Addendum to the Environmental Impact Report on the
Natomas Levee Improvement Program
Phase 3 Landside Improvements Project

State Clearinghouse # 2008072060

Prepared for:

Sacramento Area Flood Control Agency

September 2009
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ADDENDUM TO THE PHASE 3 LANDSIDE EIR

INTRODUCTION

This addendum to the Final Environmental Impact Report, Natomas Levee Improvement Program Phase 3 Landside Improvements Project (State Clearinghouse No. 2008072060) (Phase 3 EIR) addresses the discharge of water necessary to dewater excavations required for the relocation of Reclamation District (RD) 1000 Pumping Plant No. 2 (Pumping Plant No. 2) as part of the Phase 3 Project. Because the Phase 3 Project as described and analyzed in the previously certified EIR (USACE and SAFCA 2009, SAFCA 2009) did not identify the specific method of disposal of pumped groundwater removed during excavation, a minor revision to the certified EIR is necessary. The draft and final EIRs are available at the Sacramento Area Flood Control Agency (SAFCA) offices at 1007 7th Street, 7th Floor, Sacramento, CA 95814, and online at SAFCA’s Web site (http://www.safca.org/Programs_Natomas.html). The location of the proposed activity is depicted on Plate 1.

PROJECT DESCRIPTION

GROUNDWATER PUMPING AND DISCHARGE AT RD 1000 PUMPING PLANT NO. 2

SAFCA identified the need to relocate RD 1000 Pumping Plant No. 2 as part of the Phase 3 Project, as described in the certified Phase 3 EIR (USACE and SAFCA 2009:2-23). The original plant was removed after underseepage was observed in the vicinity during a storm in 2006 (USACE and SAFCA 2009:2-23). The Phase 3 EIR also described the need to excavate and remove unsuitable soils at the proposed location where Pumping Plant No. 2 would be reconstructed because the soils at this location are highly organic and are not suitable for structures for levee foundation materials (USACE and SAFCA 2009:H-32). The Phase 3 EIR disclosed that this activity would require dewatering of the excavated area because of high groundwater levels, an activity that is also part of the project as described and analyzed (USACE and SAFCA 2009:2-12). The EIR did not, however, identify the method of disposal for the water removed from the excavation at Pumping Plant No. 2. Three different methods of disposing of the pumped water are analyzed in this addendum.

SAFCA proposes to discharge the water at several locations: the adjacent North Drainage Canal (Canal), which is part of the Reclamation District No. 1000 (RD 1000) drainage system; the Sacramento River; and the Natomas Central Mutual Water Company (NCMWC) canal system. If the water would be provided to NCMWC, then NCMWC would deliver the water to existing agricultural water users in the Natomas Basin for routine water uses (e.g., irrigation of harvested rice fields to facilitate decomposition of rice stubble). This addendum addresses the potential impacts associated with discharging the water into the Sacramento River and Canal and the potential traffic impacts associated with constructing a pipe to convey the groundwater under Garden Highway if the water would be discharged to the Sacramento River. If the water would be delivered to NCMWC, no further analysis is required under CEQA because the water would be applied during routine preexisting agricultural operations using existing facilities.

As part of the approved Phase 3 Project, which involves dewatering, SAFCA will pump water from the excavated area continuously at a rate up to approximately 35 cubic feet per second (cfs) for approximately 60 days in order to draw down the water table in the immediate area of the excavation during construction (USACE and SAFCA 2009:2-12). Excavation would occur on the landside of Garden Highway as depicted in Appendix A. This excavation would extend below groundwater levels and would be dewatered utilizing approximately 48 well points with 48 small submersible pumps. The pumps would be powered by one truck-mounted generator. Pumps would be screened to reduce intake of foundation soil materials. The water would be routed through a sediment removal system before discharge. The footprint of the proposed excavation encompasses 2.6 acres and would extend to 30 feet below the ground surface at the western end of the pit and 20 feet below at the eastern end. A temporary 36-inch high-density polyethylene pipe would be installed as a conductor casing in each dewatering well at the excavation site.
RD 1000 Pumping Plant No. 2

Sacramento International Airport

Base Map: CaSil Layers
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Source: Adapted by EDAW in 2009
If the pumped water would be discharged to the Sacramento River, the pipe would be installed in a trench under Garden Highway and would discharge into the Sacramento River adjacent to the existing Plant 2 outfall structure. Traffic control measures would be employed during installation of the pipe under the highway. During cross-highway construction, it would be necessary to close the Garden Highway and detour traffic around the construction area. The outlet of the pipe would extend 10–20 feet into the river, and water would be discharged beneath the surface. After construction, the temporary pipe would be removed and the levee and Garden Highway would be restored to pre-project conditions. Construction equipment would consist of a backhoe or similar excavator and asphalt cutting equipment. Erosion control seeding would be applied on all disturbed areas.

**STANDARD FOR PREPARATION OF AN ADDENDUM**

Under the State CEQA Guidelines (California Code of Regulations [CCR] Section 15164), an addendum to a previously certified EIR is required when minor changes 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) have occurred.

**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.

**ENVIRONMENTAL ANALYSIS**

This section of the addendum analyzes the potential effects on the physical environment from implementation of the proposed change in the Phase 3 Project. This analysis has been prepared to determine whether any of the conditions described above that would require preparation of a subsequent or supplemental EIR would occur as a result of the project changes.
**ISSUES NOT ANALYZED FURTHER IN THIS ADDENDUM**

The proposed activities described in this addendum constitute a small change in the approved Phase 3 Project. Implementation of the proposed change 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 excavation of the unsuitable material at RD 1000 Pumping Plant No. 2 is part of the project as described. This activity is part of the Phase 3 Project as described in the Phase 3 EIR, relevant impacts have been analyzed and disclosed in the Phase 3 EIR, and the proposed modifications would not cause new significant impacts or a substantial increase in the severity of the impacts identified in the Phase 3 EIR for the following resource areas:

- agricultural resources;
- land use, socioeconomics, population, and housing;
- sensitive aquatic habitats;
- vegetation and wildlife;
- special-status terrestrial species;
- cultural resources;
- paleontological resources;
- air quality;
- noise;
- 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**

**WATER QUALITY**

The discharge of groundwater from the excavation into the Sacramento River or the Canal has the potential to affect water quality because discharge water from dewatering operations may contain suspended sediment, petroleum products, or other construction-related contaminants. If these materials were present in the pumped groundwater, the materials would be released directly to the receiving waters, thereby potentially degrading water quality. This impact would be potentially significant.

As stated in the Phase 3 Project description, extracted water would be treated via a sediment removal system to reduce sediment. Furthermore, the discharge would be subject to the following mitigation measure, adopted and incorporated into the Phase 3 Project (USACE and SAFCA 2009, SAFCA 2009):

- Mitigation Measure 4.5-a: Implement Standard Best Management Practices, Prepare and Implement a Stormwater Pollution Prevention Plan, and Comply with National Pollutant Discharge Elimination System Permit Conditions

Mitigation Measure 4.5-a requires that SAFCA provide notice to the Central Valley Regional Water Quality Control Board (RWQCB) and obtain a permit to discharge stormwater under the Porter-Cologne Water Quality Control Act, and certification that such discharge meets the requirements of Section 402 of the Federal Clean Water Act (USACE and SAFCA 2009:4.5-2). SAFCA shall either amend existing permits acquired under this mitigation measure or obtain separate Federal and State permitting for discharge to the Sacramento River or Canal under the Porter-Cologne Water Quality Control Act and the Federal Clean Water Act. Permit conditions would require that the water meet all applicable waste discharge requirements (WDRs) of Federal and State law. SAFCA
must implement Mitigation Measure 4.5-a as part of the Phase 3 Project; thus, SAFCA would perform best management practices to control sediment and discharge of hazardous materials such as fuels and solvents used during construction operations. Because SAFCA would implement the requirements of Mitigation Measure 4.5-a and obtain Federal and State permits, the proposed discharge to the Sacramento River or Canal would not violate applicable water quality standards or degrade water quality.

The discharge of groundwater to the Canal would be consistent with existing groundwater extraction and conveyance performed by NCMWC. Pursuant to NCMWC requirements, during the time period when the discharge would occur, RD 1000 plans to apply herbicides to the Canal and other drains in its system during a 2- to 3-day application window. The Canal may not receive water during this timeframe because it would conflict with the application of herbicides necessary to remove vegetation from the Canal. SAFCA may discharge water to the Canal following the application of the herbicides; however, for 10–15 days (the “hold” period) following the application of herbicides, the discharge to the Canal may not overtop the Canal, nor may the water in the RD 1000 system be pumped from the RD 1000 system into receiving waters (Sacramento River, Natomas Cross Canal, and Natomas East Main Drainage Canal) because this would mobilize the herbicides and vegetation subject to removal. This limitation is necessary to protect water quality and ensure that the herbicides are not discharged to receiving waters. However, during the hold period, water can be pumped from the canals into the NCMWC system or directly onto agricultural fields under permit conditions for discharge permitting under the Porter-Cologne Water Quality Control Act and the Federal Clean Water Act. Therefore, the discharge of water to the Canal would not result in new or substantially more severe significant impacts to water quality.

**FISHERIES**

The proposed discharge to either the Sacramento River or Canal may temporarily impair water quality if sediment or pollutants are present in the pumped groundwater. Soil and contaminants that enter receiving waters through discharged water can increase turbidity, stimulate algae growth, increase sedimentation of aquatic habitat, and introduce compounds that are toxic to aquatic organisms. The Sacramento River provides migratory habitat for special-status adult and juvenile chinook salmon and steelhead, and spawning habitat for special-status green sturgeon, as well as striped bass and American shad (USACE and SAFCA 2009:4.6-2). Reduced water quality may increase mortality among and impair the overall health of fish populations (USACE and SAFCA 2009:4.6-2).

With implementation of Mitigation Measure 4.5-a, previously adopted and incorporated into the Phase 3 Project and described above, and the RD 1000’s limitations required for discharge to the Canal, these impacts would remain less than significant because sediment would be removed and discharged water would comply with applicable WDRs.

**TRAFFIC**

The implementation of traffic control and closure of Garden Highway has the potential to temporarily degrade the level of service (LOS) of this roadway and to decrease emergency response times because traffic would be routed around the construction area by a detour system when pipes are installed and subsequently removed under Garden Highway.

The segments of Garden Highway closest to the proposed activity for which data are available indicate that the highway operates at approximately LOS A (USACE and SAFCA 2009:3-55). Sacramento County imposes a LOS D rating for rural collectors in unincorporated portions of Sacramento County (Sacramento County 1993:74). SAFCA will implement Mitigation Measure 4.12-a, “Prepare and Implement a Traffic Safety and Control Plan for Construction-Related Truck Trips,” which was previously adopted and incorporated into the Phase 3 Project (see USACE and SAFCA 2009:4.12-4). Because traffic would be managed during construction, a slight increase in congestion would result; however, this congestion is not anticipated to reduce the LOS from A to D. Furthermore, because emergency response vehicles would be prioritized for access during traffic control, with implementation
of mitigation the activity would not result in substantial decreases in emergency response times or disruption of emergency access. For these reasons, impacts on LOS and emergency access and response times would remain less than significant.

**IMPACT CONCLUSION**

The proposed modifications in the Phase 3 Project analyzed in this addendum would not require major revisions to the Phase 3 EIR because no new substantial impacts would result, and the impacts presented in this addendum would not increase the severity of environmental effects identified in the Phase 3 EIR. Furthermore, no changes in the circumstances under which the project changes would be undertaken would require major revisions to the Phase 3 EIR because of new or substantially increased significant environmental effects. In addition, no new information of substantial importance has been discovered that would trigger or require major revisions to the Phase 3 EIR because of new or substantially increased significant environmental effects. Therefore, no subsequent or supplemental EIR is required before approval of the activities proposed in this addendum.
REFERENCES CITED


USACE and SAFCA. *See U.S. Army Corps of Engineers and Sacramento Area Flood Control Agency.*

SAFCA. *See Sacramento Area Flood Control Agency.*