

RECORD OF DECISION

FOLSOM DAM MODIFICATION PROJECT, APPROACH CHANNEL

I have reviewed the Folsom Dam Modification Project, Approach Channel Final Supplemental Environmental Impact Statement and Environmental Impact Report (SEIS/EIR) dated December 2012, addressing the actions and need to increase existing discharge capacities associated with Folsom Dam and Reservoir. The Folsom Dam Modification Project was authorized under Section 101 (a) (6) of the Water Resources Development Act of 1999 (Public Law 106-53) to reduce damages from flooding by increasing outlet efficiencies and conducting earlier water releases in event of an approaching flood event. Based on this review and views of other interested agencies and the public, I find that the selected plan, Alternative 2 – Approach Channel Construction with Cutoff Wall, for modification of Folsom Dam and construction of the approach channel is justified in accordance with environmental statutes and meets the public interest and benefit. The benefits to be gained from implementing the selected plan outweigh any adverse effects. Thus, I approve the selected plan for the Folsom Dam Modification Project, Approach Channel construction.

The proposed action is designed to minimize potential harm to a flood plain consistent with Executive Order 11988, Floodplain Management, Section 2 (a) (2) 42 FR 26951, May 25, 1977. The U.S. Army Corps of Engineers (Corps) determined that completion of the Folsom Dam spillway approach channel required a supplement to the Bureau of Reclamation's (USBR) Folsom Dam Safety and Flood Damage Reduction Final EIS/EIR of 2007. The 2007 document acknowledged the need for a supplement as project designs for the Joint Federal Project (JFP) were developed to safely meet authorized project purposes and to reduce risk to the public and property posed by floods and earthquakes. This project is a cooperative effort with the USBR and the Central Valley Flood Protection Board, the California State Department of Water Resources and the Sacramento Area Flood Control Agency. The approach channel construction is required to complete the newly constructed spillway in order to reduce risk of flooding to population to downstream population and infrastructure of the Sacramento area. The proposed construction will also reduce the likelihood and consequences of dam failure by enabling increased capacity and control of flood water discharge from Folsom Reservoir.

For the Final SEIS/EIR, the Corps performed a detailed analysis of two action alternatives evaluating considerations of engineering feasibility, worker safety, and an expedited schedule to reduce risk to public safety. The two alternatives selected for further analysis were described in the Final SEIS/EIR and are incorporated herein by reference. Alternative 2 provided an optimized and reduced schedule risk for project completion compared to Alternative

3 and as such, provided the highest public safety option. The environmentally preferred alternative was assessed as Alternative 3, however, later changes to the project design of Alternative 2, minimized the differences in environmental effects between the two alternatives. The relocation of a cutoff wall in Alternative 2 to the same location of the proposed cofferdam in Alternative 3 would reduce the amount of in-water construction and associated environmental effects. Due to schedule advantages conferred with a reduced risk construction approach provided by Alternative 2, it was determined that the public interest and safety was best served by expediently constructing an operable approach channel prior to a high flood event.

The selected plan, Alternative 2, consists of the following features, including the refinements described in the Final Supplemental EIS/EIR:

- Excavation of an approximate 1,100-foot-long approach channel at the upstream side of the auxiliary spillway and control structure.
- Installation of concrete slab and walls within the approach channel.
- Construction of a temporary 1,000-foot-long concrete secant pile cutoff wall between the rock plug and the control structure.
- Construction of a temporary 80-foot-wide haul road over the cutoff wall.
- Construction of a spur dike in the reservoir adjacent to the approach channel.
- Stockpiling and disposal of up to 1.4 million cubic yards of excavated material at any five proposed potential disposal sites (MIAD, Dike 7, Dike 8, spur dike, and in-reservoir).
- Construction of a temporary transload facility consisting of up to a 2,000-foot-long rock ramp into the reservoir for barge unloading of dredge material.
- Staging of contractor materials and equipment at the spillway excavation site, Folsom Overlook, Dike 7, Folsom Prison, and MIAD locations.
- Temporary installation of a concrete-producing batch plant and/or rock crusher at the spillway excavation site, Folsom Overlook, Folsom Prison staging area, or MIAD area.
- Construction of roadway modifications within the enclosed project site.

During the Draft SEIS/EIR review period, a total of seven comments were received from the public and Federal and State agencies. The comments addressed information requests and concerns for air quality, water quality, vegetation removal, drainage, and construction material disposal. All comments were addressed and incorporated into the Final SEIS/EIR. No comments were received regarding the Final SEIS/EIR.

Practical means to avoid, minimize, and compensate for adverse effects on environmental resources were considered during alternative assessment, and these mitigation measures, as described in the Final SEIS/EIR, have been incorporated into the authorized project. Although the project will not result in any long-term significant impacts, there will be short-term unavoidable effects to air quality, water quality, fisheries, noise, traffic, and recreation during

construction. The mitigations incorporated in the Final SEIS/EIR are expected to reduce these effects to less-than-significant with mitigation. Mitigation measures within the Final SEIS/EIR contain specific monitoring plans for air quality, water quality, fisheries, noise and public safety.

Mitigation measures pertaining to the selected plan and included within assessment of effects by the Final SEIS/EIR are adopted in this Record of Decision (ROD) as environmental commitments that will be enforced by the Corps. Monitoring plans included as part of the assessments in the Final SEIS/EIR are also adopted in this ROD to ensure that (1) the impacts described in the Final SEIS/EIR are not exceeded; and (2) the mitigation features function as intended. Mitigation measures that were not adopted for the purpose of contractual flexibility are also identified in the Final SEIS/EIR. A summary of key resource mitigation measures and enforcements are identified and described below:

1. Air Quality. For purposes of complying with EPA's general conformity rule under the Clean Air Act, the Corps is committed to implementation and enforcement of the following key mitigation measures:

- Tier 3 and 4 emission standards would be implemented for off and on-road terrestrial emissions sources. Tier 4 standards would be implemented in year 2015.
- Tier 3 or higher tiered marine engines would be utilized.
- Nitrous oxide (NO_x) would not exceed maximum emission quantities incorporated within the State Implementation Plan.
- Rock crushing and concrete plant operations would be electrified and would not utilize internal combustion engines.
- Dust and Asbestos control plans would be approved by the Sacramento Metropolitan Air Quality District and compliance actions would be conducted for reduction of particulate matter.

2. Water Resources. The Final EIS contains a Clean Water Act subsection 404(b) (1) evaluation for the selected plan. Mitigations and Corps responsibilities for enforcement include:

- Mitigation would be conducted for up to 15 acres of permanent or temporal displacement of Open Waters of the United States.
- Wetland mitigation banking has been arranged for 2.5 acres of potential transitional riparian habitat loss.
- Compliance would be conducted with the CWA subsection 404(b) (1), and the conditions specified by the Central Valley Regional Water Quality Control Board (CVRWQCB) certification.

- Water quality monitoring would be conducted daily during in-water construction as specified within the CVRWQCB certification. Construction activity out of compliance would be required to cease until water quality resolution occurs.
- A National Pollution Discharge Elimination permit would be obtained prior to construction-related activities. Best management practices for refueling operations are required for protection of water quality and the aquatic environment.
- Mercury and methylmercury monitoring will be conducted to assess potential bioaccumulation for determination of needed mitigation.
- Mitigations that were not adopted in the Final EIS/EIR for the protection of water quality include a contractor requirement of silt curtains for turbidity containment. Instead, the project contractor will choose methodology to comply with the Clean Water Act Section 401 certification conditions.

3. Traffic, Noise, Recreation and Safety

- A traffic safety plan will be completed prior to commencement of construction activity and enforced to minimize the level of impacts resulting from construction-generated traffic.
- Construction mitigations have been specified within the SEIS/EIR for noise reduction, including a required noise monitoring program for construction activities that may exceed noise compliance thresholds outside of construction noise-exempt hours, and additionally the establishment of a 24 hour hotline for potential noise complaints.
- Recreationists will be notified of construction and blasting safety issues by adequate signage at Folsom Reservoir recreational facilities.

4. Biological Resources. Compliance with U.S. Fish and Wildlife Service and California Department of Fish and Game recommendations would occur. Mitigations for terrestrial and aquatic species include :

- Existing trees would be protected where possible. In-kind tree replacement would occur with restoration activity after construction. Two elderberry shrubs have been transplanted to address habitat issues for the valley elderberry longhorn beetle.
- Monitoring for white-tailed kites presence would occur prior to construction.
- Aquatic equipment would be decontaminated of invasive species prior to placement in Folsom Reservoir.
- Loss of fish and recreational opportunity would be mitigated by the implementation of a stocking program where a minimum of 6,000 catchable size triploid rainbow trout will be placed in Folsom Reservoir. Fish mortality from blasting activity will be monitored.

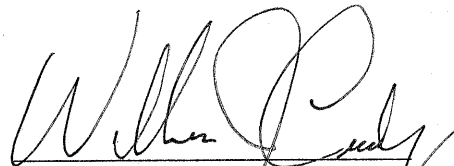
- Additional water quality monitoring would be conducted adjacent to Folsom Dam to determine effective measures to ensure protection of summer fish habitat.
- Mitigations not adopted in the Final EIS/EIR for fisheries protection include requirements for silt curtains, and blasting effects reduction. The project contractor will choose methodology to comply with Clean Water Act Section 401 certification conditions. Aquatic organisms may incur additional blast effects within the project vicinity dependent upon the contractor's choice of blasting methodology.

5. Cultural Resources. Concurrence with the Corps determination of "No Adverse Effects" to historic properties for the JFP Approach Channel EIS has been received from the State Historic Preservation Officer demonstrating compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, for the project as described in the SEIS/EIR. If previously unknown cultural resources are found, construction activities within the vicinity of the find will be discontinued pursuant to 36 CFR §800.13(b) "Discoveries without prior planning" to determine the significance of the find.

This ROD completes the National Environmental Policy Act process for the Folsom Dam Modification Approach Channel project. Supplemental NEPA/CEQA documents will be completed to address the restoration phase of the JFP project and additional construction activities not discussed within this Final SEIS/EIR. The ROD will be made publicly available upon request, or can be found on the USACE Sacramento District website.

8 MARCH 2013

Date


William J. Leady, P.E.
Colonel, U.S. Army
District Commander