/IS, Proposed FONSI, and Proposed MND were available for a 45-day public review period beginning on December 18, 2013. Written comments on the document were requested to be received no later than January 31, 2014.

As part of the NEPA/CEQA process, two public meetings also were held on January 10, 2014 at the Chico Masonic Family Center in Chico, California to provide interested parties with an opportunity to provide verbal and/or written comments on the Draft EA/IS.

The Draft EA/IS, Proposed FONSI, and Proposed MND were available for review at the following locations:

- California Department of Fish and Wildlife, 1701 Nimbus Road, Suite A, Rancho Cordova, CA 95670
- United States Fish and Wildlife Service, Sacramento National Wildlife Refuge Complex, 752 County Road 99W Willows, California 95988, and online at http://www.fws.gov/refuge/Sacramento_River/
- Butte County Library, Chico Branch, 1108 Sherman Avenue, Chico, California 95926
- Willows Library, 201 N Lassen Street, Willows, California 95988
- Sacramento River Conservation Area Forum Website: http://www.sacramentoriver.org/srcaf

In addition, the Notice of Availability of the Draft EA/IS was distributed to parties listed in **Appendix B**. The Notice of Availability also was distributed to the Sacramento River Conservation Area Forum Technical Advisory Committee, which consists of approximately 300 individuals and organizations with interests in the region, and was published in the following newspapers:

- Willows Journal – Published on December 18, 2013
- Chico Enterprise-Record – Published on December 18, 2013

The USFWS prepared a news release that was posted on the agency's website (**Appendix C**).

3.2 COMMENTS RECEIVED

The purpose of each written response to a comment on the Draft EA/IS is to address the significant environmental issue(s) raised by each comment. CEQA Guidelines Section 15088(b) requires that responses be made to only those comments that are specific to the IS/MND. Section

15088(b) of the *CEQA Guidelines* describes the evaluation that CEQA requires in the response to comments. It states that:

> *The written response shall describe the disposition of significant environmental issues raised (e.g., revisions to the proposed project to mitigate anticipated impacts or objections). In particular, the major environmental issues raised when the Lead Agency's position is at variance with recommendations and objections raised in the comments must be addressed in detail giving reasons why specific comments and suggestions were not accepted. There must be good faith, reasoned analysis in response. Conclusory statements unsupported by factual information will not suffice.*

The Lead Agencies received a total of four comment letters on the Draft EA/IS. Additionally, three speakers submitted verbal comments at the afternoon session of the January 10, 2014 Public Meeting (**Appendix D**). Verbal comments made at the January 10, 2014 public meetings were recorded, and a transcript of those comments are presented in Section 3.3.5. No verbal comments were recorded at the evening session. Commenters and their associated agencies are listed below in **Table 1**.

Table 1. Agencies, organizations, and individuals that provided comments on the Draft EA/IS.

Written Comments	Associated Agency
Cy R. Oggins	California State Lands Commission
James Herota	Central Valley Flood Protection Board
Scott A. Zaitz	Central Valley Regional Water Quality Control Board
John Merz	Sacramento River Preservation Trust
Public Meeting Comments	**Associated Agency**
Woody Elliott	
John Merz	Sacramento River Preservation Trust
Vicky Newlan	

Copies of all written comments received during the public review are included in this Final EA/IS. Each letter has been analyzed to identify specific comments to the EA/IS. Each letter is coded and each comment is numbered. For example, the first comment in the letter from the California State Lands Commission (CSLC) is labeled as CSLC-1. Responses are numbered so that they correspond to the appropriate comment. Where a comment could be responded to with a response to another comment, reference to that response is provided.

The responses that have been prepared to address issues and concerns raised in the comments on the Draft EA/IS are presented following the full suite of comment letters. Responses are provided for each comment that raised a significant environmental issue or an issue related to the adequacy of the Draft EA/IS (CEQA Guidelines § 15088). Some of the comments do not address the completeness or adequacy of the Draft EA/IS, do not raise significant environmental issues,

or do not request additional information. A substantive response to such comments is not required within the context of CEQA. Beyond the requirements set by CEQA, every attempt has been made to respond to comments that address the project in general, in an effort to provide the most complete information possible.

Additionally, comments that argue for or against approval of the Proposed Project, but which do not raise substantial issues under CEQA, do not require a CEQA response. These comments are responded to with a "comment noted or acknowledged" reference. This indicates that the comment will be forwarded to all appropriate decision makers for their review and consideration as part of the public decision making process for the project.

3.2.1 COMMENTS ON THE DRAFT EA/IS

3.2.1.1 CALIFORNIA STATE LANDS COMMISSION (CSLC) COMMENT LETTER

STATE OF CALIFORNIA — EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916) 574-1890**
Contact FAX: **(916) 574-1885**

January 31, 2014

File Ref: SCH # 2012092050

California Department of Fish and Wildlife
Attn: Ms. Katherine Hill
1701 Nimbus Road, Suite A
Sacramento, CA 95670

Subject: Draft Environmental Assessment/Initial Study, Proposed Finding of No Significant Impact, and Proposed Mitigated Negative Declaration (Draft MND) for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project (Project), Sacramento River, Butte and Glenn Counties.

Dear Ms. Hill:

Staff of the California State Lands Commission (CSLC) has reviewed the subject Draft MND for the above referenced Project, which is being prepared by the California Department of Fish and Wildlife (CDFW). CDFW, as a public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.); the U.S. Fish and Wildlife Service (USFWS) is the lead agency under the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.). The CSLC is a trustee agency because of its statutory responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, the CSLC will act as a responsible agency because the Project involves work on sovereign lands.

CSLC staff had previously provided comments on October 25, 2012 (attached) when CDFW was seeking preliminary input on the proposed Notice of Preparation/Initial Study (NOP/IS). On January 24, 2013 (attached), another letter was sent to the Project development consultant Ducks Unlimited, Inc of reconsidering the lease determination to qualify the proposed Project under Public Resources Code section 6327 to now requiring a lease under Public Resources Code section 6303.1. This determination was made with consideration of the proposed short-term protection Project that includes two dredging cycles, removal, storage and disposition of State-owned gravel material and maintenance of the existing rock revetment, as well as the undetermined scope of work for a long-term solution in this area of the Sacramento River (River).

CSLC Jurisdiction

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

CSLC-1 After reviewing the information contained in the Draft MND, CSLC staff has determined the Project will be located on State-owned sovereign land under the jurisdiction of the CSLC. A lease from the CSLC will be required for USFWS and CDFW to implement the Project on sovereign lands. Please contact Wendy Hall (see contact information below) for further information about the extent of the CSLC's sovereign ownership and leasing requirements.

CSLC-2 Please also be advised that the waterways involved in the Project are subject to a public navigational easement. This easement provides that the public has the right to navigate and exercise the incidences of navigation in a lawful manner on State waters that are capable of being physically navigated by oar or motor-propelled small craft. Such uses may include, but are not limited to, boating, rafting, sailing, rowing, fishing, fowling, bathing, skiing, kayaking, and other water-related public uses. The activities completed under the Project must not restrict or impede the easement right of the public.

Project Description

The Proposed Project involves implementation of interim measures to protect and maintain the viability of the M&T Chico Ranch/Llano Seco Rancho fish screen and pumping facility (M&T/Llano Seco Pumps Facility), located on the Sacramento River at approximately River Mile 192.5. These measures include:

1. Implementation of up to two additional maintenance dredging operations;
2. A time extension for the temporary rock-toe and tree revetment to remain in place on the USFWS Capay Unit of the Sacramento River National Wildlife Refuge

(SRNWR), and what is now The Nature Conservancy (TNC) fee title property immediately south of the Capay Unit until a long-term solution is developed and completed; and

3. Ongoing monitoring and maintenance of the revetment, which would extend until a long-term solution is developed and completed.

Implementation of these measures, in concert, are intended to sustain the viability of the M&T/Llano Seco Pumps Facility, including meeting existing fish screen criteria, and water supply and delivery responsibilities, as well as to maintain the viability of a range of alternatives under consideration for a long-term solution.

CSLC Leasing Background for Related Projects

Public Resources Code section 6327 provides that if a facility is for the "procurement of fresh-water from and construction of drainage facilities into navigable rivers, streams, lakes and bays," and if the applicant obtains a permit from the local reclamation district, the Central Valley Flood Protection Board (formerly the State Reclamation Board), the U.S. Army Corps of Engineers, or the Department of Water Resources, then a lease application shall not be required by the CSLC.

CSLC-3 In 2001 and 2007, Commission staff qualified channel maintenance (dredging) and installation of a rock revetment performed by CDFW under Public Resources Code section 6327. However, the current proposed Project does not fall under this qualification because of two dredging cycles, removal, storage and disposition of State-owned gravel material and maintenance of existing rock revetment, and the undetermined scope of work for a long-term solution in this area of the River. Since the Project does not consist of the same activities as those of the 2001 and 2007 prior projects, a lease will need to be obtained from the CSLC.

Environmental Review

CSLC staff requests that the CDFW consider the following comments on the Project's MND.

CSLC-4 1. CEQA Checklist: Rather than being placed within the MND itself, and the related impact discussions, the CEQA Initial Study Environmental Checklist (Checklist) is included as Appendix A to the MND. This structure may not be as effective in showing relationships between the proposed mitigation measures and potential impacts. For example the Checklist's "Biological Resources Section" on page A-9 briefly references Section 3.3 and Section 3.4 for the reader to understand how these possible impacts in the Checklist will be made less-than-significant through proposed mitigation measures. Unfortunately, it is not logically explained in these referenced text how the possible impacts in the Checklist are being reduced to less-than-significant. Therefore, CSLC staff recommends that each of the questions in the Checklist be part of the Chapter 3 text, and logically explained how applying prosed mitigation measures will reduce each of the significant impacts to less-than-significant.

CSLC-5

2. Recreational Activities: Kayaking, swimming, rafting, sailing, rowing, bathing, skiing, and water-related public uses are not in the list of recreational uses of the Sacramento River corridor on page 3-160 of the MND. As a result, the impact analysis of these recreational activities is missing. Therefore, CSLC staff recommends adding these to the list, and evaluating possible impacts. If these impacts are potentially significant, CSLC staff recommends proposing feasible mitigation measures to reduce these impacts to less-than-significant. It is possible that the already-proposed mitigation measures such as posting public notice signs (MND page I-32) before carrying out Project-related activities could mitigate these potential impacts as well, but if that is the case, CSLC staff recommends explaining that thoroughly in the "Recreation and Navigation Safety" discussion on page 3-160 of the MND (see comment #1 above).

Thank you for the opportunity to comment on the Draft MND. As a responsible and trustee agency, the CSLC will need to rely on the Final MND for the issuance of any lease, therefore, we request that you consider our comments before adopting the MND.

Please send copies of future Project-related documents, including electronic copies of the Final MND, Mitigation Monitoring and Reporting Program (MMRP), and Notice of Determination (NOD), when they become available, and refer questions concerning environmental review to Afifa Awan, Environmental Scientist, at (916) 574-1891 or via e-mail at Afifa.Awan@slc.ca.gov . For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Senior Staff Counsel Pam Griggs at (916) 574-1854 or via email at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Wendy Hall, Public Land Management Specialist at (916) 574-0994, or via email at Wendy.Hall@slc.ca.gov.

Sincerely,

for Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
Afifa. Awan, DEPM, CSLC
Jennifer DeLeon, DEPM, CSLC
Pamela. Griggs, LEGAL, CSLC
Wendy. Hall, LMD, CSLC
Eric Milstein, LEGAL, CSLC

Enclosures:
1. CSLC NOP/IS comment letter dated October 25, 2012
2. CSLC comment letter to Ducks Unlimited Inc. dated January 24, 2013

STATE OF CALIFORNIA — EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

CURTIS L. FOSSUM, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service From TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916) 574-1890**
Contact FAX: **(916) 574-1885**

October 25, 2012

File Ref: SCH # 2012092050

California Department of Fish and Game, North Central Region
Attn: Joseph Johnson
1701 Nimbus Road, Suite A
Sacramento, CA 95670

Subject: Notice of Preparation for an Initial Study (NOP/IS) for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project, Sacramento River, Butte and Glenn Counties.

Dear Mr. Johnson:

Staff of the California State Lands Commission (CSLC) has reviewed the subject NOP/IS for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project (Project), which is being prepared by the California Department of Fish and Game (CDFG). CDFG, as a public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.); the U.S. Fish and Wildlife Service (USFWS) is the lead agency under the National Environmental Policy Act (NEPA) (42 U.S.C. § 4321 et seq.). The CSLC is a trustee agency because of its statutory responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, the CSLC will act as a responsible agency because the Project involves work on sovereign lands.

CSLC staff notes that the CDFG appears to be seeking input, by way of the NOP/IS, on the nature and scope of Project-related effects that the CDFG should consider in its Initial Study (IS). Under CEQA, a lead agency typically issues a Notice of Preparation (NOP) as part of required scoping for a draft environmental impact report (EIR), with a completed IS often included with the NOP (Pub. Resources Code, §§ 21080.4, 21083.9, subd. (a); State CEQA Guidelines,[1] § 15082). Therefore, CSLC staff provides the below comments assuming (1) that the CDFG is seeking preliminary input on the proposed NOP/IS consistent with various other provisions of CEQA and the State CEQA Guidelines (Pub. Resources Code, § 21080.3; State CEQA Guidelines, § 15063, subd. (g)) and (2) that, in the event the IS indicates that preparation of an EIR is necessary, the CDFG will circulate a new NOP for scoping for the EIR. If that assumption is incorrect, please contact Afifa Awan in the Division of Environmental Planning and Management at the contact information at the end of this letter.

[1] The State "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CSLC Jurisdiction

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

The bed of the Sacramento River at this location is State-owned sovereign land. At the Project location, the State's sovereign ownership extends landward to the ordinary low water mark as it last naturally existed. Any activities below the ordinary low water mark require authorization by the CSLC. The gravel bar material to be removed as part of the Project is material owned by the State; as such, the material can be used for other public benefit projects but cannot be sold without payment of a royalty to the State. Please contact Wendy Hall, Public Land Management Specialist, at the contact information at the end of this letter to discuss reporting requirements related to disposal of the material.

Project Description

The M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility (M&T) is an existing pumping facility located in the Sacramento River (River) at River Mile 192.5, downstream of the River's confluence with Big Chico Creek. The Project proposes dredging activities for maintaining viability of the M&T to pump and deliver water to approximately 15,000 acres of farmland, refuge land and wildlife management areas, including over 4,000 acres of wetlands that are owned or managed by USFWS and CDFG and provide wetland habitat for waterfowl, shorebirds, and other wetland-dependent species.

Presently, westward migration of the River is being prevented by the rock-toe revetment that was installed in 2007. Prior dredge operations were conducted for the same purpose in 2001, and 2007. Although work is underway, a long-term solution has not

been identified and will undergo a separate and independent environmental compliance process. In the meantime, the Project would:

- Remove gravel bar material from the River to maintain the functionality and effectiveness of the intake pumps at the M&T Facility and fish screens with National Marine Fisheries Service's (NMFS) and CDFG criteria; and
- Maintain existing rock-toe and tree revetment to prevent further westward migration of the River until a long-term solution is developed and completed.

CSLC Leasing Background for Related Projects

Public Resources Code section 6327 provides that if a facility is for the "procurement of fresh-water from and construction of drainage facilities into navigable rivers, streams, lakes and bays," and if the applicant obtains a permit from the local reclamation district, the Central Valley Flood Protection Board (formerly the State Reclamation Board), the U.S. Army Corps of Engineers, or the Department of Water Resources, then a lease application shall not be required by the CSLC.

In 2001 and 2007, Commission staff qualified channel maintenance (dredging) and installation of a rock revetment performed by CDFG under Public Resources Code section 6327. Since the Project consists of the same activities as those of the 2001 prior project, to the extent the proposed dredging is located within State-owned sovereign lands (as staff believes it does), a lease will not need to be obtained from the CSLC, provided a permit is obtained from one of the above-listed agencies. Please forward a copy of that permit to Ms. Hall once it has been obtained.

Environmental Review

Pursuant to the State CEQA Guidelines section 15063, subdivision (g), a lead agency preparing an initial study is expected to consult with trustee and responsible agencies to obtain recommendations on whether an EIR or Negative Declaration (ND) should be prepared. Based on the level of specificity in the NOP/IS, CSLC staff is unable to make such a recommendation at this time; instead, CSLC staff provides the following input on potential impacts that may be at issue if the Project is implemented and avoidance and minimization measures that should be considered by the CDFG during preparation of the IS. If potentially significant impacts are identified, but Project revisions are not made by the CDFG to reduce them to a less than significant level, an EIR should be prepared.

1. Project Description. The IS should include a thorough and complete "Project Description" to facilitate meaningful environmental review of potential impacts, and if necessary, mitigation measures and alternatives. The Project Description should be as precise as possible in describing the details of all allowable activities (e.g., types of equipment or methods that may be used, maximum area of impact or volume of sediment removed or disturbed, seasonal work windows, locations for material disposal, etc.), as well as the details of the timing and length of activities. For example, page 2 of NOP/IS does not specify the length of time that will be required to complete the Project; although the NOP/IS mentions that the work will be done for

12 hours a day and 7 days a week, it does not specify the number of weeks, which could affect the significance conclusions for a number of different potential impacts.

2. Responsible Agencies. Staff requests that the IS include information on all responsible agencies, including the CSLC, with approval authority over the Project to facilitate possible interagency coordination in the agencies' various permitting processes.

3. Mitigation. In order to avoid the improper deferral of mitigation, mitigation measures should either be presented as specific, feasible, enforceable obligations, or should be presented as formulas containing "performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way" (State CEQA Guidelines §15126.4, subd. (b)). If impacts are significant, identify mitigation measures that would reduce them to less-than-significant and clearly stating how incorporating these mitigation measures would accomplish this.

4. Submerged Cultural Resources. Considering the extent of dredging, the Project may impact known and unknown submerged cultural resources in the Project area. Therefore, the IS should evaluate potential impacts to these resources, relying on surveys, literature searches, and consultation with Native American tribes. The CSLC maintains a shipwrecks database that can assist with this analysis. CSLC staff requests that the County contact Senior Staff Counsel Pam Griggs at the contact information noted at the end of this letter to obtain shipwrecks data from the database and CSLC records for the Project site. The database includes known and potential vessels located on the State's tide and submerged lands; however, the locations of many shipwrecks remain unknown. CSLC staff also requests to be notified immediately if unanticipated resources are discovered on lands under the CSLC's jurisdiction.

5. Title to Resources. The IS should also indicate that title to all abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the state and under the jurisdiction of the CSLC. Any submerged archaeological site or submerged historic resource that has remained in state waters for more than 50 years is presumed to be significant, and should be considered in the CDFG's decision on whether an EIR should be prepared for the Project. The recovery of objects from any abandoned shipwreck, archaeological or historic site on state land under the jurisdiction of the CSLC may require a salvage permit (Pub. Resources Code, § 6309). The IS should include the CSLC as a contact for consultation and notification in the event that any buried cultural materials are unearthed.

6. Public Trust and Recreation. The Project lies within the bed of the Sacramento River, which at this location is State-owned sovereign land, and subject to the Public Trust. Members of the public have the benefit of use consistent with the Public Trust which includes but not limited to navigation and recreation including but not limited to boating, rafting, sailing, rowing, fishing, fowling, bathing, and other water-related

recreational uses. The IS should discuss the Project's potential to restrict or impede the public's use and enjoyment of the River. If any impacts are determined significant, the CDFG should identify measures to avoid or reduce them as feasible.

The IS should also discuss how the members of the public will be notified of dredging activities in the Project area. Moreover, any additional discussions of notification and operational/construction practices should be addressed in order to minimize the impact to boaters, rafters and other members of the public. The IS should also clearly state how long before the start of Project-related activities the signage will be posted.

7. Greenhouse Gases. A greenhouse gas (GHG) emissions analysis consistent with the California Global Warming Solutions Act (AB 32) and required by the State CEQA Guidelines should be included in the IS. This analysis should identify a threshold for significance for GHG emissions, calculate the level of GHGs that will be emitted as a result of the Project, determine the significance of the impacts of those emissions, and, if impacts are significant, identify mitigation measures that would reduce them to less than significant.

Biological Resources

8. Underwater Noise. The IS should include a specific evaluation of the potential underwater noise and vibration impacts on fish from Project-related activities in the water. It should also discuss how these vibrations will be monitored to make sure they do not reach the harmful thresholds of the level to kill fish and other marine species. If there is a possibility of impacting wildlife, then mitigation measures should be proposed which can include species-specific work windows as defined by CDFG, USFWS, and NMFS, and should be considered in the CDFG's decision on whether an EIR should be prepared for the Project.

9. Sensitive Species Database Inquiries. The IS should analyze the potential for special-status species, such as endangered or threatened fish, raptors, mammals and rare plants, to occur in the Project area and, if Project impacts to special-status species are found to be significant, identify adequate mitigation measures.

10. Invasive Species. The IS should consider the Project's potential to encourage the establishment or proliferation of aquatic invasive species from possible contaminants attached to the dredging related equipment. Such aquatic invasive species can be, but not limited to, quagga mussel and aquatic and terrestrial plants. The IS should identify avoidance or minimization measures as appropriate and discuss implementation of plans which may include the following provisions:
    - Environmental training of operational and maintenance personnel to inform them about invasive species and the threats they pose;
    - Actions to be taken to prevent the release and spread of marine and/or terrestrial invasive species;
    - Procedures for safe removal and disposal of any invasive taxa observed; and

- A post-operations and maintenance report identifying what, if any, invasive species were found attached to and were removed from equipment and materials, as well as the treatment, handling and disposal of identified invasive species.

11. Dredging/Mercury/Methylmercury Release. The IS should be as precise as possible in describing the amount, duration and timing of the proposed dredging, as these would affect the intensity of any environmental impacts. For example, dredging activities may impact aquatic and marine species and habitat in a number of ways. Disturbance of fine sediments may generate turbidity, wherein suspended particulates can impede light penetration and photosynthesis of submerged vegetation; suspended sediment may also react with and reduce dissolved oxygen in the water column, making less available for marine organisms. If toxic metals lay buried in the sediment, they may be reintroduced into the environment and, potentially, enter into the food chain, affecting both water quality and the health of humans and wildlife. Finally, dredging equipment can entrain and kill organisms in the sediment and water column when removing dredge material.

    The IS should analyze these potential impacts to biological resources and water quality from the dredging component of the Project. If impacts prove potentially significant, possible mitigation could include the employment of silt curtains or other best management practices.

Thank you for the opportunity to comment on the Project NOP/IS. Please send copies of future Project-related documents, including electronic copies of the Final ND or EIR, Notice of Determination (NOD), and, if applicable, Mitigation Monitoring and Reporting Program (MMRP), CEQA Findings and Statement of Overriding Considerations when they become available for our records, and refer questions concerning our environmental review to Afifa Awan, Environmental Scientist, at (916) 574-1891 or via e-mail at afifa.awan@slc.ca.gov . For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Senior Staff Counsel Pam Griggs at (916) 574-1854 or via email at pamela.griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Wendy Hall, Public Land Management Specialist at (916) 574-0994, or via email at wendy.hall@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
A. Awan, DEPM, CSLC
P. Griggs, LEGAL, CLSC
W. Hall, LMD, CSLC

STATE OF CALIFORNIA — EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

JENNIFER LUCCHESI, *Executive Officer*
(916) 574-1800 FAX (916) 574-1810
California Relay Service from TDD Phone **1-800-735-2929**
from Voice Phone **1-800-735-2922**

Contact Phone: **(916)-574-0994**
Contact FAX: **(916)-574-1925**

January 24, 2013

File Ref: SCH# 2012092050

Ms. Chris Leininger
Project Development Consultant
Ducks Unlimited, Inc.
Western Regional Office
3074 Gold Canal Drive
Rancho Cordova, CA 95670-6116

Subject: M & T Chico Ranch/Llano Seco Ranch Fish Screen Facility Short-term Protection Project, Sacramento River, Butte and Glenn Counties

Dear Ms. Leininger,

This letter is to advise Ducks Unlimited, as the consulting agent for the above referenced project, that staff of the California State Lands Commission (CSLC) have reviewed the proposed project and reconsidered the determination to qualify the proposed project under Public Resources Code section 6327. Staff has determined a lease will be required under Public Resources Code section 6303.1.

This determination was made with consideration of the proposed short-term protection project which includes two dredging cycles, removal, storage and disposition of State-owned gravel material and maintenance of the existing rock revetment, as well as the undetermined scope of work for a long-term solution in this area of the river.

The bed of the Sacramento River at this location is State-owned sovereign land. At the project location, the State's sovereign ownership extends landward to the ordinary low water mark as it naturally existed. Any activities below the ordinary low water mark require authorization by the CSLC. Staff considers the M & T Chico Ranch to be the appropriate Applicant, as the owners of the adjacent upland to the project site.

Enclosed is the Commission's lease guidelines and application. We encourage M & T Chico Ranch to submit an application as soon as possible to allow sufficient time to complete the application process, conduct any required environmental review, and

negotiate a new lease. The lease application is also available on our website at www.slc.ca.gov.

Please complete all sections of the application and return it to me, along with an application processing fee in the amount of $1525, which is the estimated Minimum Expense Deposit plus an additional $25 Filing Fee, made payable to the State Lands Commission. The Commission is required to recover all costs associated with processing the lease. The Filing Fee and Minimum Expense Deposit must be submitted with the application. Upon receipt of your application and fees, you will be provided a reimbursement agreement. An executed reimbursement agreement to cover the Commission staff cost to process this transaction is required as part of a complete application.

After review of the submitted application, you may need to provide supplemental information and/or additional clarification as the application process progresses as required by law and the Commission's application requirements.

We appreciate your cooperation in this matter and look forward to receiving your application. If you have any questions, please feel free to email me at wendy.hall@slc.ca.gov or call me at (916) 574-0994.

Sincerely,

Wendy Hall

Wendy Hall
Public Land Management Specialist

Enclosure

Cc:
Jim Frey, Senior Staff Counsel, CSLC
Mary Hays, Public Land Manager, CSLC

3.2.1.2 *CENTRAL VALLEY FLOOD PROTECTION BOARD (CVFPB) COMMENT LETTER*

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY — EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2380 FAX: (916) 574-0682

December 26, 2013

Ms. Katherine Hill
California Department of Fish and Game
North Central Region
1701 Nimbus Road, Suite A
Sacramento, California 95670

Subject: M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-Term Protection Project
SCH Number: 2012092050
Document Type: Mitigated Negative Declaration

Dear Ms. Hill:

Staff of the Central Valley Flood Protection Board (Board) has reviewed the subject document and provides the following comments:

The proposed project is located adjacent to or within the Sacramento River which is under the jurisdiction of the Central Valley Flood Protection Board. The Board is required to enforce standards for the construction, maintenance, and protection of adopted flood control plans that will protect public lands from floods. The jurisdiction of the Board includes the Central Valley, including all tributaries and distributaries of the Sacramento River, the San Joaquin River, and designated floodways (Title 23 California Code of Regulations (CCR), Section 2).

A Board permit is required prior to starting the work within the Board's jurisdiction for the following:

- The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);

CVFPB-1

- Existing structures that predate permitting, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);

- Vegetation plantings will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be utilized within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection, and flood fight procedures (CCR Section 131).

Vegetation requirements in accordance with Title 23, Section 131 (c) states "Vegetation must not interfere with the integrity of the adopted plan of flood control, or interfere with maintenance, inspection, and flood fight procedures."

CVFPB-2 The accumulation and establishment of woody vegetation that is not managed has a negative impact on channel capacity and increases the potential for levee over-topping. When a channel develops vegetation that then becomes habitat for wildlife, maintenance to initial baseline conditions becomes more difficult as the removal of vegetative growth is subject to federal and State agency requirements for on-site mitigation within the floodway. The project should include mitigation measures to avoid decreasing floodway channel capacity.

CVFPB-3 Hydraulic Impacts - Hydraulic impacts due to encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The project should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. Off-site mitigation outside of the State Plan of Flood Control should be used when mitigating for vegetation removed within the project location.

The permit application and Title 23 CCR can be found on the Central Valley Flood Protection Board's website at http://www.cvfpb.ca.gov/. Contact your local, federal and State agencies, as other permits may apply.

The Board's jurisdiction, including all tributaries and distributaries of the Sacramento River and the San Joaquin River, and designated floodways can be viewed on the Central Valley Flood Protection Board's website at http://gis.bam.water.ca.gov/bam/.

If you have any questions, please contact me by phone at (916) 574-0651, or via e-mail at James.Herota@water.ca.gov.

Sincerely,

James Herota
Senior Environmental Scientist
Projects and Environmental Branch

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

3.2.1.3 *CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD (RWQCB) COMMENT LETTER*

CALIFORNIA Water Boards

EDMUND G. BROWN JR. GOVERNOR

MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

20 December 2013

Ms. Katherine Hill
California Department of Fish & Wildlife
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670

COMMENTS ON THE MITIGATED NEGATIVE DECLARATION FOR PROPOSED M&T CHICO RANCH/LLANO SECO RANCHO FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT, ASSESSORS PARCEL NUMBER 039-530-018, CHICO, BUTTE COUNTY

The Central Valley Regional Water Quality Control Board (Central Valley Water Board) is a responsible agency for this project, as defined by the California Environmental Quality Act (CEQA). On 17 December 2013, we received your request for comments on Mitigated Negative Declaration for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-Term Protection Project.

M&T Chico Ranch/Llano Seco Rancho along with the California Department of Fish & Wildlife (CDFW) and the U.S. Fish & Wildlife Services is proposing to implement interim measures to protect and maintain the viability of the M&T Chico Ranch/Llano Seco Rancho fish screen and pumping facility to meet existing CDFW and National Marine Fisheries Service fish screen critieria and to provide a reliable water supply to farmland, Federal wildlife management area, and a CFDW wildlife area. These areas include the eastern portion of the Llano Seco Rancho, which is under conservation easement and is served by the M&T/Llano Seco Pumps Facility. The facility provides Sacramento River water to wetlands and associated habitats owned or managed by USFWS, CDFW and Llano Seco Rancho, which creates wetland habitat for waterfowl, shorebirds, and other wetland-dependent and special-status species.

Based on our review of the information submitted for the proposed project, we have the following comments:

RWQCB-1

Clean Water Act (CWA) Section 401, Water Quality Certification
The Central Valley Water Board has regulatory authority over wetlands and waterways under both the Federal Clean Water Act (CWA) and the California Water Code, Division 7 (CWC). Discharge of dredged or fill material to waters of the United States requires a CWA Section 401 Water Quality Certification from the Central Valley Water Board. Typical activities include any modifications to these waters, such as stream crossings, stream bank modifications, filling of wetlands, etc. 401 Certifications are issued in combination with CWA Section 404 Permits issued by the Army Corps of Engineers. The proposed project must be evaluated for the presence of jurisdictional waters, including wetlands and other waters of the State. Steps must be taken to first avoid and minimize impacts to these waters, and then mitigate for unavoidable impacts. Both the Section 404 Permit and Section 401 Water Quality Certification must be obtained prior to site disturbance.

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

364 Knollcrest Drive, Suite 205, Redding, CA 96002 | www.waterboards.ca.gov/centralvalley

RECYCLED PAPER

General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP)

RWQCB-2 Construction activity, including demolition, resulting in a land disturbance of one acre or more must obtain coverage under the CGP. The M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-Term Protection Project must be conditioned to implement storm water pollution controls during construction and post-construction as required by the CGP. To apply for coverage under the CGP the property owner must submit Permit Registration Documents electronically prior to construction. Detailed information on the CGP can be found on the State Water Board website:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/gen_const.shtml

Dewatering Alternative 1: Discharge to Storm Drains or Waters of the United States

RWQCB-3 A dewatering permit, *General Order for Dewatering and Other Low Threat Discharges to Surface Waters*, (Central Valley Water Board Order No. R5-2008-0082, adopted 12 June 2008) may be required for pump testing, pipeline dewatering and/or construction activities. This general NPDES (National Pollutant Discharge Elimination System) permit covers the discharge to waters of the United States of clean or relatively pollutant-free wastewater that poses little or no threat to water quality. The following categories are covered by the dewatering permit: well development water; construction dewatering; pump/well testing; pipeline/tank pressure testing; pipeline/tank flushing or dewatering; condensate discharges; water supply system discharges; miscellaneous dewatering/low threat discharges. The dewatering permit applies only to direct discharges to waters of the United States Failure to obtain a dewatering permit, when required, may result in enforcement action. An application form and a copy of the permit are available at this office.

Dewatering Alternative 2: Discharges to Land

Construction and system test dewatering discharges that are contained on land (i.e., will not enter waters of the United States) are allowed under Central Valley Water Board Resolution No. 2003-0003-DWQ provided the following conditions are met: (1) the dewatering discharge is of a quality as good as or better than underlying groundwater; and (2) there is a low risk of nuisance. Examples of dewatering discharges to land include a terminal basin, irrigation (with no return to waters of the United States), and dust control. You may request written confirmation from this office that the waiver is applicable.

If you have any questions or comments regarding this matter please contact me at (530) 224-4784 or by email at szaitz@waterboards.ca.gov

Scott A. Zaitz, R.E.H.S.
Environmental Scientist
Storm Water & Water Quality Certification Unit

SAZ:wrb:lmw

cc w/o encl: State Clearing House Number (2012092050)
Ms. Krystel Bell, U.S. Army Corp of Engineers, Sacramento
Department of Fish and Wildlife, Region 2, Rancho Cordova

U:\Unit\Clerical\Storm_water\SZaitz\2013\CEQA Comment (M&T Chico Ranch-Llano Seco Rancho).doc

3.2.1.4 SACRAMENTO RIVER PRESERVATION TRUST (SRPT) COMMENT LETTER

Simodynes, Dianne

From:	John Merz <jmerz@sacrivertrust.org>
Sent:	Friday, January 31, 2014 12:05 PM
To:	M&TLlanoSecoProject
Cc:	dchakarun@inreach.com; denniemike@aol.com; e.ginney@pwa-ltd.com; jmerz@sacrivertrust.org; 'John Seid'; 'Kathryn Hood-Carter'; lcfsfish@aol.com; moondog.dwyer@gmail.com; rickanddi@earthlink.net; tomangelakraemer@gmail.com; rluster@tnc.org; jcarlon@riverpartners.org; 'Rist, Denise@Parks'; 'Lucas RossMerz'
Subject:	Comments on short-term M&T EA/IS
Attachments:	Comments on the Draft EA_IS January 2014.docx

To whom it may concern:

Attached please find the Trust's comments on the Draft EA/IS, Proposed FONSI and Proposed MND for the M&T Ranch/Llano Seco Rancho Fish Screen Facility Short-Term Protection Project (Project) dated December, 2013. These comments are in addition/supplement the verbal comments made by myself on behalf of the Sacramento River Preservation Trust (Trust) at the public hearing held in Chico on Friday, January 10, 2014, concerning the Project. The Trust looks forward to your response to all of our concerns/questions.

All future correspondence concerning this matter should be sent to my attention at the Trust (P.O. Box 5366, Chico, CA 95927, 530-345-1865, jmerz@sacrivertrust.org). Thanks.

Sincerely,

John Merz
Treasurer, Board of Directors

Comments on the Draft EA/IS for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-Term Protection Project (SCH No. 2012092050)

1. Section 2.3.3 Environmental Commitments and Mitigation Measures
Fisheries and Aquatic Resources
FAR-4 (p. 2-37)
How will construction personnel be able to see whether or not fish fry are being taken into the suction dredge? Is it possible to see fish fry as they emerge from the slurry?

2. Section 3.4.3.3 Impact Analysis. TR-3 Potential for the Proposed Action/Project to impact Bank Swallows (p. 3-149).
Issue
The existing toe rock was placed in 2007 and was intended to be in place for 5 years. The toe rock was placed at a known bank swallow colony located along the southern end of the Capay Unit river bank. Placing the toe rock at this location destroyed the ability for bank swallows to continue using this site. As a result, mitigation for the loss of bank swallow habitat was established through a bank swallow conservation easement on land owned by M&T Chico Ranch between RM 191.9 to 192.2. However, this mitigation was for 5 years (2007-2012).

This EA/IS now proposes that the toe rock remain in place until a long-term solution is found, however this timeframe is not specified.

The bank swallow conservation easement at M&T Chico Ranch between RM 191.9 to 192.2 is not adequate mitigation for the bank swallow colony destroyed on the USFWS Capay Unit. The bank swallow conservation easement at M&T Chico Ranch protected a colony that was not threatened. There is therefore still a net loss of bank swallow habitat that has not been properly mitigated.

Per the Bank Swallow Conservation Strategy (which can be found on the Sacramento River Conservation Area Forum website: http://www.sacramentoriver.org/bans/bans_lib/BANSConsStrat_062813_final.pdf) disturbance to bank swallow colonies, such as bank protection, is the primary cause of bank swallow population decline.

Remedy
The Draft EA/IS needs to fully discuss and propose new mitigation for the placement of toe rock on the USFWS Capay Unit and TNC-owned Stile property for the time period beginning in 2013 onwards. It is not reasonable to not require any new mitigation given that the previous mitigation was for a specific time period (2007-2012) while the project has continued past the time period mitigated.

The project proponents should read the bank swallow conservation strategy and follow the recommended guidelines that were developed by its authors and incorporate the bank swallow conservation strategies in the project. Specifically, for the time period beginning in 2013 (when the original 5 year mitigation period ended), project proponents should follow the guidelines put forth in the bank swallow conservation strategy as they relate to mitigating unavoidable impacts to dynamic river processes and bank swallow habitat (see pp. 32-33, Bank Swallow Technical Advisory Committee. 2013. Bank Swallow (*Riparia riparia*) Conservation Strategy for the Sacramento River Watershed, California. Version 1.0.).

3. Section 3.7.1.1 River Meander.

Issue

There is a lengthy discussion on the history and modeled potential for river meander in the project area. However, there is no discussion or plan for mitigating the cessation of natural river meander that has resulted from placing toe rock along the USFWS Capay Unit or the TNC-owned Stile property located between river miles 194 and 193.

The project developed a conceptual model in 2003 to guide decision making. The conceptual model is available on the Ducks Unlimited website: (http://www.ducks.org/media/conservation/mtproject/MTData/Workshop_1/M_T_Conceptual_Model.pdf). At the top of the Conceptual Model is the Project Goals statement which states that one of the primary purposes of the project is to not have a significant impact on river meander:

> "To protect threatened and endangered anadromous fish populations and pumping requirements for adjacent agriculture, managed wetlands (federal, state and private), and City of Chico wastewater facility without a significant effect upon river meanders."

Remedy

There has been no mitigation for the loss of river meander and its associated natural river processes in the project area. This document needs to explain how natural river processes will be mitigated as a result of keeping the toe rock in place for what is now an unspecified, indeterminate length of time.

3.3 RESPONSES TO COMMENT LETTERS RECEIVED ON THE DRAFT EA/IS

3.3.1 RESPONSES TO COMMENTS RECEIVED FROM CALIFORNIA STATE LANDS COMMISSION

Response to Comment CSLC-1

The Lead Agencies appreciate the California State Land Commission's (CSLC's) efforts in reviewing and commenting on the Draft EA/IS, and the comment that a lease from the CSLC will be required is acknowledged.

If the Proposed Action/Project is approved by the Lead Agencies, then the project proponents will obtain all requisite permits, approvals and/or formal authorizations prior to project implementation. Prior to release of the Draft EA/IS, Proposed FONSI, and Proposed MND, the project proponents had several communications with CSLC staff regarding leasing requirements, and as suggested, will continue to work with CSLC. An application for a lease will be submitted and formal authorization from CSLC will be requested prior to initiation of work in the Sacramento River.

Response to Comment CSLC-2

As described in the Draft EA/IS (pages 3-166 through 3-172), the suction dredge barge and the floating dredge pipeline represent an obstacle to watercraft navigation while in the Sacramento River (during both the daily 10-hour dredge operation period and the 14-hour non-working period). To address this potential impact, several precautionary measures have been incorporated into the Proposed Action/Project and include public noticing, placement of signage, placement of warning buoys, and installation of lighting on the dredge barge and in-river section of the

pipeline, among others. These measures, described on pages 2-41 through 2-43 and in Appendix I of the Draft EA/IS and Appendix A of this Final EA/IS, would be in place prior to and during the dredging operations that would occur in the Sacramento River.

Adequate passage for other motorized and non-motorized boats would be available on the west side of the Sacramento River despite the presence of the dredge barge in the Sacramento River. Additionally, although maintenance of the revetment could cause short-term, temporary interruptions of land-based recreational opportunities in the area of the revetment, maintenance of the revetment is anticipated to occur infrequently and would not cause a substantial disruption in recreational activities, and would not restrict or impede the publics' navigational easement. Incorporation of precautionary safety measures into the Proposed Action/Project would minimize the creation of navigation hazards and potential disturbances to recreationalists resulting from the Proposed Action/Project.

Response to Comment CSLC-3

The comment is acknowledged. If the Proposed Action/Project is approved by the Lead Agencies, then the project proponents will obtain all requisite permits, approvals and formal authorizations prior to project implementation. An application for a lease and a request for formal authorization from CSLC will be submitted prior to commencing work in the Sacramento River.

Response to Comment CSLC-4

Although the formatting suggestion is appreciated and acknowledged, the format of the public review Draft EA/IS document fully satisfies both NEPA and CEQA requirements. Consideration was given to the fact that the Draft EA/IS serves as a joint NEPA/CEQA document and must therefore consider both sets of regulatory requirements. Many different approaches are appropriate for compiling and presenting the information contained in a NEPA/CEQA document. The largest concern is that the environmental document contains all the requisite information necessary for a decision-maker.

The commenter states that the document's structure "*may not be as effective in showing relationships between the proposed mitigation measures and potential impacts. For example the Checklist's "Biological Resources Section" on page A-9 briefly references Section 3.3 and Section 3.4 for the reader to understand how these possible impacts in the Checklist will be made less-than-significant through proposed mitigation measures. Unfortunately, it is not logically explained in these referenced text how the possible impacts in the Checklist are being reduced to less-than-significant.*"

The sections referenced in the CEQA Checklist (Appendix A of the Draft EA/IS) direct the reader to the appropriate resource-specific discussions in the Draft EA/IS. In Chapter 3 of the Draft EA/IS, each resource section was formatted to include an environmental setting discussion (described in the document as "Affected Environment/ Environmental Setting") that provides the physical environmental conditions in the vicinity of the Action/Project Area and an environmental impacts discussion (described in the document as "Environmental

Consequences") that provides the anticipated impacts that would result from the Proposed Action/Project. Within each of the resource-specific Environmental Consequences section, there was a discussion of the assessment methodology that provided a clear and logical discussion on how potential impacts associated with each resource were determined. Each resource-specific Environmental Consequences section also presented resource-specific significance criteria (also known as thresholds of significance). In most cases, the significance criteria were based on Appendix G of the CEQA guidelines. Then, each potential impact is evaluated and disclosed. Succinct descriptions of the anticipated level of significance are included at the end of each impact discussion.

Additionally, Section 2.2.3 – Environmental Commitments and Mitigation Measures of the Draft EA/IS (pages 2-27 through 2-47) lists the proposed measures or practices committed to by the Lead Agencies and the project proponents as part of the Proposed Action/Project to minimize or avoid potentially significant impacts. These commitments are included as part of the project description. The environmental commitments and mitigation measures are also provided in Appendix I of the Draft EA/IS and Appendix A of this Final EA/IS.

The resource-specific Environmental Consequences sections describe the potential impacts and identify measures to reduce the impacts to a less-than-significant level. In each of the resource-specific impact discussions where an environmental commitment or mitigation measure has been identified to minimize or avoid a potentially significant impact, the analysis presented for a particular impact consideration also specifies the corresponding environmental commitment or mitigation measure. For example, under impact consideration ***TR-2. Potential for the Proposed Action/Project to impact Valley Elderberry Longhorn Beetle*** (see page 3-148 to 3-149 of the Draft EA/IS) the text states "…*Exclusionary fencing (**Environmental Commitment TR-1**), dust control measures (**Environmental Commitment AQ-2**) and environmental awareness training (**Environmental Commitment TR-2**) for contractor personnel will be implemented to minimize and avoid potential impacts to VELB and its habitat, unless this species becomes de-listed prior to project implementation*." Detailed descriptions of the environmental commitments and mitigation measures were not repeated in Chapter 3 to reduce redundancy and unnecessary inflation in the size of the document. The environmental commitments and mitigation measures provided in Chapter 2 and Appendix I of the Draft EA/IS and in Appendix A of this Final EA/IS avoid and/or reduce potential impacts to a level below the thresholds identified in the resource-specific significance criteria.

The Lead Agencies do not believe that the format of the document impedes the reader's understanding of the Proposed Project, including resource-specific impact evaluations and application of environmental commitments and mitigation measures, and that the document is consistent with the requirements of CEQA.

Response to Comment CSLC-5

The commenter states that "*Kayaking, swimming, rafting, sailing, rowing, bathing, skiing, and water-related public uses are not in the list of recreational uses of the Sacramento River*

corridor on page 3-160 of the MND. As a result, the impact analysis of these recreational activities is missing. Therefore, CSLC staff recommends adding these to the list, and evaluating possible impacts."

In the recreation section of the Draft EA/IS, page 3-160 in the Affected Environment/Environmental Setting for the Sacramento River does discuss that the Sacramento River corridor supports a wide range of recreation uses, including walking/hiking, angling, camping, hunting, horseback riding, picnicking, sports activities, boating (motorized and non-motorized), wildlife viewing, swimming, sight-seeing, and fishing. The list of recreational uses of the Sacramento River provided by the commenter are generally, and in some cases specifically, encompassed by the list of recreation uses described in the Draft EA/IS (e.g., kayaking, rafting, sailing and rowing are all considered to be non-motorized boats).

It is true that the affected environment/environmental setting discussion in the Draft EA/IS did not explicitly list bathing and skiing as potential recreational uses of the Sacramento River. Although bathing was not included in the list of recreational uses of the Sacramento River presented on page 3-160 of the Draft EA/IS, swimming was listed. Because both swimming and bathing activities are considered primary contact recreation (e.g., recreational activities where there is prolonged or intimate contact with water[1]) and could occur in the same portions of the Sacramento River, de facto consideration also was given to bathing in the impact assessment for recreation and navigation safety section of the Draft EA/IS. Water skiing is a surface water sport in which an individual is pulled behind a motorized boat over a body of water. Similarly, because water skiing also has the potential for an individual to become immersed in water, it too is considered to be primary contact recreational activity (see footnote below). Although not specifically discussed, potential impacts to waterskiing also were given de facto consideration in the impact assessment. Thus, although not explicitly stated, these activities were not missing from the analysis but, rather, were considered with respect to potential impacts associated with primary contact recreation (as characterized by swimming) in the recreation-related impact assessment.

Although the recreation and navigation safety discussion in the Draft EA/IS may not have explicitly listed each of the uses (kayaking, swimming, rafting, sailing, rowing, bathing, skiing, and water-related public uses) of the Sacramento River referenced by the commenter, they nonetheless were considered in the evaluation of potential impacts on recreation and navigation safety. As described on page 3-164 of the Draft EA/IS, potential impacts to recreation resources were qualitatively evaluated based on the potential for Proposed Action/Project to temporarily or permanently limit, impede, or result in the loss of recreational resources in the Action/Project Area, including recreational activities (e.g., boating, fishing, water-oriented activities) in the

[1] The primary contact recreation classification protects people from illness due to activities involving the potential for ingestion of, or immersion in, water. Primary contact recreation usually includes swimming, water-skiing, skin-diving, surfing, and other activities likely to result in immersion (EPA 2012).

Sacramento River and recreational activities (e.g., hunting, fishing, wildlife observation and photography, and environmental education) on the Capay Unit of the SRNWR.

It is acknowledged that, as with any in-river construction project, dredging activities may temporarily impede recreational opportunities (e.g., bathing, skiing) on the Sacramento River immediately surrounding the M&T/Llano Seco Pumps Facility; however, this would be a relatively short-term effect occurring during the 107-day in-river dredging period (July 1 through October 15). In addition, although recreational uses of the Capay Unit of the SNRWR and access to the Sacramento River could be affected by the Proposed Action/Project (e.g., reduced visual interest at the site), these impacts would be relatively minor due to the timing and duration of the activities. Additionally, recreationalists would have access to similar recreation opportunities at other public use areas upstream and downstream of the Action/Project Area. Implementation of ***Environmental Commitments REC-1*** through ***REC-4*** described in Chapter 2 of the Draft EA/IS (pages 2-41 through 2-43) and referenced in the recreation analysis (see page 3-171 under impact consideration ***R-2.*** *Potential for increased recreational and navigation safety hazards associated with dredging operations resulting in reduced recreational opportunities in and along the Sacramento River*) in Chapter 3 of the Draft EA/IS would reduce potential short-term impacts to the list of recreational opportunities provided by the commenter to a less than significant level.

The information provided in response to this comment does not alter the impact conclusions that were presented in the Draft EA/IS.

3.3.2 RESPONSES TO COMMENTS RECEIVED FROM CENTRAL VALLEY FLOOD PROTECTION BOARD

The Lead Agencies appreciate the Central Valley Flood Protection Board's (CVFPB's) efforts in reviewing and commenting on the Draft EA/IS. The comments contained within the CVFPB's letter do not specifically address issues, content or recommended changes to the Draft EA/IS, but rather detail the requirements of the CVFPB's issuance of an encroachment permit. Therefore, no changes will be made to the EA/IS as a result of the comments below. The responses below are only provided for clarification purposes.

Response to Comment CVFPB-1

The statement below from the CVFPB has been noted.

> *A Board permit is required prior to starting the work within the Board's jurisdiction for the following:*
>
> - *The placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (CCR Section 6);*

- *Existing structures that predate permitting, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (CCR Section 6);*
- *Vegetation plantings will require the submission of detailed design drawings; identification of vegetation type; plant and tree names (i.e. common name and scientific name); total number of each type of plant and tree; planting spacing and irrigation method that will be utilized within the project area; a complete vegetative management plan for maintenance to prevent the interference with flood control, levee maintenance, inspection, and flood fight procedures (CCR Section 131).*

The project proponents have informally consulted with CVFPB staff. If the Proposed Action/Project is approved by the Lead Agencies, then the project proponents will obtain all requisite permits prior to project implementation.

Response to Comment CVFPB-2

The commenter's statement that "*The accumulation and establishment of woody vegetation that is not managed has a negative impact on channel capacity and increases the potential for levee over-topping. When a channel develops vegetation that then becomes habitat for wildlife, maintenance to initial baseline conditions becomes more difficult as the removal of vegetative growth is subject to federal and State agency requirements for on-site mitigation within the floodway. The project should include mitigation measures to avoid decreasing flood way channel capacity."* has been noted.

The Proposed Action/Project would involve maintaining the existing rock-toe and tree revetment that was installed in 2007. If maintenance-related repairs of the rock-toe and tree revetment are required, then work would be conducted in a manner that would return the rock-toe and tree revetment to the condition in which it was originally designed and constructed (see page 2-26 of the Draft EA/IS). Vegetative growth that has been recruited on the revetment since 2007 is considered to be part of existing conditions, which was the basis of comparison for impact assessment purposes in the Draft EA/IS. The Proposed Action/Project, relative to existing conditions, would not exacerbate flooding-related impacts in the vicinity of the Action/Project Area, nor would it decrease floodway channel capacity (see pages 3-202 to 3-203 and 3-213).

Regarding maintenance responsibilities, USFWS will be responsible for vegetation management on the Capay Unit of the Sacramento River National Wildlife Refuge (SRNWR). M&T Chico Ranch and Llano Seco Rancho will be responsible for maintenance of the revetment, and the State or the U.S. Army Corps of Engineers (Corps) will continue to be responsible for other levees and revetment along the Sacramento River in the project vicinity. The access road to the rock-toe and tree revetment on the Capay Unit will be maintained by the USFWS. The SRNWR has a strong track record of working with local levee districts on assisting them with the maintenance of flood control levees (i.e., firebreaks, vegetation management, and levee burn operations) (USFWS and CDFW 2013). Similar to the Riparian Sanctuary Unit of the SRNWR,

in the event of the need to remove vegetation and sediment to maintain the State's Plan for Flood Control, the USFWS will be responsible for environmental compliance (e.g., NEPA, Endangered Species Act) for activities at the Capay Unit of the SRNWR.

Response to Comment CVFPB-3

The commenter's statement that "*Hydraulic impacts due to encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The project should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. Off-site mitigation outside of the State Plan of Flood Control should be used when mitigating for vegetation removed within the project location*." has been noted.

As described in Section 3.6.3 of the Draft EA/IS, the Proposed Action/Project would not result in hydraulic impacts that could impede flood flows, reroute flood flows or increase sediment accumulation. If maintenance-related repairs of the rock-toe and tree revetment are required, then work would be conducted in a manner that would return the rock-toe and tree revetment to the condition in which it was originally designed and constructed (see page 2-26 of the Draft EA/IS).

If the Proposed Acton/Project is approved by the Lead Agencies, the project proponents will apply for all requisite permits prior to the commencement of construction activities. Anticipated permits are expected to include a Clean Water Act Section 404 Permit, a Clean Water Act Section 401 Water Quality Certification, and coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (see Section 3.3.3 below). The CVFPB's request for off-site mitigation is not applicable to the Proposed Action/Project because the Proposed Action/Project would not be removing vegetation and, thus, there is not a need for off-site mitigation outside of the State Plan of Flood Control.

3.3.3 RESPONSES TO COMMENTS RECEIVED FROM CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

The Lead Agencies appreciate the Central Valley Regional Water Quality Control Board's (RWQCB's) efforts in reviewing and commenting on the Draft EA/IS. The letter from the RWQCB focused on a review of regulations and permitting requirements for a range of projects and impacts under the jurisdiction of the RWQCB. There were no specific statements in the letter that pertained to the adequacy or content of the Draft EA/IS. Therefore, there is no further discussion needed and no changes will be made to the EA/IS as a result of the RWQCB letter. The responses below have been developed to provide additional information regarding RWQCB permitting considerations.

Response to Comment RWQCB-1

The RWQCB's statement that both the Section 404 Permit and Section 401 Water Quality Certification must be obtained prior to site disturbance has been noted. The project proponents have informally consulted with the RWQCB and have formally consulted with the Corps through

their pre-application process and plan to obtain authorizations from both agencies prior to the commencement of construction, if the project is approved by the Lead Agencies.

Response to Comment RWQCB-2

The RWQCB's statements that: (1) the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-Term Protection Project must be conditioned to implement storm water pollution controls during construction and post-construction as required by the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (CGP); and (2) that the property owner must apply for coverage under the CGP and submit permit registration documents electronically prior to construction have been noted. If the Proposed Action/Project is approved by the Lead Agencies, then the project proponents will obtain all requisite permits prior to project implementation.

Response to Comment RWQCB-3

The RWQCB's statements regarding Discharge to Storm Drains or Waters of the United States, and Discharges to Land have been noted. Because the project proponents will be consulting with the RWQCB on several other permitting processes (e.g., CWA 401 Certification), they will also consult with the RWQCB to determine whether a dewatering permit or a waiver should be requested, and then will obtain all requisite permits prior to project implementation.

3.3.4 RESPONSES TO COMMENTS RECEIVED FROM SACRAMENTO RIVER PRESERVATION TRUST

Response to Comment SRPT-1

Although the Draft EA/IS acknowledges that there is a remote potential for fish entrainment monitoring to become necessary, dredging operations would be conducted during the time of year when fry and juvenile fish generally are not present in this reach of the Sacramento River. As described in Chapter 3 of the Draft EA/IS, species-specific juvenile emigration periods for Sacramento River species are listed below for reference.

- "*adult and juvenile winter-run Chinook salmon utilize the Sacramento River in the Action/Project Area as a migration corridor... and… most juvenile emigration occurs through the Action/Project Area after October...*"
- "*…most juvenile* [spring-run Chinook salmon] *emigration occurs through the Action/Project Area from November to May…*"
- "*…most juvenile* [fall-run Chinook salmon] *emigration occurs through the Action/Project Area from January through June…"*
- *"…the primary movement of* [late fall-run Chinook salmon] *yearlings is believed to occur during late fall and winter months…"*

- *Juveniles* [steelhead] *may be present during their downstream migration primarily from January through May….*

Therefore, anadromous salmonid fry are not anticipated to be located in the reach of the lower Sacramento River where dredging would occur during the July 1 through October 15 in-river construction window specifically established to avoid/minimize potential effects on special-status fish species. If larger juvenile anadromous salmonids were present in this reach of the river at the time when dredging would occur, they would typically be positioned in the water column or in shallower areas along the river bank, not on the bottom of the channel where the cutterhead and the suction inlet would be located.

The Draft EA/IS also states that *"Juveniles* [green sturgeon] *may be present in the Action/Project Area during their downstream migration primarily from May through August, and most abundant during June and July."* However, "*direct construction-related impacts to green sturgeon juveniles would be expected to be minimal under the Proposed Action/Project given that larvae and juvenile green sturgeon appear to be nocturnal, their foraging activity is reported to peak at night, they move downstream at night, and habitat preference suggests that juveniles prefer deep pools."* Moreover, hydraulic cutterhead dredges are considered by National Marine Fisheries Service (NMFS) as an alternative dredge type to reduce potential entrainment impacts to sturgeon (NMFS 1998).

Thus, although entrainment associated with suction dredging is not anticipated, Environmental Commitment FAR-4 states that if construction personnel observe fish in dredge slurry entering the containment areas, work would be halted and CDFW, NMFS, and USWFS would be contacted, and a formal entrainment monitoring plan would be developed and implemented prior to the re-initiation of dredging activities. Also, FAR-4 refers to the potential presence of fish in in the slurry entering the containment areas, and does not refer to potential entrainment into the suction dredge.

Additionally, the USFWS has completed ESA consultation with NMFS. Based on the best available scientific and commercial information, NMFS has determined that the project is not likely to jeopardize listed fish species or adversely modify their designated critical habitat. In the 2014 NMFS BO, NMFS also included an incidental take statement with RPMs and non-discretionary terms and conditions that are necessary and appropriate to minimize incidental take associated with implementation of the project (see Section 2.0). As also described in the 2014 NMFS BO, if a carcass or injured specimen is found, written notification shall be submitted to NMFS that includes the date, time, and location that the carcass or injured specimen was found, a color photograph, the cause of injury or death, if known, and the name and affiliation of the person who found the specimen.

Response to Comment SRPT-2

The Lead Agencies appreciate the commenter's interest in the project, and the commenter is correct that the bank swallow conservation easement on land owned by the M&T Chico Ranch was originally intended to address the temporary nature of the rock-toe and tree revetment that was installed in 2007. The purpose of the revetment was to prevent further bank erosion and river migration, thereby preserving options for long-term solutions to the ongoing gravel deposition and river meander affecting the M&T/Llano Seco Pumps Facility (see page 2-23 of the Draft EA/IS).

As described in Chapter 2 of the Draft EA/IS, under the Proposed Action/Project, "*the existing rock-toe and tree revetment would remain in the Sacramento River and be maintained, until a long-term solution is developed and completed. Although work is progressing, a long-term solution has not yet been identified, and therefore cannot be analyzed in this document, but will undergo a separate and independent environmental compliance process*."

The Lead Agencies also are aware of, and have reviewed the document titled *Bank Swallow (Riparia riparia) Conservation Strategy for the Sacramento River Watershed, California* (Bank Swallow Technical Advisory Committee 2013). Recommendations in the Bank Swallow Conservation Strategy (Bank Swallow Technical Advisory Committee 2013) include: (1) avoiding new impacts to river processes as well as to existing nesting habitat and colonies using current data; and (2) protecting suitable habitat by acquiring permanent easements or fee-title to parcels with existing colonies and suitable nesting habitat. In fact, the Bank Swallow Conservation Strategy is specifically referenced on pages 3-104 and 5-4 of the Draft EA/IS.

The Proposed Action/Project would not result in any new impacts to river processes or existing bank swallow nesting habitat, and it will not affect the ability of the bank swallow conservation easement on the M&T property to continue to provide potentially suitable habitat. As also described in the Draft EA/IS, potential impacts to bank swallow habitat will be minimized during construction activities through the implementation of construction BMPs and avoidance, to the extent feasible, of potential bank swallow habitat areas (see Environmental Commitment TR-6).

The area where the bank swallow conservation easement was established in 2007 continues to remain available as potential bank swallow habitat. Thus, it continues to temporarily serve the intended purpose and function of the conservation easement. Issues related to potential long-term bank swallow habitat impacts associated with the revetment pertain to the M&T/Llano Seco Fish Screen Facility, Phase IV Long-term Protection Project, which is a different project than that which was evaluated in the Draft EA/IS. The Phase IV Long-term Protection Project will undergo a separate, independent environmental compliance process. As part of that separate environmental compliance process, the evaluation of potential long-term bank swallow habitat impacts and the potential need for additional mitigation will be appropriately considered with respect to the guidelines set forth on pages 32 and 33 of the Bank Swallow Conservation Strategy.

Response to Comment SRPT-3

The commenter references the conceptual model developed for the Phase IV Long-term Protection Project, and is correct that one of the goals of the conceptual model for that project is to not have a significant effect on river meander.

As described in Chapter 2 of the Draft EA/IS, "*the existing rock-toe and tree revetment would remain in the Sacramento River and be maintained, until a long-term solution is developed and completed. Although work is progressing, a long-term solution has not yet been identified, and therefore cannot be analyzed in this document, but will undergo a separate and independent environmental compliance process.*"

As stated on page 2-23 of the Draft EA/IS, "*the purpose of the revetment was to prevent further bank erosion and river migration, thereby preserving options for long-term solutions to the ongoing gravel deposition and river meander affecting the M&T/Llano Seco Pumps Facility*." Technical studies conducted for the M&T/Llano Seco Fish Screen Facility, Phase IV Long-term Protection Project since 2007 have re-affirmed that there may potentially be a need for the revetment to remain in place as part of a long-term solution. Thus, issues related to potential long-term river meander impacts associated with the revetment pertain to the Phase IV Long-term Protection Project, which is a different project that is undergoing separate technical investigations and an independent environmental compliance process. As part of that separate process, it is anticipated that both upstream and downstream river meander issues will be appropriately considered in relation to the alternatives that are ultimately identified and evaluated by that process.

3.3.5 RESPONSES TO VERBAL COMMENTS RECEIVED ON THE DRAFT EA/IS

Two public meetings were held on January 10, 2014 to provide interested parties with an opportunity to provide verbal or written comments on the Draft EA/IS. The comments below were provided verbally during the afternoon session, which was held from 2:00 pm to 4:00 pm. There were no comments from the public provided during the evening session, which was held from 7:00 pm to 9:00 pm.

M&T CHICO RANCH/LLANO SECO RANCHO FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT DRAFT ENVIRONMENTAL ASSESSMENT/INITIAL STUDY, PROPOSED FINDING OF NO SIGNIFICANT IMPACT, AND PROPOSED MITIGATED NEGATIVE DECLARATION

PUBLIC MEETING COMMENTS

TRANSCRIPTION SUMMARY

Chico Masonic Family Center
1110 West East Avenue
Chico, CA 95926

Two public meetings were held on January 10, 2014 to provide interested parties with an opportunity to provide verbal or written comments on the Draft EA/IS. The comments below were provided verbally during the afternoon session, which was held from 2:00 pm to 4:00 pm. There were no comments from the public provided during the evening session, which was held from 7:00 pm to 9:00 pm.

Commenter: Woody Elliott

I want to applaud all the agencies for putting together a very thorough and complete document. I just skimmed the surface of it, but one of my main concerns was why not stockpile the gravel where it can be reincorporated into the streambed and into river. From what I really gather that it seems to make a lot of sense, there are a lot of problems with doing that and I guess my laypersons interpretation of the write up it seems reasonable. Want to thank all the effort that went into what I consider a pretty thorough analysis of it. I certainly haven't looked at it in any critical way regarding the technical nature of the modeling that went into it assuming it was appropriate. As long as "Heringer Hill" is alive and well, we'll keep stockpiling it there. Thanks for the answers.

My other question is what's going to happen to all of those wonderful gravels? And I guess that will come out of the long-term solution, and hopefully it will involve its release downstream somewhere because it is essentially taking it out of the system. Although lot of gravel is probably coming down through Stoney Creek as it is and fish apparently don't seem to spawn down there, but it is messing with the natural processes.

WE-1

One question, this dredge looked pretty high tech. What, and I can only assume that fine sediments that it is going to dislodge are going to be sucked up to an adequate degree to satisfy the Clean Water Act or whatever is involved in that so you don't get a large sediment plume going downstream which may or may not have effects even if there's not a lot of spawning habitat going on. What is the technology involved in that swing dredging minimizing sedimentation in the river?

Assume this is going to be permitted by the Regional or State board, so there will be some sort of allowance for a minimum amount of sediment allowed?

Commenter: John Merz, representing the Sacramento River Preservation Trust (SRPT)

SRPT-1 Yeah, a couple things. First of all… it's really a little bit outside of the purview of this document… but again who makes the call to proceed with dredging, assuming this goes through what would be the decision-making process? Who will make the call? Fish and Game? Fish and Wildlife Service? M&T Ranch? Ducks Unlimited?

SRPT-2 Ok, a couple other things more specific to the document itself. And if you do have it covered, I haven't read the whole thing from page 1 to 10,000 whatever, might eventually at some point. But so this is in the EA/IS I believe you still need to be looked at potential future projects impacts. And one is the Hamilton City J Levee flood project relative to flows and gravel, and how it impacts the floodplain. I don't know if you've done any analysis on that, but if you haven't you need to give a recommendation. Because, in fact, it's going to be a funneling process – that's what the Hamilton City project does. It shrinks that two-mile floodplain to something much less than that. In fact, assuming that it does get funded, it is going to start in south and move upstream so the impacts will be relatively immediate in terms of impacting this area as opposed as down the river. So, I think you need to look at that relative to potential impacts on this project. I am referring to the stockpile. How it impacts the floodplain in terms of just flow.

SRPT-3 The other thing is somewhat related to this in terms of the other impacts I haven't looked at your analysis in the document yet but again yellow-billed cuckoo potential listing process and standard performance but this is something else that needs to be analyzed. At least addressed in your document. Not just fisheries but again terrestrial.

SRPT-4 And actually I haven't received it but I am curious to know what success there was with the bank swallow mitigation site, which was again the plan to mitigate for the impacts that bank swallow going to .. at this site at one time how successful or not that colony has been at least that site… was it colonized, and if not there, perhaps elsewhere in the area. So I think the bank swallow evaluation needs to be there, I haven't looked at it, so my apologies if you did have. I think there needs to be a very thorough discussion about that because you are intending to continue the elimination of that habitat, the elimination or at least the continuing erosion on that river bank. That therefore that habitat still remains unavailable to bank swallow. So that's additional.

SRPT-5 Probably more importantly and again my apologies if you did addressed this and I didn't see it, is that though you have identified your area, the project area, I still don't see where you address the upstream movement of the river sediment, relative to geomorphology, river velocity and its impact. I don't know if in fact that's true depends on whether been studied or not. Upstream you have sediment moving down especially on river right, it's pushing water to basically the river left that's impacting eroding as we speak. There's gravel, of course, moving onto that, so your geomorphology, which again was addressed pretty early in the process. It's not just documented studies on site you need to go upstream, so I'd like to know how far upstream you've gone and how and or if you've gone at all. What evaluation is being done there, and particular evaluation of river road and washout in terms of this impact to again how water moves through that area. Because it's basically it's a rip-rapped bank and uh… how resistant, resistant to erosion itself and creates impacts on the flow characteristics in the upper stretch of the river relative to this site. So would really like to have a very thorough description of that geomorphology. And if you don't have it, I think your document is deficient. In the short-term for sure, definitely in the long-term.

SRPT-6

One more thing about assumption of the new project, I think you have to be careful how something's stated the reality is that you will not impact something up Big Chico Creek because you get sued, or impacts on the spring-run Chinook salmon so I don't think that's valuable, viable assumption. In fact, that's one of the reasons why pumping plant was moved to begin with. It's actually not just spring-run, also winter-run relative to non-natal rearing habitat. So to assume that in fact you have this ability to go back to the way things were is not accurate, and so I think that assumption needs to be revisited. I truly don't believe it's viable and should not be in this document relative to the new project alternative.

SRPT-7

And then last of all, the City of Chico, I'm assuming you have documentation on any case City of Chico in fact has requested and the 300-foot site to be retained in the impact analysis as well as 1,500 feet south which is where they are now. I'm not aware of that, but if you have documentation to that effect, I would like to see it. One of the things this project has been going on for a long time trying to keep City of Chico as partner. I don't see them here today. I'm assuming they are not truly, and I think that relationship needs to be verified.

[A member of the audience requested clarification regarding what kind of impact was being referred to regarding Big Chico Creek]

SRPT-6 con't.

Actually has to do where river might go in the future. If you look at the storage and old photos, both of those, and other documentation on where river used to go, and look at the position of the creek where Big Chico Creek was, way over where the levee is, and then go out so in fact if it was doing that right now, we wouldn't even be having this discussion because you would already have sweeping flows going past the pumping plant and we wouldn't be having this conversation. But that was way back in the beginning of statehood, and river road didn't exist, a whole lot of other things didn't exist. But, the reality is that the river's been all over the place, and where pumping plant is in fact is geologic control, so that's as far east if you will as a river's going to go historically. Again, the river primarily goes to the left of the.. and that's the concern now relative to this isolation issue that people have concerns about..

[A member of the audience asked for the question to be restated.]

That's the big picture. Small picture is you have this going on downstream. It may impact how the river flows at certain velocities. That's the other thing. You have to analyze it at a variety of velocities, especially in terms of how often they might occur as well. But those velocities have a lot to do with what's happening to the gravel movement.

[A member of the audience asked for clarification regarding whether the commenter wanted the water velocities to indicate what impact they have on gravel movement.]

SRPT-8

Again, there is a good chance and this of course has been brought up actually as part of the long-term several times. That's again that river may involve an engineering answer that would be for the river to Big Chico Creek and creates that sweeping flow as opposed to again fighting this gravel bar build up, which the consequence, a number of consequences that may have in river road and other things. But this is incomplete science at best. You need to make some sense of what's going on upstream. Initially this project had some geomorphological study work done, I believe it was at least to Scotty's, to see what was going on in terms of the river moving back and forth and what was occurring there. I think that needs to be revisted. I can be wrong about that, but I don't think I am. And I think that needs to be revisited because of again of what's happening upstream of this site. At least one river meander if not two. That's partly because of a number of things has happened since then as well, including the establishment of

riparian habitat. And placed meander or the lack thereof of riprap that at one time was in place and no longer exists and/or has been displaced along the river itself. So we have a lot of history in this area, and I don't think it's been well represented in the analysis.

Commenter: Vicky Newlan

VN-1 A question was asked about whether any evaluation has been conducted with respect to if the ranches reverted back to diverting water from Big Chico Creek.

3.3.5.1 RESPONSES TO VERBAL COMMENTS RECEIVED FROM WOODY ELLIOTT

Response to Comment WE-1

The commenter first thanked the Lead Agencies for putting together a very thorough and complete document, and for providing an explanation of the alternative gravel placement locations that were considered. The commenter also raised two questions: (1) what will happen to the existing gravel stockpile on the M&T Chico Ranch property, and will it be addressed as part of a long-term solution; and (2) how will sedimentation and turbidity in the Sacramento River be minimized as a result of dredging operations, and will the Proposed Project be permitted by the RWQCB or the State Water Resources Control Board.

The Lead Agencies appreciate the commenter's interest in the project.

The commenter is correct that disposition of the existing gravel stockpile is anticipated to be a component of developing and completing a long-term solution, which is being addressed through a separate environmental compliance process.

Several environmental commitments have been identified to minimize the potential for sedimentation and turbidity in the Sacramento River, and these are described in Section 2.2.3 and Appendix I of the Draft EA/IS and Appendix A of this Final EA/IS. Specifically, the commenter is referred to:

- ***Environmental Commitment WQ-1:*** (1) Obtain appropriate NPDES Permit and Water Quality Certification; and (2) comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities by Preparing and Implementing a Stormwater Pollution Prevention Plan.

- ***Environmental Commitment WQ-2:*** Prepare and Implement an Erosion Control Plan and a Post-Construction Stormwater Management Plan.

- ***Environmental Commitment WQ-3:*** Minimize the potential for increased sediment and turbidity by reducing the cutterhead dredge speed and/or the ladder swing speed, as conditions warrant.

In addition, as described above in the response to written Comments RWQCB-1, RWQCB-2 and RWQCB-3, it is anticipated that the project proponents will apply for permits for a Clean Water

Act Section 404 Permit, a Clean Water Act Section 401 Water Quality Certification, and coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities.

3.3.5.2 RESPONSES TO VERBAL COMMENTS RECEIVED FROM SACRAMENTO RIVER PRESERVATION TRUST (JOHN MERZ)

Response to Comment SRPT-1:

The Lead Agencies appreciate the commenter's interest in the project. The commenter requested clarification regarding the decision-making process associated with implementing dredging operations.

As described at the meeting on January 10, 2014, Ducks Unlimited will accumulate the information from the bathymetric survey, and will provide that information to the Lead Agencies and the ranches. With input from the project team (Ducks Unlimited, M&T Chico Ranch and Llano Seco Rancho in addition to the Lead Agencies), the Lead Agencies will then make a decision regarding whether or not to conduct the dredging operations.

Response to Comment SRPT-2

The commenter expressed concerns regarding potential future impacts associated with: (1) the implementation of the Hamilton City Flood Damage Reduction and Ecosystem Restoration Project, for which funding presently remains uncertain; and (2) related downstream floodplain impacts within the Action/Project Area for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project.

The Hamilton City Flood Damage Reduction and Ecosystem Restoration Project was considered as part of the cumulative effects analysis, and a description of the Hamilton City project is included in Chapter 4 of the Draft EA/IS. In summary, the Hamilton City Flood Damage Reduction and Ecosystem Restoration Project (e.g., "J" levee) will provide enhanced flood protection for Hamilton City by constructing 6.8 miles of setback levee, removing most of the existing "J" levee to reconnect the Sacramento River to the floodplain, and actively restoring about 1,500 acres of native vegetation between a new setback levee and the Sacramento River (USACE 2004a).

In Chapter 4 of the Draft EA/IS, the Hamilton City project and potential cumulative floodplain impacts are discussed in Section 4.1.2.4 – Hydrology and Water Quality and Section 4.1.2.5 – Geology, Geomorphology and Soils. For additional information, please also see response to Comment SRPT-5, below.

Response to Comment SRPT-3:

The commenter expressed concern regarding the recent listing of western yellow-billed cuckoo as a proposed threatened species under the federal Endangered Species Act, and stated that

potential project-related impacts to western yellow-billed cuckoo should be analyzed in the Draft EA/IS.

The Draft EA/IS (page 5-47) acknowledged the USFWS' October 3, 2013 proposal to list the yellow-billed cuckoo in the western portions of the United States, Canada and Mexico as a threatened distinct vertebrate population segment under the federal Endangered Species Act, and evaluated potential project-related impacts to this species. As an update to the information presented in the Draft EA/IS, the USFWS re-opened the public comment period for the proposal to list the western yellow-billed cuckoo as a threatened species, and comments will be accepted by USFWS until February 24, 2014 (USFWS 2014). This new information does not change any of the conclusions for western yellow-billed cuckoo that are presented in the Draft EA/IS.

Western yellow-billed cuckoo also are discussed on pages 3-98, 3-100, 3-103, 3-107 to 3-109, 3-147, 3-151 to 3-152, 4-13, 4-14, 5-2, 5-4, 5-47 to 5-53, 5-95 to 5-97, 5-98, 5-100 and 5-101 of the Draft EA/IS.

Response to Comment SRPT-4

The commenter expressed concern regarding the need to address potential impacts to bank swallows and their habitat within the Action/Project Area.

Bank swallows are discussed on pages 2-41, 3-87 to 3-89, 3-91, 3-96, 3-97, 3-98, 3-103, 3-104 to 3-106, 3-136, 3-139, 3-149 to 3-150, 3-157, 3-158, 3-160, 4-5, 4-13, 4-14, 4-16, and 5-4 of the Draft EA/IS.

Regarding the success of the bank swallow conservation easement established on the M&T property in 2007, as described on page 3-89 of the Draft EA/IS, "*fluctuating bank swallow activity at the M&T Chico Ranch mitigation site during 2008 through 2010 is attributed to erosion and bank movement into unsuitable floodplain soil textures for bank swallow burrow construction (Silveira et al. 2012).*" As shown in Table 3.4-2 - Summary of Annual Cooperative Bank Swallow Survey Results on page 3-89 of the Draft EA/IS, the average number of bank swallow burrows at the M&T Chico Ranch 2007 mitigation site ranged from 0 in 2008, 2010 and 2012 to 109 in 2011.

The commenter also is referred to the response to the written Comment SRPT-2, above.

Response to Comment SRPT-5

The commenter expressed concerns regarding the address of movement of river sediment upstream of the Action/Project Area, relative to river velocity and geomorphology impacts.

Historically, Sacramento River flows and channel dynamics have been influenced by a multitude of factors, as well as actions undertaken by numerous parties over time. The project proponents are not responsible for the impacts resulting from the upstream actions of others, nor do they have an ability to control them under existing conditions or in the future.

Many of the issues raised in this comment pertain to the influence of natural river processes affecting sediment transport in upstream areas that are outside of the Action/Project Area. Over the course of the past decade, numerous studies have been conducted to investigate the issues raised in this comment, including natural river processes and river meander, and many of the studies are available for detailed review at https://www.ducks.org/california/california-projects/m-t-llano-seco-fish-screen-project. As discussed on page 3-223 of the Draft EA/IS, this previous work has detailed the historic migration of the Sacramento River and identified the hydraulic factors that are responsible for creation and continued development of the gravel bar and the resulting sedimentation problems at the M&T pump intake (Harvey et al. 2004).

With respect to the address of potential hydrologic and geomorphologic impacts resulting from the Proposed Action/Project, the commenter is referred to the description of the affected environment and the analysis of potential project-related effects to hydrology and geomorphology provided in Section 3.6 (Hydrology and Water Quality) and Section 3.7 (Geology, Geomorphology and Soils) of the Draft EA/IS. For example, page 3-196 of the Draft EA/IS states the following.

> *Analytical results presented in Tetra Tech (2011) indicate that, while the J-Levee project would significantly affect water-surface elevations upstream of the M&T/Llano Seco reach, there would be little or no impact within the reach (Figure 3.6-5). The inclusion of the setback levee decreases the width of the floodplain, and as the result, the water-surface elevations increase in area to the east of the setback levee, and decrease in the area behind (to the west) of the training levee. The effect of the proposed setback levee, as shown by the area with the increase in water surface elevations, extends downstream along the floodplain to approximately opposite the M&T/Llano Seco Pumps Facility. The largest increase in water surface elevation opposite the M&T/Llano Seco Pumps Facility is about 0.2 feet, occurring approximately 1,500 feet to the west of the main channel. The water-surface elevations in the vicinity of River Road increase by approximately 0.1 feet under the proposed setback levee conditions.*"

Due the similarity of issues, particularly with respect to natural river processes and long-term river meander, the commenter is also referred to the responses that have been prepared for verbal Comment SRPT-2, above, and the response to written Comment SRPT-3.

Response to Comment SRPT-6

In this comment, the commenter expressed concern regarding the characterization of the No Action Alternative, particularly with respect to re-initiating diversion on Big Chico Creek.

As described in Chapter 2 of the Draft EA/IS, a lead agency is required under the National Environmental Policy Act (NEPA) to consider environmental impacts of the No Action Alternative. Neither NEPA nor the Council on Environmental Quality (CEQ) Regulations for implementing NEPA contain a specific directive for using a baseline for determining an action's significant effects on the quality of the human environment (Reclamation et al. 2013). CEQ's

Forty Most Asked Questions Concerning CEQ's NEPA Regulations provides that the no-action alternative may be used as a "*benchmark, enabling decision makers to compare the magnitude of environmental effects of the action alternatives.*"

Under NEPA, Federal agencies have the discretion to define the baseline for assessing environmental effects of the alternatives as the No Action Alternative. "No action" may be interpreted to mean that a proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity to go forward. Where a choice of "no action" by the decision-making agency would result in predictable actions by others, this consequence of the "no action" alternative should be included in the analysis (40 CFR Parts 1500 - 1508 (1987)).

Characterization of the No Action Alternative in the Draft EA/IS involved a multi-step process that integrated a review of regulatory requirements, coordination with M&T Chico Ranch and the Llano Seco Rancho and detailed review of the ranches existing water rights and related agreements, and consultation with the Lead Agencies and various technical experts. As it is described in the Draft EA/IS, the No Action Alternative is believed to represent a reasonably foreseeable representation of what would be expected to occur in the future if the Proposed Action/Project is not approved.

As described on pages 3-28 and 3-29 of the Draft EA/IS, discussion of the potential for long-term fisheries impacts associated with the No Action Alternative specifically addresses the west bank of the Sacramento River in the vicinity of the existing revetment, and within Butte and Big Chico creeks downstream of the anticipated future locations of diversion. The discussion of potential long-term impacts associated with re-initiation of diversion in Big Chico Creek and increasing diversions from Butte Creek is based on the following considerations: (1) timing of anticipated diversions in Big Chico and Butte creeks (based on historical timing of the diversions prior to their discontinuation in 1997); (2) special-status species-specific lifestage periodicity in Big Chico and Butte creeks downstream of the diversions; and (3) the potential for impacts to special-status fish species associated with the diversions in Big Chico and Butte creeks, such as reduced flows and the potential for reduced flow-dependent habitat availability and less suitable habitat conditions. The commenter is referred to the fisheries analysis presented on pages 3-47 to 3-50. For additional information regarding the No Action Alternative, the commenter is also referred to the response to verbal comment VN-1, below.

Several of the issues raised in this comment are beyond the purview of the Proposed Action/Project that was evaluated in the Draft EA/IS. As previously discussed, issues associated with natural river processes and the migration of the Sacramento River near the confluence of Big Chico Creek pertain to the M&T/Llano Seco Fish Screen Facility, Phase IV Long-term Protection Project, which is undergoing separate technical investigations and a separate environmental compliance process. It is anticipated that river meander issues and related effects (e.g., River Road, Big Chico Creek) will be appropriately considered as part of that separate environmental compliance process.

Response to Comment SRPT-7

The commenter implies that the City of Chico requested that their waterwater treatment plant outfall locations at 300 feet and 1,500 feet downstream of the M&T/Llano Seco Pumps Facility be addressed in the impact analysis. That is not correct. As shown in Appendix B to the Draft EA/IS, the City of Chico participated in the public scoping process for the Proposed Action/Project and submitted a scoping comment letter on October 25, 2012. In that letter, the City of Chico stated "*The City supports the removal of the gravel bar material and maintenance of the existing rock-toe and tree revetment, acknowledging that these actions are critical to the ongoing functionality of the M&T Facility fish screens, as well as the City's Wastewater Treatment Plant (WWTP) operations*."

Response to Comment SRPT-8

In this verbal comment, the commenter requested that the duration and frequency of water velocities in the Sacramento River be studied to provide information on how different velocities influence the movement of gravel downstream. The commenter again requested that upstream effects associated with natural river processes and river meander in the vicinity of Big Chico Creek be studied in greater detail.

To the extent that information is available and relevant to the analysis of the Proposed Action/Project in the Draft EA/IS, it was reviewed and incorporated (see the description of the affected environment for hydrology and geomorphology in Section 3.6 and Section 3.7, respectively.

As the commenter himself mentioned in his comment, the concerns described (e.g., natural river processes upstream, river meander), have previously been brought up as part of the process for developing and completing a long-term solution. For clarification purposes, issues related to a the development of a long-term solution are being addressed through a separate process – the M&T/Llano Seco Fish Screen Facility, Phase IV Long-term Protection Project. Therefore, many of the issues raised in this comment are beyond the purview of the Proposed Action/Project that was evaluated in the Draft EA/IS.

3.3.5.3 RESPONSES TO VERBAL COMMENTS RECEIVED FROM VICKY NEWLAN

Response to Comment VN-1

The Lead Agencies appreciate the commenter's interest in the project.

The commenter expressed a concern regarding whether any evaluation had been conducted with respect to reverting back to diverting water from Big Chico Creek under the No Action Alternative.

For background information regarding the water right agreements that are presently in place, the commenter is referred to the discussion in Section 1.1 – Background, of the Draft EA/IS.

Additional information regarding activities that may occur if the Proposed Project is not approved is provided in Section 2.1 – No Action Alternative.

Potential resource-specific impacts associated with reinitiating diversion under the No Action Alternative were evaluated and are addressed in Chapter 3 of the Draft EA/IS.

As explained by the Lead Agencies during the January 10, 2014 public meeting, re-diversion of water from Big Chico and Butte creeks were characterized as part of the No Action Alternative in the Draft EA/IS for impact evaluation purposes. CDFW explained that, if the Proposed Project is not approved by the Lead Agencies, the ranches likely could exercise their right to divert water from Butte or Big Chico creeks as a temporary emergency procedure in accordance with Section 1600 of the California Department of Fish and Game Code.

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APPENDIX A

Final Mitigation, Monitoring and Reporting Program

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M&T CHICO RANCH/LLANO SECO RANCHO FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT

FINAL MITIGATION, MONITORING AND REPORTING PROGRAM

INTRODUCTION

Mitigation is an important mechanism that Federal agencies can use to minimize the potential adverse environmental impacts associated with their actions (CEQ 2011). Many Federal agencies rely on mitigation to reduce adverse environmental impacts as part of the planning process for a project, incorporating mitigation[2] as integral components of a proposed project design before making a determination about the significance of the project's environmental impacts. Federal agencies should clearly identify commitments to mitigation measures designed to achieve environmentally preferable outcomes in their decision documents (CEQ 2011). Agencies also should identify mitigation commitments necessary to reduce impacts, where appropriate, to a level necessary for a mitigated "Finding of No Significant Impact" (FONSI) on the environment. In both cases, mitigation commitments should be carefully specified in terms of measurable performance standards or expected results, so as to establish clear performance expectations (CEQ 2011).

Section 15097 of the California Environmental Quality Act (CEQA) Guidelines states that all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a "mitigated negative declaration" or specified environmental findings related to environmental impact reports. The primary purpose of the Mitigation, Monitoring and Reporting Program (MMRP) is to ensure that the environmental commitments and mitigation measures identified in the Environmental Assessment/Initial Study (EA/IS) are implemented to avoid or reduce identified potential environmental impacts.

Mitigation is defined by both CEQA (see Section 15370 of the CEQA Guidelines) and the National Environmental Policy Act (NEPA) as a measure that:

- Avoids an impact altogether by not taking a certain action or parts of an action.

[2] This type of mitigation can lead to an environmentally preferred outcome and in some cases reduce the projected impacts of agency actions to below a threshold of significance. An example of mitigation measures that are typically included as part of the proposed action are agency standardized best management practices such as those developed to prevent stormwater runoff or fugitive dust emissions at a construction site (CEQ 2011).

- Minimizes an impact by limiting the degree or magnitude of the action and its implementation.
- Rectifies an impact by repairing, rehabilitating, or restoring the affected environment.
- Reduces or eliminates an impact over time, through preservation and maintenance activities during the life of the action.
- Compensates for an impact by replacing or providing substitute resources or environments.

BASIS FOR THE MITIGATION, MONITORING AND REPORTING PROGRAM

The legal basis for the development and implementation of the MMRP lies within both NEPA and CEQA (including the California Public Resources Code).

Although not expressly required by NEPA, the Council on Environmental Quality (CEQ) directs all Federal agencies to include appropriate means to mitigate adverse environmental impacts (40 CFR 1502.14(f), 1502.16(h)). For many Federal actions, environmental review is conducted through the preparation of an Environmental Assessment. In these instances, NEPA compliance is usually completed with a FONSI and, thus, a more detailed environmental impact statement is not required. According to CEQ (2011), the environmental impacts of a proposed action may be mitigated to the point when the Federal agency may make a FONSI determination. When the FONSI depends on successful mitigation, however, such mitigation requirements should be made public and be accompanied by monitoring and reporting (CEQ 2011; CEQ 2010).

Public involvement is a key procedural requirement of the NEPA review process, and should be provided for in the development of mitigation and monitoring procedures (40 CFR §1506.6). As a matter of transparency and accountability, Federal agencies are encouraged to consider including public involvement components in their mitigation monitoring programs because public involvement may provide insight or perspective for improving mitigation activities and monitoring (CEQ 2011). NEPA further requires all Federal agencies to make information useful for restoring, maintaining and enhancing the quality of the environment available to States, counties, municipalities, institutions and individuals (42 U.S.C. §4332(2)(G)). This requirement can include information on mitigation and mitigation monitoring (CEQ 2011).

With respect to CEQA, Sections 21002 and 21002.1 of the California Public Resources Code state:

- Public agencies are not to approve projects as proposed if there are feasible alternatives or feasible mitigation measures available that would substantially lessen the significant environmental effects of such projects; and
- Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves whenever it is feasible to do so.

Section 21081.6 of the California Public Resources Code further requires that the public agency shall adopt a mitigation monitoring or reporting program for the changes made to the project or

conditions of project approval, adopted to mitigate or avoid significant effects on the environment. The monitoring or reporting program shall be designed to ensure compliance with mitigation measures during project implementation (OPR 1997). Section 21081.6 of the California Public Resources Code also requires that mitigation measures be adopted when a public agency adopts a mitigated negative declaration or, after preparing a full environmental impact report, the agency makes its findings under CEQA regarding how identified significant environmental effects will be addressed. The monitoring or reporting program can be made a condition of project approval or otherwise made binding on the project in order to mitigate or avoid significant effects on the environment.

INTENT OF THE MITIGATION MONITORING AND REPORTING PROGRAM

The primary objective of the MMRP is to ensure the effective implementation and enforcement of adopted environmental commitments, mitigation measures and permit conditions. The MMRP will provide for monitoring of construction and dredging activities as needed, on-site identification and resolution of potential environmental issues, and proper reporting to Lead Agency staff.

CONTENT OF THE MITIGATION, MONITORING AND REPORTING PROGRAM

Environmental commitments are measures or practices adopted by a project proponent to reduce or avoid adverse effects that could result from project construction and operations. An MMRP describes the environmental commitments, including impact avoidance or minimization measures, incorporated into the Proposed Project as a means to avoid and/or reduce potentially significant impacts on the environment (**Table A-1**).

The mitigation program identified in this Final MMRP to reduce potential project impacts consists of mitigation measures, project design elements, and construction-related best management practices. In addition, terms and conditions resulting from consultation with NMFS under Section 7(a)(2) of the Endangered Species Act, which are necessary to implement the reasonable and prudent measures described in the biological opinion for the project, are also identified in Table A-1 below.

Potentially significant impacts related to air quality have been identified. Although impacts on other environmental resources are expected to be less than significant, environmental commitments are nonetheless proposed for several other resources to ensure that any potential impacts remain less than significant. These environmental resources include cultural resources, fisheries resources, geology and soils, greenhouse gas emissions, hydrology and water quality, hazards and hazardous materials, terrestrial resources and traffic. Resource-specific environmental commitments and mitigation measures provided in this Final MMRP were identified in Chapter 3 – Affected Environment and Environmental Consequences and Chapter 4 – Other Impact Considerations, of the Draft EA/IS. As part of the impact assessment for each resource, environmental commitments and/or mitigation measures have been identified that reduce these impacts to less than significant levels. The environmental analysis conducted for the

Proposed Project did not identify any impacts that, after mitigation, remained significant and therefore unavoidable; no significant irreversible impacts were identified associated with the Proposed Project.

The Lead Agencies are proposing to adopt these measures and incorporate them as part of the Proposed Project in compliance with applicable Federal, State, and local policies or regulations that apply to the project activities. If the Lead Agencies decide to approve and implement the Proposed Action/Project, then compliance monitoring and evaluation will be performed as indicated in the description of each measure in Table A-1.

As the lead agencies, USFWS and CDFW are responsible for monitoring the implementation of the Proposed Action/Project and for ensuring that adopted environmental commitments and mitigation measures are implemented. The purpose of the MMRP is to document that the required mitigation measures are implemented as described in the EA/IS and to ensure that project impacts are reduced to a less-than-significant level. USFWS and CDFW may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants, as deemed necessary. They will ensure that the person(s) delegated to conduct these duties or responsibilities are qualified to monitor compliance.

Another important consideration addressed in this MMRP pertains to funding assurances for the Proposed Project. In particular, adequate funding must be provided to implement the required minimization and mitigation measures, and to monitor compliance with and the effectiveness of the measures (CDFW 2013). For the Proposed Project, the existing Ecosystem Restoration Program Grant provides a funding mechanism to address: (1) preparation of requisite NEPA and CEQA environmental compliance documentation; (2) preparation of requisite permitting applications, including ESA and CESA; (3) site maintenance activities comprised of sedimentation monitoring (bathymetric survey) and an additional year of habitat mitigation monitoring at the restoration and enhancement areas associated with the rock-toe revetment installed in 2007. If the Proposed Action/Project is approved, additional funding for subsequent activities pertaining to construction, implementation of project-related mitigation and post-project effectiveness monitoring described in this MMRP would need to be secured prior to the initiation of any on-the-ground activities. After funding is secured for the next phase of work, and prior to implementation of any on-the-ground activities, a construction bid contract will be circulated and selection of a contractor(s) will occur at that time. Through the contracting process, it is anticipated that a Grant Administrator will be responsible for ensuring that the contractor (or sub-contractor) implements the measures specified in this MMRP.

As specified in Table A-1, USFWS, CDFW, and/or delegated representatives will be responsible for implementing the MMRP, which will include:

- Ensuring that the MMRP elements are incorporated into the construction bid documents.
- Coordinating monitoring activities.
- Directing the preparation and filing of compliance reports.

- Maintaining records concerning the status of all environmental commitments and mitigation measures.

This Final MMRP is organized in a matrix format and measures are presented by environmental resource area (e.g., air quality, biological resources). Table A-1 is comprised of the following five columns.

- ***Environmental Commitment/Mitigation Measure.*** – The first column lists the environmental commitment or mitigation measure identified for each respective resource-specific impact discussed in the Draft EA/IS. The numbering system used in the Draft EA/IS is carried forward in this Final MMRP.
- ***Responsible Implementing Entity***. – The second column identifies the agency or entity that will be responsible for implementing the environmental commitment and/or mitigation measure, and what, if any, coordination is required. If more than one party has responsibility under a given mitigation measure, the tasks of each individual party is identified parenthetically (e.g., "implementation" or "monitoring").
- ***Timeframe for Implementation***. – The third column refers to when a measure will be implemented and/or when monitoring will occur.
- ***Responsible Monitoring Agency***. – The fourth column refers to the agency responsible for ensuring that the environmental commitment and/or mitigation measure is implemented.
- ***Verification of Compliance***. – The fifth column includes an area for sign-off indicating compliance.

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Table A-1. Summary of Environmental Commitments Incorporated into the Proposed Project and Mitigation Measures.

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Air Quality / Greenhouse Gas Emissions				
Environmental Commitment AQ-1*: Reduce potential air quality impacts by implementing standard minimization and mitigation measures, and best available construction management practices.* The following standard mitigation measures would be implemented as part of the project to ensure minimization of impacts on air quality. ▪ Maintain all construction equipment in proper tune according to manufacturer's specifications. ▪ Maximize to the extent feasible, the use of diesel construction equipment meeting the CARB's 1996 or newer certification standard for off-road heavy-duty diesel engines. ▪ Use electric equipment where feasible. ▪ Substitute gasoline-powered for diesel-powered equipment, where feasible. ▪ Require that emissions from all off-road diesel-powered equipment used on the project site not exceed 40 percent opacity for more than 3 minutes in any one hour. ▪ Minimize the amount of disturbed area and the amount of materials actively worked. Additional review of BCAQMD guidelines regarding BAMMs identified one additional measure that the Proposed Action/Project is capable of implementing. ▪ A Vehicle Idling Policy will be implement to restrict unnecessary vehicle idling to 5 minutes.	Construction contractor (implementation)	During the construction period	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) BCAQMD (Butte County air quality regulatory compliance) GCAPCD (Glenn County air quality regulatory compliance)	
Mitigation Measure AQ-1*: Prepare an Air Quality Control Plan to reduce NO_x emissions.* Because potentially significant air quality impacts related to NO_x emissions have been identified, mitigation measures will be implemented to reduce NO_x emissions when GCAPCD and BCAQMD thresholds are exceeded. Projects that exceed a BCAQMD Level B threshold (i.e., > 25 lbs per day	Construction contractor, in collaboration with M&T Chico Ranch and Llano Seco Rancho	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
of NO_x) should be submitted to the BCAQMD for review (BCAQMD 2008). The contractor will provide a plan for review and approval by GCAPCD and BCAPCD and the Lead Agencies demonstrating that construction activities will not exceed 25 lbs/day of NO_x. The plan also will demonstrate that the heavy-duty (equal to or greater than 50 horsepower) off-road equipment to be used during construction, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NO_x reduction compared to the most recent CARB fleet average at time of construction. To reduce NO_x emissions for the Proposed Action/Project, the contractor may employ one or more of the following measures: ▪ Require injection timing retard of 2 degrees on all diesel vehicles, where applicable. ▪ Install high-pressure injectors on all vehicles, where feasible. ▪ Encourage the use of reformulated diesel fuel. ▪ Electrify equipment, where feasible. ▪ Maintain equipment in tune with manufacturer's specifications. ▪ Install catalytic converters on gasoline-powered equipment. ▪ Substitute gasoline-powered for diesel-powered equipment where feasible. ▪ Use compressed natural gas or on-site propane mobile equipment instead of diesel-powered equipment, where feasible. The contractor will submit to the Lead Agencies and all relevant air quality management districts a comprehensive inventory of all off-road construction equipment equal to or greater than 50 horsepower that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the contractor shall provide the relevant air quality management districts with the anticipated construction timeline, including start date and the name and phone number of the project manager and on-site foreman.	(implementation)		USFWS (Lead Agency implementation monitoring) BCAQMD (Butte County air quality regulatory compliance) GCAPCD (Glenn County air quality regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Acceptable options for reducing emissions also may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, aftertreatment products, provide funds for air district offsite mitigation projects, and/or other options as they become available. The GCAPCD and GCAQMD will be contacted to discuss plan details and potential alternative measures, if necessary.				
Environmental Commitment GHG-1*: Reduce potential GHG impacts by implementing standard BMPs for reducing GHG emissions.* Although BCAQMD (2008) does not identify specific measures for reducing GHG emissions, the measures below are considered BMPs that provide options for reducing GHG emissions from construction projects (SMAQMD 2010). ▪ Improve fuel efficiency from construction equipment: ▪ Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to no more than 3 minutes (5 minute limit is required by the State airborne toxics control measure [Title 13, sections 2449(d)(3) and 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. ▪ Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. ▪ Train equipment operators in proper use of equipment. ▪ Use the proper size of equipment for the job. ▪ Use equipment with new technologies (repowered engines, electric drive trains). ▪ Perform on-site material hauling with trucks equipped with on-road engines (if determined to be less emissive than the off-road engines). ▪ Use alternative fuels for generators at construction sites such as propane or solar, or use electrical power.	Construction contractor, in coordination with M&T Chico Ranch and Llano Seco Rancho (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) BCAQMD (Butte County air quality regulatory compliance) GCAPCD (Glenn County air quality regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
▪ Use an CARB approved low carbon fuel for construction equipment (NO_x emissions from the use of low carbon fuel must be reviewed and increases mitigated.) ▪ Use locally sourced materials for construction materials (goal of at least 20% based on costs for building materials) ▪ Develop a plan to efficiently use water for adequate dust control. ▪ Encourage and provide carpools or shuttle vans for construction worker commutes.				
Hydrology and Water Quality				
Environmental Commitment WQ-1*: (1) Obtain appropriate NPDES Permit and Water Quality Certification; and (2) comply with the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities by Preparing and Implementing a Stormwater Pollution Prevention Plan.* The Construction General Permit requires that all stormwater discharges associated with construction activity, where clearing, grading, and excavation results in soil disturbance of at least 1 acre of total land area, by law must comply with the provisions of an NPDES Permit and develop and implement and effective SWPPP (Caltrans 2003). Because both the Proposed Action/Project and the No Action Alternative would involve construction activities affecting more than one acre, it is anticipated that coverage would be obtained through the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit Order 2009-0009-DWQ), consistent with the terms of the NPDES Permit obtained for the 2007 project. The Construction General Permit requires the development and implementation of a SWPPP, which must list BMPs and the placement of those BMPs, that will be used to protect stormwater runoff (SWRCB 2013). BMPs will include but are not limited to: ▪ Implementing the terms and conditions of the CWA Section 401 Water Quality Certification, including a ECP, PCSWMP, SWPPP, and a Hazardous Materials Control, Spill Prevention, and Response Plan (HMCSPRP) to prevent any substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses, as well as to minimize turbidity levels and suspension of sediments;	M&T Chico Ranch/Llano Seco Rancho (permit applicants) Construction contractor (implementation)	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) RWQCB (CWA regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
▪ Establishing and implementing a HMCSPRP before project construction that includes strict on-site handling rules to keep construction and maintenance materials out of drainage and waterways; ▪ Training all construction personnel in the proper use and cleanup of potentially hazardous materials; ▪ Notifying CDFW and the Central Valley RWQCB immediately of spills and cleanup procedures, and cleaning up all spills immediately according to the HMCSPRP, and ▪ Providing staging and storage areas for equipment, materials, fuels, lubricants, solvents, and other possible contaminants away from watercourses and their watersheds. The SWPPP will be provided prior to the onset of construction activities, and will be implemented as required by the conditions of a NPDES permit.				
Environmental Commitment WQ-2*: Prepare and Implement an Erosion Control Plan and a Post-Construction Stormwater Management Plan.* Implementing an Erosion Control Plan (ECP) and Post-construction Stormwater Management Plan (PCSWMP) will help to prevent any substances that could be hazardous to aquatic life from contaminating the soil or entering watercourses, as well as to minimize turbidity levels and suspension of sediments. Consistent with mitigation requirements for the 2007 Temporary Maintenance Project, it is anticipated that a ECP and PCSWMP will be prepared and implemented for the Proposed Project. **Erosion Control Plan** According to Butte County (2005) requirements for preparing an ECP, the plan must be prepared by a qualified professional with experience in the field of erosion and sediment control that has the ability to certify based on a professional license or registration issued in the State of California that the erosion control plan is suitable for proposed construction and that when completed, the construction was in accordance with the erosion and sediment control plans (Butte County 2005). The ECP shall include both temporary (first year) and permanent erosion control protection measures that prevent sediment and other pollutant discharges from reaching watershed drainages and streams. In the event that the ECP fails to adequately prevent sediment from	M&T Chico Ranch/Llano Seco Rancho (permit applicants) Construction contractor (implementation) M&T Chico Ranch and Llano Seco Rancho	Develop plans prior to the construction period. Adhere to ECP specifications during the construction period. Adhere to PCSWMP specifications post-construction.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) RWQCB (CWA regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
leaving the site, the qualified professional will be contacted to immediately correct and/or repair the deficiencies (Butte County 2005). Erosion and sediment control requirements may include, but are not limited to, the following. ▪ Hydroseeding mixtures shall conform to the Federal Seed Act, the Federal Noxious Weed Act, and applicable state and local seed and noxious weed laws. Seed mixes will be determined by CDF&W and USFWS biologists utilizing appropriate native species collect from local ecotypes. ▪ Use hydroseeding in conjunction with straw mulch, and state the application rate per seed mixture in the ECP. Supplemental irrigation may be required during dry periods. ▪ Hydroseeding can be applied prior to straw mulch or in a mixture of fiber, seed, etc. Application prior to straw mulch ensures maximum direct contact of the seeds to the soil. If seed is applied in a mixture, increase the seed rate to compensate for all seeds not having direct contact with the soil. ▪ Roughen embankments and fill rills before placing straw mulch by rolling with a crimping or punching type roller or by track walking. Apply straw at a minimum rate of 4,000 lb/acre, either by machine or by hand distribution, and evenly distribute straw mulch on the soil surface. ▪ Avoid use of hydroseeding in areas where it would be incompatible with future earthwork activities and would have to be removed. ▪ Follow up application shall be made as needed to cover weak spots and to maintain adequate soil protection. ▪ Avoid over spray onto roads, sidewalks, drainage channels and existing vegetation. ▪ Use fiber rolls that are a minimum of 8 inches in diameter, and locate them on level contours according to appropriate slope inclination requirements. ▪ Turn the ends of the fiber roll up slope to prevent runoff from going around the roll. If more than one fiber roll is placed in a row, the rolls shall be abutted securely to one another to provide a tight joint. ▪ Fiber rolls typically remain in place. If fiber rolls are removed, the contractor should collect and dispose of sediment accumulation, and fill and compact holes, trenches, depressions or any other ground disturbance to blend with adjacent ground.				

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
With respect to revetment maintenance, the specific combination of erosion control measures to be implemented will be dependent on the location, type and extent of maintenance that may be required. Post-construction inspection and maintenance requirements include, but are not limited to the following. ▪ Inspect erosion control applications prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season. ▪ Areas where erosion is evident shall be repaired, and straw mulch and hydroseed shall be re-applied as soon as possible. Reapplication of straw mulch and tackifier may be required to maintain effective soil stabilization over disturbed areas and slopes. A tackifier is typically applied at a rate of 125 lb per acre. In windy conditions, the rates are typically 180 lb per acre. ▪ Where seeds fail to germinate, or they germinate and die, the area must be re-seeded, fertilized, and mulched within the planting season, using not less than half the original application rates. ▪ Sediment shall be removed from fiber rolls when sediment accumulation reaches one-half the designed sediment storage depth, usually one-half the distance between the top of the fiber roll and the adjacent ground surface. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location. **Post-Construction Stormwater Management Plan** The primary objective of a Post-Construction Stormwater Management Plan is to ensure that pollutant discharges are reduced to the maximum extent practicable and to prevent stormwater discharges from causing or contributing to a violation of receiving water quality standards (RWQCB 2012). Post-construction stormwater management primarily consists of non-structural and structural BMPs (RWQCB 2011). Non-structural BMPs include the preservation of riparian zones, minimization of disturbance and imperviousness, and maximization of open space. Structural BMPs include treatment devices designed to reduce pollutants through sedimentation, adsorption, decomposition, filtration and infiltration (RWQCB 2011).				

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Development of stormwater management controls and practices is an effective and economical way of meeting the requirements of the NPDES General Permit and the stormwater management objectives (RWQCB 2011). The minimum requirements for a Post-Construction Stormwater Management Plan, as described in the General Permit, are as follows: ▪ Develop a regulatory mechanism (to the maximum extent allowable by State, tribal, and local law) requiring the implementation of post-construction runoff BMPs at new development and redevelopment projects covering at least one acre of land. ▪ Continue to implement and evaluate structural and non-structural BMPs for the control of post-construction runoff from new development and redevelopment projects. ▪ Ensure adequate long term operation, maintenance and success of BMPs. ▪ Identify, develop and implement the appropriate BMPs and measurable goals to meet these minimum requirements. A discharger must certify that all State and local requirements have been met in accordance with the General Permit. For construction to be found complete, post-construction stormwater management measures must be installed, and a long-term maintenance plan established (SWRCB 2013). This requirement is intended to ensure that the post-construction conditions at the project site do not cause or contribute to direct or indirect water quality impacts (i.e., pollution and/or hydromodification) upstream and downstream. Specifically, the discharger must demonstrate compliance with the post-construction standards set forth in Section XIII of the General Permit (SWRCB 2013).				
Environmental Commitment WQ-3: *Minimize the potential for increased sediment and turbidity by reducing the cutterhead dredge speed and/or the ladder swing speed, as conditions warrant.* The Proposed Action/Project would adhere to RWQCB water quality objectives for the Sacramento River Basin. These objectives require that project discharge cannot exceed 1 Nephelometric Turbidity Unit (NTU) when natural turbidity is between 0 and 5 NTUs, 20 percent of natural turbidity levels when natural turbidity is between 5 and 50 NTUs, 10 NTUs when natural turbidity is between 50 and 100 NTUs, or 10 percent when natural turbidity is greater than 100 NTUs. A biological	Construction contractor (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
monitor will oversee construction activities within the channel of the Sacramento River, and if water quality objectives are exceeded, in-water work will stop until these objectives can be achieved. Silt curtains are not recommended for operations around cutterhead dredges where frequent curtain movement would be necessary (Herbich and Brahme 1991). Operating parameters used to determine the turbidity generation from the cutterhead typically include the cutter rotational velocity, the suction flow rate, the thickness of cut, the ladder angle, and the translational ladder speed (Henriksen 2009). In addition to the other environmental commitments to minimize and avoid potential water quality impacts described in this chapter, the following BMPs for dredging will be applied to further reduce the potential for mobilization of sedimentation in the water column. ▪ ***Reduce cutterhead rotation speed.*** Submerge the cutterhead within the substrate to the maximum extent practicable when the dredge pumps are engaged, and utilize a slow rotational speed, where feasible given onsite in-river conditions. Reducing cutterhead rotation speed reduces the potential for side casting excavated sediment away form the suction entrance and re-suspending sediment. This measure is typically effective only on maintenance of relatively loose, fine grain sediment (LTMS 2001). Pipeline clearing will be kept to the minimum amount necessary. ▪ ***Reduce ladder swing speed.*** Reducing the swing speed ensures that the dredgehead does not move through the cut faster than it can hydraulically pump the sediment. Reducing swing speed reduces the volume of re-suspended sediment. When feasible given onsite in-river conditions, the goal is to swing the dredgehead at a speed that allows as much of the disturbed sediment as possible to be removed with the hydraulic flow. Typical swing speeds are 5-30 feet per minute (LTMS 2001).			USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA regulatory compliance) RWQCB (CWA regulatory compliance)	
Fisheries and Aquatic Resources				
Environmental Commitment FAR-1*: Implement measures to minimize the injury or mortality of fish in the immediate work area associated with rock-toe and tree revetment maintenance activities.* The construction contractor conducting rock-toe and tree revetment maintenance activities, including rock or brush replacement, will be required to implement measures to scare fish away	Construction contractor (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
from the immediate work area. Before submerging a dragline bucket or placing rock below the water surface, the dragline will be splash-cast into the water, and a person will wade ahead of the equipment to scare fish away from the immediate work area.			USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA regulatory compliance)	
Environmental Commitment FAR-2*: Prepare and implement an environmental awareness training program for project personnel.* Project personnel will participate in an environmental awareness training program provided by a qualified biologist. Construction workers will be informed by a qualified biologist about any sensitive fisheries and aquatic biological resources associated with the project and that disturbance of sensitive habitat or special-status species is a violation of the Federal ESA and Section 404 of the CWA. Workers will be informed of the potential near-shore presence of juvenile listed fish species, including anadromous salmonids, and that actions causing injury or death to these fish could result in civil or criminal penalties to the individuals who commit such actions.	CDFW and USFWS biologists, construction contractor, M&T Chico Ranch and Llano Seco Rancho (awareness program) Construction contractor (implementation)	Prior to the construction period. During the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA regulatory compliance)	
Environmental Commitment FAR-3*: Decontaminate field gear and dredging equipment to avoid introduction of invasive species.* The construction contractor will be required to read and implement procedures identified for decontaminating field gear and in-river dredging equipment contained in the CDFG (2008) Field Gear Decontamination Protocols. Procedures for decontaminating field gear (i.e., waders, wading boots, boot insoles, nets, wading sticks, or anything else that comes into contact with the water), as well as in-river equipment, developed by CDFG (2008) will be followed prior to entering the	Construction contractor (implementation)	During and subsequent to the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Sacramento River in the Action/Project Area.			monitoring and ESA compliance)	
Environmental Commitment FAR-4*: Conduct entrainment monitoring if construction crews identify fish in dredge slurry.* Although entrainment associated with suction dredging is not anticipated, if construction personnel observe fish in dredge slurry entering the containment areas, work would be halted and CDFW, NMFS, and USWFS would be contacted, and a formal entrainment monitoring plan would be developed and implemented prior to the re-initiation of dredging activities.	Construction contractor, in coordination with M&T Chico Ranch and Llano Seco Rancho (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA regulatory compliance)	
2014 NMFS BO Non-discretionary Terms and Conditions to Implement RPM-1[3]: (a) Measures shall be taken to further conservation measures and to minimize injury and mortality to listed anadromous salmonids from the in-stream Project dredging and where Sacramento River access and staging are being completed. Take of listed fish in the project area will be avoided with these measures:	Construction contractor (implementation), in coordination with USFWS	During the construction period.	USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA	

[3] NMFS issued a Biological Opinion (BO) on June 20, 2014 that included three reasonable and prudent measures (RPMs) necessary to minimize take of listed fish species resulting form implementation of the project. The terms and conditions outlined on pages 105 through 107 of the 2014 NMFS BO implement the RMPs and identify prescribed monitoring and reporting requirements. These terms and conditions have been incorporated into the project and are described in this Final MMRP.

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
(1) USFWS or its contractor will implement work windows and BMPs to reduce impacts to the stream channel from sedimentation. All construction equipment including fuels are to be stored at designated staging areas. (2) Spoils materials must be compiled and stored in designated areas away from the Sacramento River.			regulatory compliance)	
2014 NMFS BO Non-discretionary Terms and Conditions to Implement RPM-2: (a) Measures shall be taken to minimize impacts to listed salmonids and green strugeon from the amount and duration of sedimentation from the construction, and to monitor the range and magnitude of sediment load from all activities so as to reduce the impact to listed fish by halting dredging if sediment loads exceed 20 percent of baseline level NTUs for more than 3 hours on more than four occasions. To avoid impacts from the Dredging operations placement and diversion removal: (1) Monitors shall conduct grab samples at three stations for each project "zone" as described in the Project Description section of the 2014 NMFS BO. The first sample should be taken 100 feet upstream of the construction zone, or wherever possible that will establish a baseline suspended sediment "level" that is free of construction turbidity effects. The second sample should be taken with twenty feet of the lowest point of effluent in the construction zone (such as below the heavy equipment that is operating). The third sample should be taken at 1,000 feet below the construction site. These samples should be taken during project construction to monitor the change in NTUs so that measurable increases stay within ≤ 20 percent of baseline levels. (2) If work in the channel exceeds the NTU standard up to 1,000 feet downstream of the project for greater than 3 hours, silt curtains or other methods designed to prevent the transport of suspended sediment will be employed to ensure that turbidity is reduced below this threshold. (3) NMFS must be notified, and if NTUs > 20 percent above baseline levels is documented for more than 3 hours on more than four occasions, work must be halted and NMFS must be notified. If NMFS in conjunction with the Resource Agencies determine that the exceedance cannot be fully mitigated, activities will be halted until NMFS can determine with USFWS how to correct it.	Construction contractor (implementation), in coordination with USFWS	During the construction period.	USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
2014 NMFS BO Non-discretionary Terms and Conditions to Implement RPM-3: (a) Measures shall be taken to monitor all project elements and conservation measures throughout the life of the project to ensure their effectiveness. (1) A detailed report of the post-dredging evaluation and assessment of the channel function with information on the functionality of the fish screen function shall be submitted to NMFS within 60 days from test completion. The report shall be sent to NMFS address below. Assistant Regional Administrator NMFS Central Valley Area Office Fax at (916) 930-3623) or by phone at: (916) 930-3600 A follow-up written notification shall also be submitted to NMFS which includes the date, time, and location that the carcass or injured specimen was found, a color photograph, the cause of injury or death, if known, and the name and affiliation of the person who found the specimen. Written notification shall be submitted to: Assistant Regional Administrator Central Valley Area Office National Marine Fisheries Service 650 Capitol Mall, Suite 5-100 Sacramento, California 95814	Construction contractor (implementation), in coordination with USFWS	During and after the construction period.	USFWS (Lead Agency implementation monitoring compliance) NMFS (ESA regulatory compliance)	
Terrestrial Resources (Botanical and Wildlife)				
Environmental Commitment TR-1*: Avoid and minimize potential adverse effects to Valley Elderberry Longhorn Beetle and its habitat.* If suitable habitat for VELB occurs on a project site, or within close proximity where beetles will be affected by the project, these areas must be designated as avoidance areas and must be protected from disturbance during the construction and operation of the project. Protective measures are identified in USFWS's 1999 guidelines to avoid and minimize potential project effects on VELB. Complete avoidance (i.e., no adverse effects) may be assumed when a 100-foot (or wider) buffer is established and maintained around elderberry plants containing stems	Construction contractor, M&T Chico Ranch, Llano Seco Rancho in collaboration with the project engineer and CDFW and USFWS	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring and ESA	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
measuring 1.0 inch or greater in diameter at ground level (USFWS 1999). In buffer areas, construction-related disturbance should be minimized and any damaged area should be promptly restored following construction. The USFWS must be consulted before any disturbances within the buffer area are considered. In addition, the Service must be provided with a map identifying the avoidance area and written details describing avoidance measures (USFWS 1999). Any VELB habitat that cannot be avoided should be considered impacted and appropriate minimization measures should be implemented (USFWS 1999). The Proposed Project will avoid and minimize impacts to VELB by implementing the protective measures that are prescribed in the USFWS (2014) letter titled "*Informal Intra-agency Consultation Under Section 7(a)(2) of the Endangered Species Act for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project, Butte and Glenn Counties, California*", which have been incorporated into the measures described below. ▪ Preparatory activities including dredging equipment mobilization and site set-up will commence June 16, to avoid the flight season for the Valley Elderberry Longhorn Beetle (March 15 to June 15). ▪ The project engineer will stake the limits of the construction footprint that is in proximity to potential VELB habitat (i.e., elderberry shrubs) at the project site. Elderberry shrubs located within 100 feet from the edge of access roads in the Action/Project Area will be protected. Temporary construction netting (e.g., high-visibility plastic fencing) will be placed around nearby vegetation by the contractor to provide protection from construction activities. As an additional level of protection identified through the ESA Section 7 consultation process, USFWS (2014a) states "*Riparian vegetation exists along the pipeline alignment and to the west of the containment areas. Elderberry shrubs exist within the riparian habitat. The riparian vegetation will be fenced with chain link fencing to keep equipment out of the beetle habitat, thereby avoiding damaging the elderberry shrubs*." Therefore, the area of riparian vegetation containing elderberry shrubs shown in **Attachment 1** will be fenced using cyclone fencing (e.g., chain link) to provide additional protection from construction activities. ▪ A biological monitor will be on site during mobilization to assist the project engineer with identifying suitable locations for placement of construction equipment, staging, and containment areas that avoid elderberry shrubs. The biologist will direct activities to occur away from the drip line of all elderberry shrubs and to avoid shrubs at a distance of 100	biologists (implementation)		compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
feet if possible. Protective measures identified in USFWS 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle include: ▪ Fence and flag all areas to be avoided during construction activities. In areas where encroachment on the 100-foot buffer has been approved by the USFWS, provide a minimum setback of at least 20 feet from the drip line of each elderberry plant. ▪ Brief contractors on the need to avoid damaging the elderberry plants and the possible penalties for not complying with these requirements. ▪ Erect signs every 50 feet along the edge of the avoidance area with the following information: "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." ▪ The signs should be clearly readable from a distance of 20 feet, and must be maintained for the duration of construction. ▪ Instruct work crews about the status of the beetle and the need to protect its elderberry host plant. Restoration and maintenance measures identified in USFWS 1999 Conservation Guidelines for the Valley Elderberry Longhorn Beetle include: ▪ Restore any damage done to the buffer area (area within 100 feet of elderberry plants) during construction. Provide erosion control and re-vegetate with appropriate native plants. ▪ Buffer areas must continue to be protected after construction from adverse effects of the project. Measures such as fencing, signs, weeding, and trash removal are usually appropriate. ▪ No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant should be used in the buffer areas, or within 100 feet of any elderberry plant with one or more stems measuring 1.0 inch or greater in diameter at ground level. ▪ The applicant must provide a written description of how the buffer areas are to be restored, protected, and maintained after construction is completed.				

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
▪ Mowing of grasses/ground cover may occur from July through April to reduce fire hazard. No mowing should occur within five feet of elderberry plant stems. Mowing must be done in a manner that avoids damaging plants (e.g., stripping away bark through careless use of mowing/trimming equipment). ▪ If new elderberry shrubs are identified or any shrubs cannot be avoided during implementation of the Proposed Action/Project, the appropriate resource agency (i.e., CDFW and/or USFWS) will be contacted for additional review and consultation to determine the potential significance of any anticipated impact, and whether additional impact avoidance measures exceeding those described in USFWS (1999) are necessary. ▪ In addition to the protective measures described above, minimization measures (e.g., planting replacement habitat, or conservation planting), may be needed (USFWS 1999). Elderberry plants must be transplanted if they can not be avoided by the Proposed Project. All elderberry plants with one or more stems measuring 1.0 inch or greater in diameter at ground level must be transplanted to a conservation area (USFWS 1999). At USFWS discretion, a plant that is unlikely to survive transplantation because of poor condition or location, or a plant that would be extremely difficult to move because of access problems, may be exempted from transplantation. In cases where transplantation is not possible, the minimization ratios in Table 1 of USFWS (1999) may be increased to offset the additional habitat loss. The numbers of elderberry seedlings/cuttings and associated riparian native trees/shrubs to be planted as replacement habitat are determined by stem size class of affected elderberry shrubs, presence or absence of exit holes, and whether a project lies in a riparian or non-riparian area (USFWS 1999). On October 2, 2012, the USFWS issued a proposed rule to remove VELB from the Federal list of endangered and threatened wildlife and to remove the designation of critical habitat (77 FR 60237). Generally, the protective measures described above would be implemented as part of the Proposed Action/Project until such time that the USFWS issues a Final Rule removing VELB from the Federal list of threatened and endangered species. However, because the Capay Unit of the SRNWR was established, in part, for VELB habitat restoration purposes, these protective measures would likely remain in place on the Capay Unit regardless of a Final Ruling to remove VELB from listing under the ESA (K. Moroney, USFWS, 2013, pers. comm.).				

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Environmental Commitment TR-2**: Prepare and implement an environmental awareness training program for project personnel.* Concurrent with the fisheries environmental awareness training described in ***Environmental Commitment FAR-2, project personnel will participate in an environmental awareness training program provided by a qualified terrestrial resources biologist prior to initiation of construction activities at the project site. Construction workers will be informed by a qualified biologist about any sensitive terrestrial biological resources associated with the project and that disturbance of sensitive habitat or special-status species is a violation of the Federal ESA and Section 404 of the CWA. The training also will instruct workers about what to do if a special-status species is encountered during construction activities, and how to contact the monitoring biologist overseeing construction activities.	CDFW and USFWS biologists, construction contractor, M&T Chico Ranch and Llano Seco Rancho (awareness program) Construction contractor (implementation)	Prior to the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring and ESA compliance)	
***Environmental Commitment TR-3**: Maintain existing project conditions to the extent feasible.* ▪ Materials placed in natural areas and all temporary structures will be removed in their entirety and the affected areas returned to pre-construction elevations. ▪ After dredging activities are completed, any temporary fill or debris shall be removed and disturbed areas restored to their pre-project conditions. An area subject to "temporary" disturbance includes any area that is disturbed during project activities, but that, after Proposed Project completion, will not be subject to further disturbance and has the potential to be re-vegetated. These areas will also be re-contoured to pre-project conditions and replanted with a vegetation ratio of 3:1 from pre-project conditions. Monitoring of planting success will occur for two seasons following the re-vegetation. A detailed restoration plan will be approved by CDFW. ▪ USFWS will submit a written report to the NMFS within thirty (30) working days of the completion of each dredging period at the Proposed Project site and restoration of the site to pre-project conditions.	Construction contractor, M&T Chico Ranch and Llano Seco Rancho (implementation) CDFG and USFWS (SRNWR) will oversee implementation of planting of re-vegetation on the Capay Unit and Stile property, if revetment maintenance becomes necessary. Independent contractor /	During the construction period. Subsequent to the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring and ESA compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
	qualified biologist, in coordination with CDFW, USFWS, M&T Chico Ranch and Llano Seco Rancho (post-construction monitoring and reporting)			
Environmental Commitment TR-4*: Avoid and minimize potential adverse effects to terrestrial resources.* ▪ Conduct a pre-construction floristic plant survey according to CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009) during the spring of 2014 to investigate whether botanical species identified as having the potential to occur in the Action/Project Area are present. If special status botanical species (see Chapter 3) are identified, then CDFW and USFWS will be notified, survey results will be provided to CDFW and USFWS, the locations of individual plants or populations will be identified, and these locations will be clearly identified as avoidance areas (e.g., exclusionary fencing and signage) prior to initiation of construction. ▪ To avoid take of birds and/or their nests, if construction is to occur during the nesting season (February 1 – August 31), conduct pre-construction surveys within 15 days prior to initial mobilization. Surveys for raptors will be conducted within 500 feet of the project area, other nesting bird surveys will be conducted within the project footprint. All work will be conducted to avoid disturbing nesting cuckoos. The results of the survey shall be emailed to Tracy.McReynolds@wildlife.ca.gov. If no active nests are detected during these surveys, no additional measures are required. If active nests are found in the survey area, avoidance measures will be developed in coordination with CDFW (and USFWS).	Independent contractor / qualified biologist, M&T Chico Ranch and Llano Seco Rancho, in coordination with CDFW and USFWS biologists	Prior to the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring and ESA compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
▪ If a lapse in project-related work of 15 days or longer occurs, another focused survey shall be required before project work can be reinitiated. Concurrent with ***Environmental Commitment TR-1***, a pre-construction survey for WPT shall be conducted by a qualified biologist the morning of initiation of construction activities. If a pond turtle is observed in the project area during construction activities, the contractor will temporarily halt construction until the turtle has moved itself to a safe location outside of the construction limits. If construction is to occur during the nesting season (late June–July), a pre-construction survey will be conducted by a qualified biologist to locate any WPTs or their nests. This survey will be conducted within suitable habitat within the project footprint no more than two days prior to the start of construction or restoration activities in suitable habitat. If a pond turtle nest is found, the biologist will flag the site and determine whether construction activities can avoid affecting the nest. If the nest cannot be avoided, in consultation with CDFW, a no-disturbance buffer zone may be established around the nest until the young have left the nest. The monitoring biologist shall be contacted immediately in the event that a turtle or eggs are encountered during the work period. Any dead or injured turtles shall be immediately reported to the CDFW. The treatment of any injured or dead turtles shall be coordinated with the CDFW. ▪ Coordinate with CDFW (and USFWS as appropriate) if the aforementioned pre-construction surveys identify other special status species (see Chapter 3) in the Action/Project Area prior to the onset of construction activities. As previously discussed, the results of site assessments and biological surveys are often considered valid by the USFWS and/or CDFW for a period of two years, unless determined otherwise on a case-by-case basis by the appropriate USFWS or CDFW office. Depending on the timing of when revetment maintenance and a second dredge cycle may become necessary, additional terrestrial resource pre-construction surveys (e.g., nesting raptors, WPT, VELB habitat) may need to be conducted if these activities occur two or more years in the future.				

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Environmental Commitment TR-5*: Avoid and minimize potential adverse effects to terrestrial resources resulting from the spread of non-native weeds.* Construction equipment will be pressure washed prior to entering the project site to help control the spread of non-native weeds. Additionally, reseeding with native grasses may be required if mowing of grasslands is required during revetment maintenance to ensure adequate construction vehicle clearance to minimize the potential fire risk.	Construction contractor, M&T Chico Ranch and Llano Seco Rancho, USFWS (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring)	
Environmental Commitment TR-6*: Avoid and minimize potential adverse effects to bank swallow habitat.* Impacts to potential bank swallow habitat will be minimized during construction activities through the implementation of construction BMPs and avoidance, to the extent feasible, of potential bank swallow habitat areas.	CDFW, USFWS, M&T Chico Ranch and Llano Seco Rancho (implementation)	Prior to, during and subsequent to the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring)	

<table>
<tr><th>Environmental Commitment / Mitigation Measure</th><th>Responsible Implementing Entity</th><th>Timeframe for Implementation</th><th>Responsible Monitoring and Regulatory Compliance Agencies</th><th>Verification of Compliance</th></tr>
<tr><td colspan="5">Recreation and Navigation Safety</td></tr>
<tr><td>Environmental Commitment REC-1: Post notices at area public boat launch facilities.

Notices alerting recreationalists to the dredge activities will be posted at local boat launch facilities. Beginning two weeks prior to the proposed dredging and throughout the duration of the activity (i.e., June 15 through October 15), notices will be posted at boat launch facilities along the Sacramento River within Glenn and Butte counties. Facilities with motor boat access (e.g., boat launches) where notices will be posted are provided below.

Each notice will state that, while in the river, the suction dredge boat will represent a potential hazard to navigation and boaters, and other recreationalists should exercise caution while passing through the affected portion of the Sacramento River. The notices also will state that in-river operations are anticipated to occur between 7 am and 7 pm from July 1 through October 15. A sample of the public notice is provided in Attachment 2 to this Final MMRP.

Public Motor Boat Access Points in Glenn and Butte Counties
<table>
<tr><th>Facility</th><th>Location</th><th>County</th></tr>
<tr><td>Irvine Finch River Access</td><td>RM 200</td><td>Glenn</td></tr>
<tr><td>Gianella Landing</td><td>RM 199</td><td>Glenn</td></tr>
<tr><td>Pine Creek Day Use Area (Landing)</td><td>RM 196.5</td><td>Butte</td></tr>
<tr><td>Scotty’s Boat Landing</td><td>RM 196</td><td>Butte</td></tr>
<tr><td>Bidwell-Sacramento River State Park</td><td>RM 193</td><td>Glenn/Butte</td></tr>
<tr><td>Ord Bend Park</td><td>RM 184</td><td>Glenn</td></tr>
<tr><td>Butte City Launch Facility</td><td>RM 169</td><td>Glenn</td></tr>
<tr><td>Capay Unit Parking Lots, SRNWR</td><td>RM 194</td><td>Glenn</td></tr>
</table></td><td>Construction contractor, M&T Chico Ranch and Llano Seco Rancho, in coordination with CDFW and USFWS (implementation)</td><td>Prior to and during the construction period.</td><td>CDFW (Lead Agency implementation monitoring)

USFWS (Lead Agency implementation monitoring)</td><td></td></tr>
</table>

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Environmental Commitment REC-2*: Publish notice for planned dredge activities in local newspapers.* An informative notice advising the public of the proposed dredge activities will be published in local newspapers. Newspaper notices will be published approximately one week prior to commencement of in-river activities.	Construction contractor, in coordination with project landowners (i.e., M&T Chico Ranch and USFWS)	Prior to the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring)	
Environmental Commitment REC-3*: Utilize U.S. Coast Guard standard lighting elements on suction dredge boat and associated in-river equipment.* Consistent with U.S. Coast Guard Inland Navigation Rules (e.g., Rule 27) and Federal Navigation Regulations (33 CFR 83), lights will be used to illuminate the location of the dredge boat and the portion of the pipeline in the river between dusk and dawn. The barge, flexible pipe, and auxiliary boats will be anchored and sufficiently illuminated during non-daylight hours to maintain high visibility for boaters and other water users. The dredge boat will be anchored as close to shore as practicable at night to allow traffic to pass freely. In addition, a night watchman would remain on the project site during non-working hours to respond to any unforeseen issues. It is anticipated that active dredge operations would be conducted about 12 hours per day, seven days per week. Vessels engaged in dredging or underwater operations also must utilize the following lighting elements when an obstruction exists and when at anchor: ▪ Two all-round red lights or two balls in a vertical line to indicate the side on which the obstruction exists. ▪ Two all-round green lights or two diamonds in a vertical line to indicate the side on which another vessel may pass.	Construction contractor (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) CDBW (regulatory compliance)	
Environmental Commitment REC-4*: Install warning signs upstream and downstream of dredging construction site on the Sacramento River.* The contractor will install warning signs consistent with both U.S. Coast Guard and California Department of Boating and Waterways marking systems. Two special marked buoys will be utilized	Construction contractor (implementation)	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring) USFWS	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
to alert boaters and other recreationalists of the general location of the dredge boat and the dredging activities. The buoys will be yellow, and will be placed upstream and downstream of the affected area two days prior to and throughout the duration of dredging operations to caution local water craft of the potential in-river hazard. Although special marked buoys are not required to be lit, a lighted warning buoy would be utilized in order to increase visibility of the dredge boat (California Department of Boating and Waterways 2012).			(Lead Agency implementation monitoring) CDBW (regulatory compliance)	
Cultural Resources				
Environmental Commitment CULT-1*: Reduce potential historic and cultural resources impacts if buried resources are discovered during construction.* If buried historic properties, cultural or archeological resources are discovered during construction, the contractor will cease work in that area and within 100 feet of the find until a qualified archaeologist can assess the significance of the find and, if necessary, develop appropriate treatment measures in consultation with the State Historic Preservation Officer (SHPO). In accordance with Section 15064.5(f) of the CEQA Guidelines, if the find is determined to be an historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Work could continue on other parts of the project site while historical or unique archaeological resource mitigation takes place. The contractor also would contact the lead agencies.	Construction contractor, in coordination with project landowners (i.e., M&T Chico Ranch and USFWS)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) SHPO	
Environmental Commitment CULT-2*: Reduce potential historic and cultural resources impacts if human remains are discovered during construction.* If human remains are unearthed during construction, the contractor would contact the County Coroner to make the necessary findings of origin and disposition in accordance with Public Resources Code Section 5097.98. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission (NAHC) shall be adhered to in the treatment and disposition of the remains. The contractor also would contact the lead agencies.	Construction contractor, in coordination with project landowners (i.e., M&T Chico Ranch and USFWS)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) Butte County and/or Glenn County Coroner NAHC	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
Environmental Commitment CULT-3*: Reduce potential historic and cultural resources impacts if submerged archaeological or historic resources are discovered in the Sacramento River.* Title to abandoned shipwrecks, archaeological sites, and historic or cultural resources on or in the tide and submerged lands of California is vested in the State and under the jurisdiction of the California State Lands Commission (CSLC). Any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant. Therefore, in the even that any buried cultural materials are unearthed on lands under CSLC jurisdiction, the CSLC will be consulted and notified. The contractor also would contact the lead agencies.	Construction contractor, in coordination with CDFW and USFWS, M&T Chico Ranch and Llano Seco Rancho (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) CSLC (regulatory compliance)	
Hazards and Hazardous Materials				
Environmental Commitment HAZ-1*: Prepare and Implement a Hazardous Materials Control, Spill Prevention and Response Plan.* Before construction begins, a Hazardous Materials Control, Spill Prevention, and Response Plan (HMCSPRP) will be prepared to reduce the potential effects of hazardous materials and spills. The plan will identify staging areas where hazardous materials would be stored during construction and include an accidental spill prevention and response plan. The plan also will identify potential hazardous materials that would be used during construction activities and include appropriate practices to reduce the likelihood of a spill of toxic chemicals and other hazardous materials during construction, which may include the following. ▪ Protocols for proper handling and disposal of materials will be established prior to construction. ▪ Spill prevention measures will include stockpiling absorbent booms, staging hazardous materials at least 25 feet away from the river, and maintaining and checking construction equipment to prevent fuel and lubrication leaks. Additional spill prevention measures will include specific actions regarding the containers, handling, and transport of fuel to the barge, and refueling practices.	Construction contractor, in collaboration with M&T Chico Ranch and Llano Seco Rancho (implementation)	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring and CESA compliance) USFWS (Lead Agency implementation monitoring) RWQCB (CWA regulatory compliance) USACE (CWA regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
▪ Any spill within the floodplain and active channel of the Sacramento River will be reported to NMFS, CDFW, and other appropriate resource agencies within 48 hours. ▪ The contractor will have absorbent boom available within 250 feet of the live channel during all in channel work to be further prepared for quick containment of any spills within or adjacent to the Sacramento River. ▪ All measures from the 1602 Streambed Alteration Agreement, 404 and 401 water quality certifications and permits will be adhered to.			NMFS (ESA compliance)	
***Environmental Commitment HAZ-2**: Implement fire risk reduction measures.* To minimize the potential for wildland fires during construction, the lead agencies would ensure (through enforcement of contractual obligations) that staging areas, welding areas, or other areas identified for construction work using spark-producing or intense heat-producing equipment would be cleared of dried vegetation or other materials that could serve as fire fuel. The contractor would keep these areas clear of combustible materials in order to maintain a firebreak.	Construction contractor, in collaboration with M&T Chico Ranch and Llano Seco Rancho (implementation)	During the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring)	
Traffic and Circulation				
***Environmental Commitment TRAF-1**: Prepare and Implement a Traffic Control Plan.* To avoid any potential delays or safety issues on SR45, County Rd. 23, River Road or other haul routes, a traffic control plan would be developed and implemented. M&T Chico Ranch/Llano Seco Rancho would work with the construction contractor and coordinate with Caltrans and/or county public works or planning departments and develop a traffic control plan prior to initiating work. The traffic control plan would include specific measures to manage traffic in the Action/Project Area and along haul routes, which would be submitted to the appropriate transportation agency for review and approval prior to the start of construction. The traffic control plan would include measures to address the following. ▪ Reduce, to the extent practicable, the number of vehicles (construction-related and other) on the roadways adjacent to the Action/Project Area. ▪ Reduce, to the extent practicable, the interaction between construction equipment and other vehicles.	Construction contractor, in collaboration with M&T Chico Ranch and Llano Seco Rancho (traffic plan development) Construction contractor (implementation)	Prior to the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) Caltrans and/or Butte and Glenn Counties (regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
▪ Promote public safety through actions aimed at driver and road safety. ▪ Prior to implementation of construction activities, the contractor will verify that all roads, bridges, culverts, and other infrastructure along the access routes can support expected vehicle loads. ▪ Identify intended haul routes, locations of signage, locations of flaggers, approved permits, documentation of coordination with local and State agencies, and locations of potential delays to vehicle and pedestrian traffic. Construction vehicles will follow established truck routes to the greatest extent practicable.		During the construction period.		
Environmental Commitment TRAF-2: *Implement Measures to Address Potential Traffic Flow and Access Issues.* The following environmental commitments would be implemented as part of the project to ensure minimization of impacts on traffic and circulation. ▪ The construction contractor will maintain travel traffic on all roads adjacent to the site and on all affected public roads during the construction period. Measures for the protection and diversion of traffic, including the provision of watchmen and flagmen, erection of barricades, placing of lights around and in front of equipment and the work, and the erection and maintenance of adequate warning, danger, and direction signs, will be as required by State and local authorities having jurisdiction. ▪ The traveling public shall be protected from construction and work damage to person and property. The contractor's traffic on roads selected for hauling material to and from the site shall interfere as little as possible with public traffic. ▪ Traffic controls on major roads and collectors would include flag persons wearing bright orange or red vests and using “stop/slow” paddles to direct drivers. ▪ Access to public transit would be maintained, and movement of public transit vehicles would not be impeded as a result of construction activities. ▪ Through access for emergency vehicles would be provided at all times. ▪ Access would be maintained for driveways and private roads.	Construction contractor, in coordination with project landowners (i.e., M&T Chico Ranch and USFWS)	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) Caltrans and/or Butte and Glenn Counties (regulatory compliance)	

Environmental Commitment / Mitigation Measure	Responsible Implementing Entity	Timeframe for Implementation	Responsible Monitoring and Regulatory Compliance Agencies	Verification of Compliance
***Environmental Commitment TRAF-3**: Construction-related Traffic Measures.* The following environmental commitments would be implemented as part of the project to ensure minimization of impacts on traffic and circulation. ▪ Construction parking will be restricted to the designated staging areas. ▪ During peak periods, construction-generated traffic will avoid roadway segments or intersections that are at, or approaching, a level of service (LOS) that exceeds local standards, either by traveling different routes or by traveling at non-peak times. ▪ Construction warning signs would be posted in accordance with local standards or those set forth in the Manual on Uniform Traffic Control Devices (Federal Highway Administration 2000) in advance of the construction area and at any intersection that provides access to the construction area. ▪ Rock, dirt, and/or other fill materials will be prevented from being accidently dropped from trucks traveling on highways to and from the project site. ▪ Written notification would be provided to appropriate contractors regarding appropriate routes to and from construction sites, and weight and speed limits for local roads used to access construction sites. ▪ Water trucks will be utilized to prevent excess dust caused by equipment traffic on dirt and gravel roads.	Construction contractor, in coordination with M&T Chico Ranch and Llano Seco Rancho (implementation)	Prior to and during the construction period.	CDFW (Lead Agency implementation monitoring) USFWS (Lead Agency implementation monitoring) Caltrans and/or Butte and Glenn Counties (regulatory compliance)	

Notes

BCAQMD – Butte County Air Quality Management District
Caltrans – California Department of Transportation
CDBW – California Department of Boating and Waterways
CDFW – California Department of Fish and Wildlife
CSLC – California State Lands Commission
GCAPCD – Glenn County Air Pollution Control District
NAHC – Native American Heritage Commission
NMFS – National Marine Fisheries Service
RWQCB – Regional Water Quality Control Board
SHPO – State Historical Preservation Officer
USACE – U. S. Army Corps of Engineers
USFWS – U.S. Fish and Wildlife Service

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ATTACHMENT 1
OF
APPENDIX A

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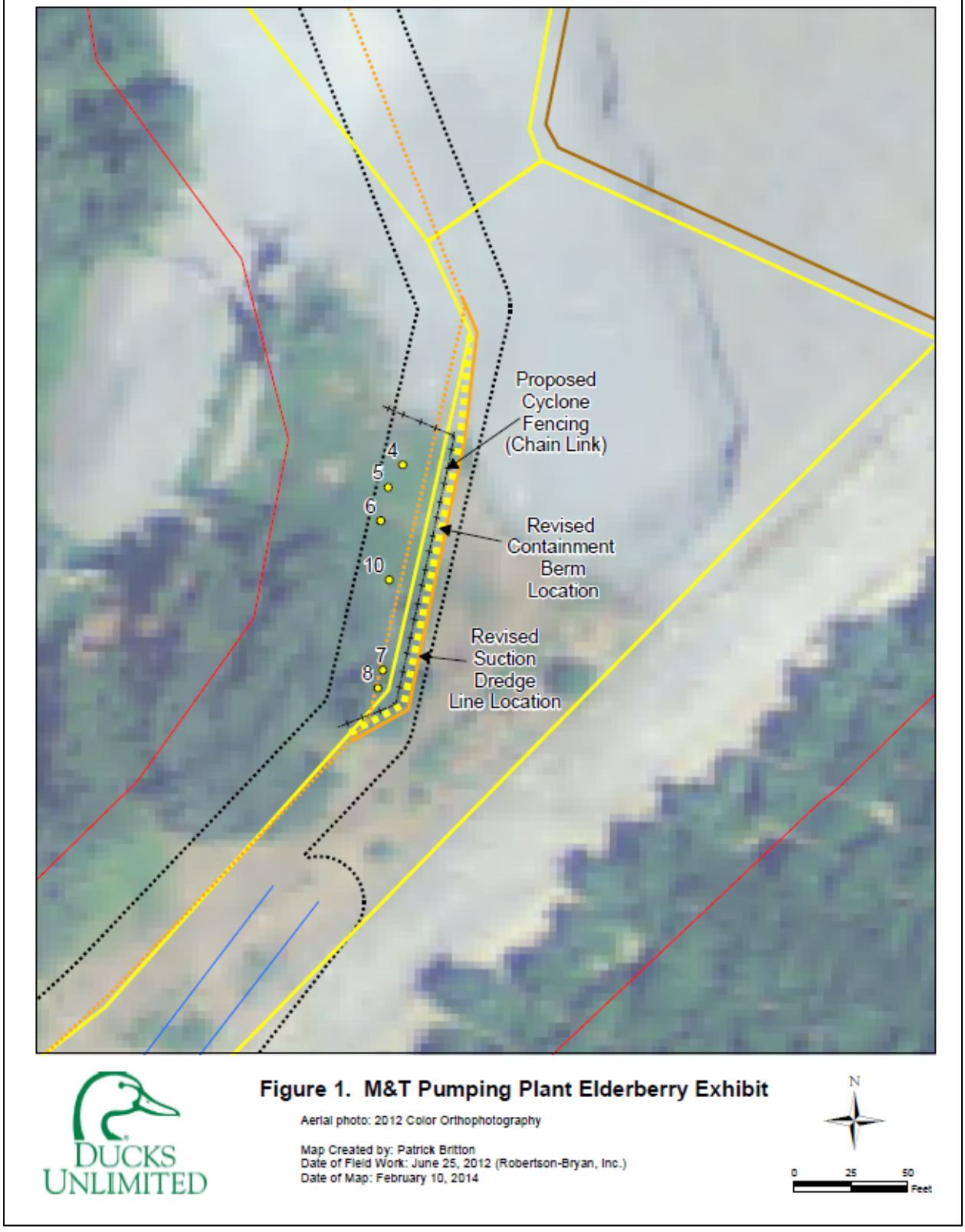

Attachment 1. Location of cyclone fencing (chain link) proximate to the suction dredge line and the containment berm.

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ATTACHMENT 2
OF
APPENDIX A

Attachment 2 presents an example of the public notice that would be posted at each of the Sacramento River boat launch facilities listed in ***Environmental Commitment REC-1*** above. Additionally, an informative notice advising the public of the proposed dredge activities will be published in local newspapers, consistent with the Notice of Preparation, Notice of Availability and other public notices for the Proposed Action/Project. Newspaper notices will be published approximately one week prior to the commencement of in-river activities. As a supplemental public outreach measure, information regarding the proposed dredge activities will be shared through the Sacramento River Conservation Area Forum listserv.

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Sample Public Notice to be Posted at Area Boat Launch Facilities.

PUBLIC NOTICE
TEMPORARY NAVIGATION HAZARD

IN-RIVER DREDGING IN THE SACRAMENTO RIVER AT RIVER MILE 192.5

(JULY 1 THROUGH OCTOBER 15)

The USFWS and CDFW will be sponsoring a maintenance dredging operation downstream of the confluence of Big Chico Creek and the Sacramento River, along the east bank of the Sacramento River immediately south of the Bidwell-Sacramento River State Park at River Mile (RM) 193, approximately 6 miles southwest of the City of Chico. Dredging operations are anticipated to occur between 7 am and 7 pm from July 1 through October 15. While in the Sacramento River, the suction dredge barge will represent a potential hazard to navigation.

Boaters and other recreationalists should exercise caution while passing through the affected portion of the Sacramento River. Yellow warning buoys will be placed at highly visible locations in the Sacrament River to alert boaters to the potentially hazardous in-river conditions. These buoys will be placed upstream and downstream of the dredge area and will be set two days prior to initiation of dredging. The buoys will remain in place for the duration of the dredging operation. For questions regarding this public notice, please contact either:

Mr. Dan Frisk
Sacramento NWR Complex Office
752 County Road 99W
Willows, CA 95988
(530) 934-2801

Mr. Joe Johnson
California Department of Fish and Wildlife
1701 Nimbus Road Ste. A
Rancho Cordova, CA 95670
(916) 358-2900

The environmental documentation addressing the suction dredging activities, including detailed descriptions of the dredging activities and specific locations affected, are available at: http://www.ducks.org/california/california-projects/m-t-llano-seco-fish-screen-project.

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APPENDIX B

Public Draft Environmental Assessment/Initial Study
Distribution List

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PUBLIC DRAFT ENVIRONMENTAL ASSESSMENT/INITIAL STUDY DISTRIBUTION LIST

Name	Agency/Organization
Afifa Awan	California State Lands Commission
Andy Popper	Glenn County
Antero Rivasplata	ICF
Aric Lester	DWR
Armen Kamian	Butte County
Barbara LeVake	Sacramento Valley Homeowners Association
Barbara Vlamis	Aqua Alliance
Bill Orme	State Water Resources Control Board
Brenda Crotts	Butte County Library
Brendon Flynn	Pacific Farms and Orchards
Butte Environmental Council	
California Native Plant Society	Mt. Lassen Chapter
California Waterfowl Association	
Candace Grubbs	Butte County Clerk-Recorder
Central Valley Bird Club	
Central Valley Project Water Association	
Charlie Edgar	Rancho Llano Seco
Chico Area Flyfishers	
Chris Barr	USFWS
Chris Leininger	Ducks Unlimited
Chris Norden	Assemblyman Jim Nielsen, Staff
Chris Wilkinson	DWR
Cy R. Oggins	California State Lands Commission
Cynthia Pustejovsky	Gridley Branch Library
Dan Frisk	USFWS
Dan Kelley	Somach, Simmons & Dunn
Dan Meier	USFWS
Dan Welsh	USFWS
David Zezulak	CDFW
Dawn Garcia	Altacal Audubon Society
Denise Rist	California Department of State Parks and Recreation
Dennis Dorratcague	MWH Global
Dr David Brown	CSU Chico Dept of GeoSciences
Dr. Colleen Hatfield	CSU Chico Dept of Biological Science
Dr. Jeff Mount	Department of Geology, UC Davis
Dr. John Battles	UC Berkeley
Dr. John Stella	State University of New York
Dr. Matt Kondolf	UC Berkeley

Name	Agency/Organization
Dr. Michael Singer	Dept. of Earth & Environmental Sciences
Dr. Peter Moyle	UC Davis
Dr. Steve Greco	UC Davis
Dr. Val K Shaw	
Family Water Alliance	
Fran Peace	U.S. Representative Wally Herger's Office, Staff
Grace M. Marvin	Sierra Club - Yahi Group
Greg Golet	The Nature Conservancy
Gretchen Umlauf	NMFS
Guy F. Chetelat	Central Valley Regional Water Quality Control Board -
Howard Brown	National Marine Fisheries Services
Howard Ellman, Esq.	Buchalter Nemer
Ian Ledbetter	Glenn County
Institute for Sustainable Development	CSU Chico
James Herota	Central Valley Flood Protection Board, Flood Projects
Jane Dolan	Sacramento River Conservation Area Forum
Jay Bogiatto	Department of Biological Sciences, CSU Chico
Jay Punia	Central Valley Flood Protection Board
Jeff Drongesen	CDFW
Jenny Marr	CDFW
Jim Frey	California State Lands Commission
Jim Gaumer	M&T Chico Ranch
Jim Moose	Remy Moose Manley, LLP
Jim Well	Ducks Unlimited
Joe Johnson	California Dept. of Fish & Wildlife
John Linhard	Glenn County
John Merz	Sacramento River Preservation Trust
Kathleen Moghannam	Butte County
Kathy Hill	CDFW
Kelly Moroney	USFWS
Kevin Eastman	Senator Doug LaMalfa, Staff
Kevin Tokunaga	Glenn County
Krystel Bell	U.S. Army Corps of Engineers
Leigh McDaniel	Glenn County Board of Supervisors
Les Heringer	M&T Chico Ranch
Marc Sulik	City of Chico
Mark Spannagel	Senator Doug LaMalfa, Staff
Michael Crites	Crites Equipment Services
Mary Dunne	CDFW
Michael Fehling	California Department of Parks & Recreation - Northern

Name	Agency/Organization
Michael Hoover	USFWS
Mike Crump	Butte County
Mike Harvey	Tetra Tech
Nancy Haley	U.S. Army Corps of Engineers - Sacramento District
Neil Schild	MWH Global
Orland Free Library	
Patricia Roberson	USFWS
Patrick Britton	Ducks Unlimited
Paul Hahn, Chief	Butte County
Paul Risher	U.S. Army Corps of Engineers
Paul Ward	
Point Reyes Bird Observatory	
Quene Hansen	City of Chico
Richard Thieriot	Rancho Llano Seco
Rob Olmstead	Assemblyman Jim Nielsen, Staff
Robert Mussetter	Tetra Tech
Rowland Hickel	Butte County
Ryan Luster	The Nature Conservancy
Ryan T. Larson	U.S. Army Corps of Engineers
Sacramento River Watershed Program	
Sacramento River Discovery Center	
Sandie Dunn	Somach, Simmons & Dunn
Scott Zaitz	Central Valley Regional Water Quality Control Board
Sheryl Thur	Glenn County
State of California Resources Agency	
Steve Evans	Friends of the River
Steve Lambert	Butte County
Steve Oetzel	California State Lands Commission
Susan Rauen	Chico Branch Library
Tamara Miller	MPM Engineering
Tim Rust	U.S. Bureau of Reclamation
Tim Snellings	Butte County
Tina Bartlett	CDFW
Tom Barrett	Big Chico Creek Watershed Alliance
Tom Fossum	Butte County
Tom Varga	City of Chico
Tracy Bettencourt	City of Chico
Tracy McReynolds	CDFW
Vicki Newlin	Butte County
Victoria Whitney	State Water Resources Control Board

Name	Agency/Organization
W. James Wagoner	Butte County
Wendy Hall	California State Lands Commission
William Hutton, Esq.	Coblentz, Patch, Duffy & Bass
Woodson Bridge RV Park	
Woody Elliott	
Yantao Cui	

APPENDIX C

USFWS Press Release Regarding the Availability of the Draft Environmental Assessment/Initial Study for the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project

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U.S. Fish & Wildlife Service

Department of the Interior
U.S. Fish & Wildlife Service
Sacramento NWR Complex
752 County Road 99W
Willows, CA 95988
Phone: 530/934-2801
Fax: 530/934-7814
Email: sacramentovalleyrefuges@fws.gov
Website: http://www.fws.gov/refuge/Sacramento_River

News Release

FOR IMMEDIATE RELEASE
December 18, 2013
Contact: Kelly Moroney, kelly_moroney@fws.gov; USFWS, 530-934-2801

Service Announces Availability of the Draft Environmental Assessment/Initial Study For the M&T Chico Ranch/Llano Seco Rancho Fish Screen Facility Short-term Protection Project

Today, the U.S. Fish and Wildlife Service (Service) and California Department of Fish and Wildlife (CDFW) announce the availability of a Draft Environmental Assessment/Initial Study (EA/IS), Proposed Finding of No Significant Impact (FONSI), and Proposed Mitigated Negative Declaration (MND) for the M&T Chico Ranch/Llano Seco Rancho Pumps & Fish Screen Facility Short-term Protection Project. These documents have been prepared in compliance with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

The Proposed Project involves implementation of interim measures to protect and maintain the viability of the M&T Chico Ranch/Llano Seco Rancho fish screen and pumping facility, located on the Sacramento River (~RM 192.5 near the town of Glenn). These measures include: (1) implementation of up to two additional maintenance dredging operations; (2) a time extension for the temporary rock-toe and tee revetment to remain in place on the Service's Capay Unit of the Sacramento River National Wildlife Refuge (SRNWR), and what is now The Nature Conservancy property immediately south of the Capay Unit until a long-term solution is developed and completed; and (3) ongoing monitoring and maintenance of the revetment, which would extend until a long-term solution is developed and completed. Implementation of these measures, in concert, are intended to sustain the viability of the M&T/Llano Seco Pumps Facility, including meeting existing fish screen criteria and water supply and delivery responsibilities, as well as to maintain the viability of a range of alternatives under consideration for a long-term solution.

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The Draft EA/IS, proposed FONSI, and proposed MND will be available for a 45-day public review and comment period. Written comments on the document should be received no later than January 31, 2014. A public meeting also will be held to provide interested parties with an opportunity to submit verbal or written comments on the Draft EA/IS. Two public meetings will be held on January 10, 2014, from 2 p.m. to 4 p.m. and from 7 p.m. to 9 p.m. at the Chico Masonic Family Center, 1110 West East Avenue, Chico, CA 95926.

Hardcopies of the Draft EA/IS, proposed FONSI, and proposed MND are available for public review at the following locations:

- CDFW, 1701 Nimbus Road, Suite A, Rancho Cordova, CA 95670;
- USFWS, SNWRC, 752 County Road 99W Willows, California 95988;
- Butte County Library, Chico Branch, 1108 Sherman Avenue, Chico, California 95926;and
- Willows Library, 201 N Lassen Street, Willows, California 95988.

Electronic copies of the documents are available at the following websites: Sacramento River Conservation Area Forum Website (http://www.sacramentoriver.org/srcaf) and Sacramento River National Wildlife Refuge Website (http://www.fws.gov/refuge/Sacramento_River/). Under the Americans with Disabilities Act of 1990, CDFW and USFWS will provide documentation in alternate formats to individuals with disabilities. To obtain such services, please contact Tina Johnson, CDFW Public Information Officer, at (916) 651-1214.

Written comments may be mailed to: CDFW, Attention Mr. Joe Johnson, 1701 Nimbus Road, Suite A, Rancho Cordova, CA 95670; or USFWS, SNWRC, Attention Mr. Daniel Frisk, 752 County Road 99 W, Willows, CA 95988. Comments may also be submitted electronically to M&TLlanoSecoProject@hdrinc.com.

--FWS--

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people. We are both a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals, and commitment to public service. For more information on our work and the people who make it happen, visit www.fws.gov.cno. Connect with our Facebook page at, follow our tweets at http://twitter.com/USFWSPacSWest*, watch our YouTube Channel at* http://www.youtube.com/usfws *and download photos from our Flickr page at http://www.flickr.com/photos/usfws_pacificsw/*

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APPENDIX D

January 10, 2014 Pubic Meeting Speaker Request Lists

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U.S. FISH & WILDLIFE SERVICE
AND CALIFORNIA DEPARTMENT OF FISH & WILDLIFE
PROPOSED M&T CHICO RANCH/LLANO SECO RANCHO
FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT
DRAFT EA/IS

PUBLIC S MEETING
JANUARY 10, 2014
2:00 P.M. TO 4:00 P.M.

SPEAKER REQUEST LIST

If you would like to submit verbal comments, please fill in the information below.

Name:	Woody Elliott
Organization (if applicable):	Self
Address:	287 Pinyon Hills Dr.
City/State/Zip:	Chico 95928
E-mail:	woodyelliott@gmail.com
Name:	~~Robert Fulton~~
Organization (if applicable):	~~SREAF~~
Address:	
City/State/Zip:	
E-mail:	~~Robert.Fulton@water.ca.gov~~
Name:	JOHN MAZ
Organization (if applicable):	SSPT
Address:	
City/State/Zip:	YOU KNOW?
E-mail:	
Name:	Vicki Nolan
Organization (if applicable):	
Address:	
City/State/Zip:	
E-mail:	
Name:	
Organization (if applicable):	
Address:	
City/State/Zip:	
E-mail:	

U.S. FISH & WILDLIFE SERVICE
AND CALIFORNIA DEPARTMENT OF FISH & WILDLIFE
PROPOSED M&T CHICO RANCH/LLANO SECO RANCHO
FISH SCREEN FACILITY SHORT-TERM PROTECTION PROJECT
DRAFT EA/IS

PUBLIC S MEETING
JANUARY 10, 2014
7:00 P.M. TO 9:00 P.M.

SPEAKER REQUEST LIST

If you would like to submit verbal comments, please fill in the information below.

Name:	Jane Dolan
Organization (if applicable):	Sac River Conservation Area Forum
Address:	2440 Main St
City/State/Zip:	Red Bluff CA 96080
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Name:	
Organization (if applicable):	
Address:	
City/State/Zip:	
E-mail:	
Name:	
Organization (if applicable):	
Address:	
City/State/Zip:	
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