# EXHIBIT A

# Addendum No. 3 to the Final Environmental Impact Report on the

Natomas Levee Improvement Program Phase 3 Landside Improvements Project



State Clearinghouse # 2008072060



July 2014

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#### State Clearinghouse # 2008072060

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# ADDENDUM NO. 3 TO THE NATOMAS LEVEE IMPROVEMENT PROGRAM PHASE 3 LANDSIDE IMPROVEMENTS PROJECT FINAL ENVIRONMENTAL IMPACT REPORT

## **SECTION 1. INTRODUCTION AND BACKGROUND**

This Addendum No. 3 to the *Final Environmental Impact Report, Natomas Levee Improvement Program Phase 3 Landside Improvements Project* (State Clearinghouse No. 2008072060) (Phase 3 EIR) addresses refinements in design to the Pritchard Lake Pumping Plant element of the Phase 3b Project for the Natomas Central Mutual Water Company (NCMWC) and the Sacramento Area Flood Control Agency (SAFCA). The Phase 3b Project, as described and analyzed in the previously certified Phase 3 EIR (SAFCA 2009), covered improvements to the Sacramento River east levee between Elverta Road and Interstate 5 and relocation and/or reconstruction of irrigation and drainage facilities to accommodate these levee improvements. The facilities to be relocated and/or reconstructed included NCMWC's Pritchard Lake Pumping Plant, which was included in the Phase 3 EIR. The draft and final Phase 3 EIRs are available at the SAFCA offices at 1007 7th Street, 7th Floor, Sacramento, CA 95814, and online at SAFCA's Website (http://www.safca.org). The location of the Pritchard Lake Pumping Plant is shown on Plate 1.

Addendum No. 1 to the Phase 3 EIR evaluates Project Refinements related to the discharge of water necessary to dewater excavations required for the relocation of Reclamation District (RD) 1000 Pumping Plant No. 2. (SAFCA 2011). Addendum No. 2 to the Phase 3 EIR evaluates Project Refinements related to hauling of approximately 30,000 cubic yards (cy) of fill material from an existing stockpile of soils located along Mack Road in the City of Sacramento to the landside of the levee in Reach 9B of the Sacramento River east levee improvements. (SAFCA 2009b) This Addendum No. 3 to the Phase 3 EIR focuses on Project Refinements related to replacing NCMWC's existing Pritchard Lake Pumping Plant and adding fish screens as part of the replacement work, as described below.

The Federal Anadromous Fish Screen Program (AFSP) protects juvenile anadromous fish from entrainment in water diversions in California on the Sacramento and San Joaquin Rivers, their tributaries, and the Sacramento-San Joaquin Delta. The AFSP was established in 1994 to carry out Section 3406(b)(21) of the Central Valley Project Improvement Act (CVPIA). CVPIA (Title 34 of Public Law 102-575) required implementation of measures to protect, restore, and enhance fish and wildlife affected by operations of the Federal Central Valley Project (CVP). The AFSP was specifically developed to help meet the fish restoration objectives of the CVPIA, which is implemented by the U.S. Bureau of Reclamation (Reclamation) and U.S. Fish and Wildlife Service (USFWS). The AFSP is an incentive-based program that encourages the construction of fish screens at water diversions by providing technical assistance and cost-share funding. Fish protected through this program include Chinook salmon, steelhead trout, and green and white sturgeon.

One component of the AFSP is the American Basin Fish Screen and Habitat Improvement Project. Under the auspices of this project, NCMWC planned two consolidated positive-barrier fish screen diversion facilities along the lower Sacramento River (SAFCA 2008). The operation of the newly constructed diversion facilities would allow NCMWC to remove several small unscreened pumping plants along the Sacramento River and the Natomas Cross Canal (NCC). In 2014, NCMWC completed construction of the first of these new screened diversion facilities in the Sacramento River channel near the intersection of the Garden Highway and Sankey Road. This new Sankey Diversion Facility has allowed NCMWC and SAFCA to cooperate in decommissioning and eventually removing NCMWC's Bennett and Northern Pumping Plants along the south levee of the NCC (SAFCA 2009). NCMWC planned to construct the second consolidated facility several miles downstream of the Sankey Facility. This second structure would have allowed NCMWC to decommission and abandon two of its existing unscreened pumping plants along the Sacramento River channel near the allowed NCMWC to decommission and abandon two of its existing unscreened pumping plants along the Sacramento River channel including the Pritchard Lake Pumping

Plant and the Elkhorn Pumping Plant. However, the cost of creating a single consolidated facility with sufficient capacity to replace the two existing pumping plants proved infeasible and NCMWC abandoned the concept of consolidation, focusing instead on screening the Pritchard Lake Pumping Plant in its current location.

As discussed in the Phase 3 EIR, SAFCA was meanwhile developing a project to modify the Pritchard Lake Pumping Plant in order to achieve the flood risk reduction objectives of the NLIP. The modifications involved raising the pipes connecting the pumping plant to NCMWC's Elkhorn Irrigation Canal through and over the Sacramento River east levee and reconstructing the pumps, deck, support piles, gate structures and other facilities comprising the plant. The Phase 3 EIR notes that implementation of these flood related improvements could be affected by the timing of NCMWC's efforts to screen the plant's intake structures and/or construct the Sankey Diversion Plant. Following the SAFCA Board's adoption of the Phase 3 EIR, SAFCA and NCMWC concluded that their interests could best be served through a joint project at the Pritchard Lake site that would include the upgrades needed for both flood and fish habitat purposes. This Addendum No. 3 describes and evaluates the refinements that are necessary to implement the joint project by comparison to the project described in the Phase 3 EIR (Project Refinements).

## **SECTION 2. PROJECT REFINEMENTS**

The most important Project Refinement involves the treatment of the existing Pritchard Lake Pumping Plant facility. While the objectives of the flood related project could have been achieved through somewhat extensive modification of the existing pumping plant platform, screening of the plant's intakes requires demolition of the existing platform and construction of a new platform slightly further out into the river channel. There are three primary reasons for this:

- Water depths below the existing platform are inadequate to allow proper function of the fish screens at low summer river levels.
- The existing platform structure itself is too small to accommodate the pump spacing required for the screens. The platform is about 30 feet long and 10 feet wide. Each of the three new fish screens is about 20 feet long and installed end-to-end along the river side would require a total of about 70 feet of space, including clearance between screens. The new replacement pumps and associated infrastructure also require more space than is available on the existing platform. This project refinement involves a larger in-channel footprint than would have been required by the flood-related modifications to the Pritchard Lake Pumping Plant described in the Phase 3 EIR.
- The existing platform collects a substantial amount of timber debris during high flows. This debris often damages the facility, taking it out of service and requiring repair.

The new structure would be equipped with three cylindrical fish screens designed to prevent fish entrainment during pumping (U.S. Bureau of Reclamation 2014). Installation of these screens would necessitate:

- removing the existing intake structure;
- constructing a new access bridge, platform, and a short walkway to facilitate maintenance;
- upgrading and widening an existing access road, and constructing a short access road from Garden Highway;
- installing a new intake structure and fish screens in front of the new intake structure; and
- constructing a log boom as a debris deflection barrier.

## **EXISTING FACILITY DECOMMISSIONING**

The existing pumping plant would be decommissioned and removed. The existing platform, pipes, pumps, walkway deck, and timber support bracing would be removed using cranes and support equipment from land, and these elements would be removed above the ordinary high water mark (OHWM). Once the superstructure is removed, the existing timber piles would be removed using cranes to pull the piles out of the ground below the OHWM. If it is not possible to pull the piles out of the ground, or they break during extraction, the piles would be cut to match ground level and the above ground material would be removed from the river. As an option, it may be determined in the field that all piles would be cut to ground level.

An existing concrete vault that provides flow metering and a landing for the existing access bridge to the existing platform would be demolished and removed. An existing emergency drain pipe for the plant would be removed during this construction operation whereby the pipe would be excavated and removed from the site, affecting 0.01 acre of the bank of the river.

As part of decommissioning of the existing plant, the existing supply pipes on the water side of the Garden Highway would be removed. This would require excavation of approximately 1,775 cubic yards of soil (above the OHWM and outside of Section 10/404 jurisdiction) to expose the pipes. Excess spoils would be disposed of off-site.

## NEW ACCESS BRIDGE, PLATFORM, WALKWAY, PUMPS, AND FISH SCREENS

A new access bridge would connect the platform to the shore for maintenance of the pumping plant. To support the new access bridge, approximately twelve new 24-inch-diameter steel pipe piles would be driven into the bank and bed of the Sacramento River. The access bridge would be approximately 24 feet wide and about 90 feet long extending from the bank to the platform. The platform itself would be approximately 16 feet wide by 72 feet long. A short walkway would be constructed to facilitate maintenance. Approximately eight additional 24-inch diameter steel pipe piles would be installed in the river bed to support the new platform. The platform provides the surface to which all the pump motors, pump controls, and screen controls would be mounted above the 200-year flood elevation on the deck of the platform. Plates 2, 3, and 4 illustrate details of the Pritchard Lake Pumping Plant improvements.

The new pumps would be placed vertically below the pump platform. The fish screens would be attached to a track in front of the pumps. The track would be attached to the pump platform. The pump columns would be inserted into three pump cans (two with a 78 inch diameter and one with a 66 inch diameter) that would be inserted into the river approximately 10 feet below the river bed. As a result of the water level being lowest during pump operations in late spring to late summer, the pump impellors must be below ground level to meet the submergence requirement for proper pump operation in combination with the fish screen type selected. Insertion of the pump cans below the river bed would require the removal of some of the material at the river bottom. If the river bottom in the footprint of the pumps is fairly soft sediment material, it would be removed by excavation. However, if the river bottom is fairly hard, then another method of driving the pump cans into the river bottom, such as using hard tips attached to the bottom of the pump cans and the cans, would be used.



Source: U.S. Bureau of Reclamation 2014

**Pritchard Lake Pumping Plant Location** 

## IMPROVED AND EXPANDED ACCESS ROAD AND NEW ACCESS ROAD

To reach the new platform, the existing access road would be improved and expanded. Approximately 480 cubic yards of fill dirt would be used to create the improved access. Approximately 0.07 acre (410 cubic yards) of riprap would be placed below the OHWM of the river, below the access bridge and along the bank of the river north toward the RD 1000 Pumping Plant No. 2 outfall. Also, the existing access road would be regraded to more natural contours to match adjacent terrain. In addition, a new paved access road approximately 24 feet long and 90 feet wide would also be constructed off of Garden Highway to provide access to the facilities. To install riprap and construct the new fill slope for the access road, the river bank below the access bridge would need to be graded and shaped. Up to about 0.01 acre of the bank of the Sacramento River below the OHWM would be temporarily disturbed by these grading operations.

## **New Log Boom**

To alert boaters and protect the new pumping plant from large floating debris, a log boom would be constructed in the river in front (west) of the pumping plant and a timber deflector would extend upstream (north) and be angled back toward the river bank. The log boom would be about 20 feet in front (west) of the proposed platform. The proposed log boom would be approximately 70 feet long and would be anchored by three 18-inch-diameter steel pipe piles. The timber deflector would be approximately 135 feet long anchored by four 30-inch-diameter steel pipe piles. The timber deflector consists of multiple sections of 32- inch-diameter steel pipe main members faced with 3-inch by 12-inch timber fenders and counterbalanced with 20-inch diameter steel pipes. The log boom and timber deflector would have ultra-high density polyethylene guides against the vertical pipe piles so they would slide to float at the water surface.

### **CONSTRUCTION, OPERATIONS, AND MAINTENANCE**

Pumps, motors, and fish screens would be installed using boom equipment mobilized on the access bridge from shore. The electrical and control facilities for the Pritchard Plant would be placed on the waterside bench between the Sacramento River and Garden Highway, south of the existing Pritchard Lake Pumping Plant at the location where the pump tender's residence was removed. The facilities would be constructed within an improved enclosure with a chain link fence around it, totaling approximately 65 feet long and 50 feet wide. The existing temporary electrical and control pad, located between the existing Pritchard Lake Pumping Plant and Plant 2, would then be dismantled and removed. The majority of the construction work would occur from shore by land-based equipment and personnel. The installation of the pilings, platform, pumps, screens, and a walkway would be from land-based cranes. During construction, workboats or construction barges may be used; no equipment is expected to be placed in the water. The in-water portion of the work would occur during the approved in-water work window of July 1 to October 31 for the Sacramento River.

All pipe piles would be driven with the vibratory method if practical and may be finished with the diesel hammer method as needed to reach required tip elevation. Pile-driving equipment would start at low power levels and strike frequency and gradually increase settings until satisfactory progress is made. A minimum 15-minute break between each pile installation would be implemented to allow fish in the vicinity of the pile driving to move. All pile driving would be completed during daylight hours and within the prescribed methods and limitations of the existing NMFS biological opinion for the proposed refinements (U.S. Bureau of Reclamation 2014). When inwater work is conducted, a qualified biologist would be present to monitor construction activities and ensure compliance with any permit terms and conditions.

Pumps, motors, and fish screens would be serviced using boom equipment mobilized on the access bridge from shore. Maintenance of the fish screens would be typically done on the platform with the screens pulled up to the top of their rails. For major service, the screens would be moved to shore via the boom truck.

## PHASE 3 EIR MITIGATION MEASURES AND EXISTING PERMIT CONDITIONS

The Phase 3 EIR includes mitigation measures that will reduce all of the potentially significant impacts resulting from the proposed Project Refinements to a less than significant level.

For example, the Phase 3 EIR contains an in-depth discussion of the potential for in-channel construction work to result in a loss of fish or aquatic habitat through increased sedimentation and turbidity or releases of contaminants or other construction-related disturbance. The EIR concludes that these potentially significant effects would be reduced to a less-than-significant level by implementing the following measures, all of which apply to the proposed Project Refinements, and are summarized below:

- implementing standard best management practices guided by a stormwater pollution prevention plan;
- complying with National Pollution Discharge Elimination System (NPDES) permit conditions, including conditions for a point-source discharge;
- implementing a feasible construction work window that minimizes impacts to special-status fish species;
- implementing operational controls and a fish rescue plan that minimizes impacts to fish associated with cofferdam construction and dewatering; and
- restoring, replacing, or rehabilitating degraded shaded riverine aquatic (SRA) habitat function and complying with Section 7 of the Federal Endangered Species Act, Section 1602 of the California Fish and Game Code, and Section 2081 of the California Endangered Species Act.

All applicable permits for the Phase 3 Project have been received and NCMWC will comply with all permit conditions. These permits include the following: incidental take permits from National Marine Fisheries Service (NMFS) and USFWS under Section 7 of the Federal Endangered Species Act, a permit from USACE under Section 404 of the Federal Clean Water Act, permits from the California Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code and Section 2081 of the California Endangered Species Act, an NPDES permit from the Central Valley Regional Water Quality Control Board, and an encroachment permit from the Central Valley Flood Protection Board. Through these actions and coordination, NCMWC has ensured that all key Federal and state agencies with jurisdiction have had an opportunity to assess the Project Refinements, identify applicable mitigation measures in the Phase 3 EIR, and incorporate relevant measures into permit conditions to be implemented by NCMWC. These permits will be implemented by NCMWC for the proposed Project Refinements and thereby minimize environmental impacts.



Source: CH2M HILL 2014, Adapted by AECOM 2014



Source: CH2M Hill 2013, Adapted by AECOM 2014

**Overall Site Plan** 

Plate 3

### **Discharge Piping Ian and Profile**



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Source: CH2M Hill 2014, Adapted by AECOM 2014

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PRELIMINARY - NOT FOR CONSTRUCTION

# **SECTION 3. ENVIRONMENTAL ANALYSIS**

This section of the addendum summarizes State CEQA Guidelines applicable to proposed changes to a project for which an EIR has been certified and analyzes the potential effects on the physical environment from implementation of the proposed Project Refinements to the Phase 3 Project. This analysis also provides the substantial evidence required for a determination regarding whether any of the project changes would require preparation of a subsequent or supplemental EIR.

## STATE CEQA GUIDELINES FOR EVALUATING PROJECT REFINEMENTS

### STANDARDS FOR PREPARING AN ADDENDUM

Under the State CEQA Guidelines (California Code of Regulations [CCR] Section 15164), an addendum to a previously certified EIR may be prepared when minor modifications in the project are proposed, but none of the conditions described in the State CEQA Guidelines that require either a subsequent EIR (CCR Section 15162) or a supplemental EIR (CCR Section 15163), as summarized below, have occurred.

### STANDARDS FOR PREPARING SUBSEQUENT OR SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORTS

Under the State CEQA Guidelines (CCR Section 15162), a subsequent EIR is required whenever any of the following conditions occur:

- substantial changes are proposed in the project that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- substantial changes occur with respect to the circumstances under which the project is undertaken that will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:
  - the project will have one or more significant effects not discussed in the previous EIR or negative declaration;
  - significant effects previously examined will be substantially more severe than shown in the previous EIR;
  - mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
  - mitigation measures or alternatives that are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Under the State CEQA Guidelines (CCR Section 15163), the Lead or Responsible Agency may choose to prepare a supplement to an EIR rather than a subsequent EIR if:

• any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and

• only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation.

## **ISSUES NOT ANALYZED FURTHER IN THIS ADDENDUM**

The proposed Project Refinements described in this addendum constitute minimal changes in the approved Phase 3 Project and certified Phase 3 EIR. Implementation of the proposed Project Refinements would not cause a new significant impact or a substantial increase in the severity or intensity of the impacts identified in the Phase 3 EIR for the following issue areas because the impacts associated with the construction of a pumping plant facility along this area of the Sacramento River have been examined as part of the Phase 3 EIR.

The proposed Project Refinements would not cause new significant impacts, a substantial increase in the severity of the impacts, or require new mitigation measures beyond those identified in the Phase 3 EIR for the following resource areas, which are not evaluated further:

- agricultural resources;
- land use, socioeconomics, population, and housing;
- geology and soils;
- hydrology and hydraulics;
- water quality;
- vegetation and wildlife;
- paleontological resources;
- transportation and circulation;
- recreation;
- visual resources;
- utilities and service systems;
- hazards and hazardous materials;
- airport safety;
- wildfire hazards; and
- environmental justice.

### **ISSUES CARRIED FORWARD FOR FURTHER ANALYSIS IN THIS ADDENDUM**

#### FISHERIES AND SENSITIVE AQUATIC HABITATS

The project area for the Pritchard Lake Pumping Plant is designated critical habitat for the Sacramento River winter-run Chinook salmon Evolutionarily Significant Unit (ESU), the Central Valley spring-run Chinook salmon ESU, and Central Valley steelhead Distinct Population Segment (DPS). This was discussed in the March 2009

Biological Assessment for the NLIP Phase 3 Landside Improvements Project. Additionally, Reclamation released an Environmental Assessment for the Natomas Mutual Water Company & Anadromous Fish Screen Program Pritchard Lake Pumping Plant Fish Screen Project, in January 2014, examining potential impacts to fisheries in more detail.

Underwater sound pressure resulting from driving piles below the water surface could result in temporary effects to the behavior and local distribution of fish in the immediate vicinity of the pumping plant construction site. Available information indicates that exposure of fish species to underwater sound pressure levels exceeding approximately 180 decibels (dB) may result in sublethal (e.g., damage to ear, hearing impairments, behavioral implications including delays in migration) or lethal (e.g., ruptured swim bladder, internal bleeding) effects (Laughlin 2005). These critical sound levels exceed levels that are anticipated to be associated with the proposed Project Refinements. Pile-driving activities with repetitive high peaks have been documented to generate up to about 115 dB at a distance of 10 feet. Furthermore, project construction is occurring within the Sacramento River work window when special-status species populations are substantially reduced. Therefore, this possible activity is expected to be well below critical sound pressure levels for fish (mortality or injury) and result in less-than-significant effects on fish. (SAFCA 2009c.)

The project refinement area does not contain any spawning habitat but does serve as a migratory pathway for juvenile and adult Chinook salmon and steelhead. The proposed Project Refinements, however, would not substantially modify water flow, water quality, migratory corridor, or sediment quality in such a way that would reduce the area's ability to support aquatic species or cause substantial impacts to any of the special-status species. As a result of construction activities, there would be a temporary adverse modification of critical habitat for Chinook salmon and steelhead from pile driving. This adverse modification would occur only during pile-driving activities and be limited in duration during daylight hours. Following construction, conditions would return to baseline. This temporary adverse modification of designated critical habitat would be a less-thansignificant impact.

Based on this information, the impacts to fisheries would be less than significant, there would be no new significant impacts, and there would not be a substantial increase in the severity of previously identified effects on fisheries. The new fish screens would minimize salmon and steelhead mortality from operation of the Pritchard Lake Pumping Plant and would provide a long-term benefit to salmon and steelhead that more than compensates for the short-term construction-related impacts.

Furthermore, NCMWC has been coordinating with a variety of Federal and State permitting agencies to support the proposed Project Refinements. This includes receiving the following permits: incidental take permits from NMFS and USFWS under Section 7 of the Federal Endangered Species Act, a permit from USACE under Section 404 of Federal Clean Water Act, permits from CDFW under Section 1602 of the California Fish and Game Code and Section 2081 of the California Endangered Species Act, an NPDES permit from the Central Valley Regional Water Quality Control Board, and an encroachment permit from the Central Valley Flood Protection Board. The State Lands Commission has concluded that it does not need to review or approve the Pritchard Lake Pumping Plant project. Through these actions and coordination, NCMWC has ensured that all key state and federal agencies with jurisdiction have had an opportunity to assess the Project Refinements, identify applicable mitigation measures in the Phase 3 EIR, and incorporate relevant measures into permit conditions to be implemented by NCMWC. These permits will also minimize adverse effects to fish populations and sensitive aquatic habitats.

### **SPECIAL-STATUS TERRESTRIAL SPECIES**

The following discussion makes evident that there are no new circumstances since certification of the Phase 3 EIR that would influence terrestrial biological resource impacts associated with the proposed Project Refinements evaluated in this addendum, and there is no new information requiring analysis for verification of the Phase 3 EIR's conclusions regarding terrestrial biological resources.

- Impacts to special-status terrestrial species are covered in substantial detail in the Phase 3 EIR. The proposed Project Refinements do not result in any new significant impacts, or substantial increase in the severity of previously identified effects, that were not disclosed in the Phase 3 EIR on special-status or other terrestrial species and their habitats. Moreover, the California Department of Fish and Game (DFG, now CDFW) developed the following permit terms as part of its 1600 permitting process in a letter dated June 4, 2012, all of which will be implemented by the proposed Project Refinements to address any potential impacts to nesting birds: Unless previously established in subsequently approved documents (e.g., the CEQA document or an Incidental Take Permit), if construction is to occur during the breeding season (February 15 through August 31) a pre-construction raptor nest survey shall be conducted within 30 days prior to the beginning of construction activities by a qualified biologist. The results of the survey shall be submitted to DFG. If no active nests are found during the pre-construction survey, no further consultation is required.
- If active raptor nests are found within a quarter-mile (1320 feet) of project related activities, an initial temporary nest disturbance buffer shall be established. If project-related activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season (approximately March 1 and September 1), then an on-site biologist/monitor experienced with raptor behavior shall be retained by the project proponent to monitor the nest, and shall along with the project proponent, consult with the DFG to determine the best course of action necessary to avoid nest abandonment or take of individuals. Work may be allowed to proceed within the temporary nest disturbance buffer if raptors are not exhibiting agitated behavior such as defensive flights at intruders, getting up from a brooding position, or flying off the nest. The designated on-site biologist/monitor shall be on-site daily while construction related activities are taking place and shall have the authority to stop work if raptors are exhibiting agitated behavior.
- In consultation with DFG and depending on the behavior of the raptors, over time it may be determined that the on-site biologist/monitor may no longer be necessary due to the raptors' acclimation to construction related activities.

A total of 10.86 acres of non-wetland waters of the United States were affected by the Phase 3 project. Compensation for these effects to non-wetland waters were mitigated by creation of 13.66 acres of new waters of the United States in the form of the Phase 3 Project's Lower Giant Garter Snake/Drainage Canal, Lower Elkhorn Canal, and the Sandy Drain. Consequently, the Phase 3 Project's 13.66 acres of created waters provides the required mitigation for the proposed Project Refinements' additional 0.073 acre of effects to waters of the United States and there would be no net loss of acreage of waters of the United States.

Based on this information, the impacts to special-status terrestrial species and habitats would be less than significant, there would be no new significant impacts, and there would not be a substantial increase in the severity of previously identified effects on special-status or other terrestrial species and their habitats. The permits identified above under "Fisheries" also would minimize adverse effects to special-status and other terrestrial species.

### **CULTURAL RESOURCES**

There are no new circumstances since completion of the Phase 3 EIR that would influence cultural resource impacts associated with the proposed Project Refinements evaluated in this addendum, and there is no new information requiring analysis for verification of the EIR's conclusions regarding cultural resources. Project Refinements do not alter the Phase 3 project footprint, thus there is no potential for new impacts to cultural resources.

An archaeologist and an architectural historian surveyed the access corridor site in July and August 2006; on April 26-28, 2007; and in February 2008 to document the presence of any previously unrecorded archaeological resources. These and previous cultural resources investigations identified a number of historic era structures and

debris scatters. Within the project footprint, three historic cultural resources were identified. These include the foundations from a mid-twentieth century house, a historic trash dump, and the Pritchard pump house.

Construction-related activities could alter these sites, including the planned demolition of the historic structures, although they date to the historic era and appear to lack association with important historic themes, stylistic values, and data potential. As a result of the lack of significance, these resources were recommended ineligible for listing on both registers. USACE determined that these resources were not eligible for inclusion in the National Register of Historic Places (NRHP), and the State Historic Preservation Officer (SHPO) concurred with this determination. Therefore, no further management is anticipated to be required. This impact is considered to be less than significant. Any previously undiscovered cultural resources would be protected by mitigation measures already in place in the Phase 3 EIR.

Based on this information, the impacts to cultural resources would be less than significant, there would be no new significant impacts, and there would not be a substantial increase in the severity of previous identified effects on cultural resources.

### AIR QUALITY

The project area is located within the Sacramento Valley Air Basin (SVAB) regulated by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The SMAQMD has reached National Ambient Air Quality Standards (NAAQS) and/or California Ambient Air Quality Standards (CAAQS) for criteria pollutants of concern except for: ozone (O3), inhalable particulate matter between 2.5 and 10 microns in diameter (PM10), and particulate matter less than 2.5 microns in diameter (PM2.5). As a result, the emissions of most concern are O3 (which includes precursors such as volatile organic compounds [VOC] and nitrogen oxides [NOx]), PM10, and PM2.5. Table 1 below shows the attainment status and *de minimis/threshold* for the criteria pollutants of most concern. (U.S. Bureau of Reclamation 2014)

Table 1. SVAB Attainment Status and De Minimis Thresholds for   Federal General Conformity Determinations				
Pollutant	Attainment Status <sup>a</sup>	De Minimis/ Thresholds		
VOC (as ozone precursor)	Nonattainment <sup>b</sup>	25 <sup>d</sup>		
NO <sub>x</sub> (as an ozone precursor)	Nonattainment <sup>b</sup>	25 <sup>d</sup>		
PM <sub>10</sub>	Nonattainment (CAAQS 24-hr and Annual) Attainment (NAAQS) <sup>c</sup>	100 (NAAQS) <sup>d</sup>		
PM <sub>2.5</sub>	Nonattainment (CAAQS Annual) Attainment (NAAQS 24-hr) <sup>e</sup>	100 (NAAQS) <sup>d</sup>		
<sup>a</sup> Source: http://www.airquality.org/aqdata/attainmentstat.shtml				
<sup>b</sup> The SVAB is designated as Severe for O <sub>3</sub> NAAQS, and Serious for CAAQS.				
<sup>c</sup> Federal Register No. 2013-23245. Effective October 28, 2013, the U.S. Environmental Protection Agency (EPA) approved the				
redesignation of Sacramento County from a nonattainment area to an attainment area for the 24-hr PM <sub>10</sub> NAAQS.				
<sup>d</sup> 40 CFR 93.153				
<sup>e</sup> Federal Register No. 2013-16785. Effective August 14, 2013, the EPA determined that the Sacramento nonattainment area in				
California has attained the 2006 24-hour PM <sub>2.5</sub> NAAQS.				

Construction emissions for the proposed Project Refinements would vary daily, based on the activities being performed in a given day, the timing and intensity of construction activities, and weather on a given day including wind speed and direction. In general, air quality impacts from the proposed Project Refinements would be localized and concentrated around the project site, decreasing with distance. The proposed Project Refinements are short-term in nature and the emissions from construction activities would be temporary. After construction of the proposed Project Refinements, there would be no operational emissions. Any ground-disturbing activities would

result in the temporary emissions of fugitive dust and vehicle combustion pollutants during the following activities:

- On-site earthwork (site preparation, demolition, piping, grading, and stockpiling), and
- On-site construction equipment and haul truck engine emissions.

Construction activities would be concentrated in a small area at the existing Pritchard Lake Pumping Plant site near the Sacramento River. Calculated emissions from the proposed Project Refinements were estimated using the 2013 California Emissions Estimator Model (version 2013.2.1) for reactive organic gases (ROG)<sup>1</sup>, NOx, PM<sub>10</sub>, and PM<sub>2.5</sub>. Total project emissions are presented in Table 2 below (U.S. Bureau of Reclamation 2014).

Table 2. Estimated Project Emissions <sup>a</sup>				
Pollutant	Unmitigated (tons/year)	Mitigated (tons/year)		
ROG/VOC	0.40	0.40		
NO <sub>x</sub>	3.33	3.33		
$PM_{10}$	0.62	0.37		
PM <sub>2.5</sub>	0.41	0.28		
Carbon dioxide equivalents	280.35	280.35		
<sup>a</sup> Source: CalEEMod Version 2013.2.1 (U.S. Bureau of Reclamation 2014.)				

Table 2 shows that the proposed Project Refinements are estimated to emit less than the *de minimis threshold* for NOx and ROG/VOC as O<sub>3</sub> precursors; therefore, a Federal general conformity analysis report is not required. Nonetheless, the proposed Project Refinements would comply with the SMAQMD's Regulation 4, Rule 403 control measures for fugitive dust, including construction emissions of PM<sub>10</sub> and PM<sub>2.5</sub>. One of these control measures includes the use of water in "the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land" for fugitive dust suppression (SMAQMD 1997). However, if dust suppression measures are not implemented, the estimated PM<sub>2.5</sub> and PM<sub>10</sub> emissions from the proposed Project Refinements would still be well below the respective SMAQCD thresholds. (U.S. Bureau of Reclamation 2014) The Phase 3 EIR also contains mitigation measures that apply to construction of the proposed Project Refinements and minimize air quality impacts.

Based on this information, the impacts to air quality would be less than significant, there would be no new significant impacts, and there would not be a substantial increase in the severity of previously identified effects on air quality or greenhouse gas emissions.

## **SECTION 4. CONCLUSIONS**

### CONCLUSION REGARDING APPROPRIATE CEQA ANALYSIS

The proposed changes to the Phase 3 Project would not result in any new significant impacts that are substantially different from those described in the Phase 3 EIR and therefore the Project Refinements as they are currently known may be addressed in an EIR addendum. As described in Section 2 of this document, "Project Refinements," and this Section 3, "Environmental Analysis," none of the conditions described above for Section 15162 calling for preparation of a subsequent EIR or Section 15163 calling for preparation of a supplemental EIR exist. In addition, the Phase 3 EIR and associated Mitigation Monitoring and Reporting Program (MMRP) remain

<sup>&</sup>lt;sup>1</sup>The term "volatile organic compounds" are synonymous with "reactive organic gases" for the purposes of this document since both terms refer to hydrocarbon compounds that contribute to ozone formation

valid for assessing and mitigating identified impacts that would result from implementation of the Project Refinements.

The Project Refinements described in this addendum and any altered conditions since certification of the Phase 3 EIR on May 21, 2009:

- would not result in any new significant environmental effects, and
- would not substantially increase the severity of previously identified effects.

In addition, no new information of substantial importance has arisen that shows that:

- the project would have new significant effects,
- the project would have substantially more severe effects,
- mitigation measures or alternatives previously found to be infeasible would in fact be feasible, or
- mitigation measures or alternatives that are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment.

Because none of the conditions described in Section 15162 or Section 15163 of the State CEQA Guidelines calling for preparation of a subsequent or supplemental EIR have occurred, it is appropriate to use an addendum to the Phase 3 EIR, consistent with Section 15164 of the State CEQA Guidelines, to address the proposed Project Refinements.

## **CUMULATIVE IMPACTS**

In Chapter 5 of the Phase 3 Draft EIR (DEIR), "Cumulative Impacts," the Phase 3 Project is considered together with related projects and regional development for each of the environmental topic areas evaluated in the DEIR. Consistent with the intent of a cumulative analysis, where the combined effects of multiple projects are to be considered, the various elements of the Phase 3 Project are generally evaluated as a whole. The Phase 3 Project would not make cumulatively considerable incremental contributions to a significant cumulative impact on any resource areas, with the exception of agriculture and land use, cultural resources, air quality, and visual resources.

As documented throughout this addendum, implementing the proposed Project Refinements would not result in any new significant impacts or substantially more severe impacts and would not require any new or different mitigation measures. Furthermore, there are no new circumstances since certification of the Phase 3 EIR that would result in new cumulatively considerable incremental contributions to significant cumulative impacts or that would substantially increase the severity of previously identified cumulatively considerable incremental contributions to significant cumulative impacts. There is no other new information requiring analysis or verification. Therefore, the direct, indirect, and cumulative impacts of the proposed Project Refinements evaluated in this addendum would remain consistent with the conclusions of the cumulative impact analysis in Chapter 5, "Cumulative Impacts," of the Phase 3 Draft EIR.

## **ENVIRONMENTAL DOCUMENT**

Based on the analysis of the categories of environmental impacts evaluated above, the proposed Project Refinements described in this document would result in none of the conditions described in Section 15162 or Section 15163 of the State CEQA Guidelines calling for preparation of a subsequent EIR or supplemental EIR, respectively. In summary, there are no altered circumstances or new information of substantial importance since certification of the Phase 3 EIR, and the proposed Project Refinements evaluated in this addendum:

- would not result in any new significant environmental effects,
- would not substantially increase the severity of previously identified effects,
- would not result in mitigation measures or alternatives previously found to be infeasible becoming feasible, and
- would not result in availability/implementation of mitigation measures or alternatives that are considerably different from those analyzed in the previous document that would substantially reduce one or more significant effects on the environment.

These conclusions confirm that this addendum to the Phase 3 EIR is the appropriate CEQA document to evaluate and record the proposed Project Refinements and related environmental impacts.

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