STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY
EDMUND G. BROWN JR., *Governor*

DEPARTMENT OF WATER RESOURCES
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February 9, 2015

Mr. William Guthrie
Senior Project Manager, Sacramento Office
Regulatory Branch
U.S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814

RE: Additional Information on Barrier Construction and Removal for the Emergency Drought Barriers Project (SPK-2014-00187)

Dear Mr. Guthrie:

The California Department of Water Resources (DWR) is submitting this letter to the U.S. Army Corps of Engineers (USACE) in order to provide additional information on barrier construction and removal and to comply with Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act for the Emergency Drought Barriers Project (EDB or Project).

DWR proposes to install three rocks barriers up to three times during a 10-year period. This installation could occur from 2015 through 2024. The current permit application contains estimated effects based on existing conditions and known construction methods. DWR recognizes that within the 10-year permit term resources may change (e.g., species listing status) or proposed construction methods may change/improve (e.g., availability of stockpile locations). For example, while DWR is proposing three potential disposal sites, timing of Project implementation will likely dictate which disposal site(s) will be used. Regardless of which disposal site(s) is chosen, DWR will consult with USACE to confirm no fill of jurisdictional waters of the United States would result. DWR recognizes that the permit issued by USACE may need to be at a programmatic level to satisfy CWA Section 404 regulations. DWR anticipates this programmatic approach may apply to other regulations (e.g., state and Federal Endangered Species Act) and that it will be necessary to re-consult with the regulatory agencies to confirm effects on regulated resources.

After discussing the methodology with DWR engineers, additional information on barrier construction and removal is provided below.

Barrier Construction

All rock, gravel, and structures would be constructed at the project sites in spring. The general methodology described herein applies to the three project sites, unless otherwise indicated. Although construction activities would primarily be situated in water, the contractors would also work from the levees.

The contractors would mobilize construction equipment and crew. DWR would utilize multiple barges with excavators and work boats which would be transported on water to the project sites. At the West False River site, an excavator or other small earthwork equipment will be needed on each side levee to aid with the installation of the sheet pile walls. The contractors would install construction trailers on the levee nearby.

Barges powered by tugs would be used to transport rock from quarries and/or other loading bulkheads or material transfer points to the barrier sites. The contractors would use excavators, dozers, and loaders to move/push the rock from transportation barges into the channel. The contractors would shape/contour the rock barriers by using a barge-mounted crane with a clamshell or barge-mounted excavator from material barges. Because of the greater width of the channel at the West False River site, the contractors may use a dump scow to transport the rock and place it in the channel. Some of the existing rock slope protection at False River would need to be temporarily removed in order to construct the abutments; however, no channel dredging or excavation in the levee profiles would be required. To prevent riverbed scour the contractor will be required to place rock in horizontal layers and to prevent levee scour the final lifts of rock will be placed on the barriers starting from the levees toward the center of the channel. During final rock placements and closure, excavators will be placing rock from the top of the barriers.

Barrier Removal

All rock, gravel, and structures would be removed from the project sites in fall, with the exception of the sheet pile abutments and associated rock at the West False River site. The general methodology described herein applies to the three project sites, unless otherwise indicated. Although removal activities would primarily be situated in water, the contractors would also work from the levees.

First, the contractors would mobilize construction equipment and crew. DWR would utilize multiple barges with excavators and work boats which would be transported on water to the barrier sites. In water work would occur on one side of the barrier–either upstream or downstream of the barrier–in the direction of where the contractors would ship the rock.

Next, the contractors would strategically place the barges adjacent to the barriers in order to excavate the rock. Rock would be excavated using cranes with clam-shell buckets, and/or excavators from one barge and placed onto another barge where it would be transported to an approved off-loading site. Given the volume of rock, DWR anticipates that excavation would occur continuously (i.e., 24-hours per day, seven days per week). To prevent levee scour, rock removal will start from the center of the channel and work outward. Excavation would occur from the top of the barrier down to the streambed. As the rock is excavated, the contractors would remove the culverts and associated bedding then continue to remove rock down to the streambed to approximate pre-project contours. DWR would restore the levee geometry to ensure compliance with any CVFPB requirements.

Lastly, the rock would be shipped on a barge from the project site to an approved off-loading site which would serve as a temporary transfer station. Contractors would use excavators and loaders to off-load the rock from the barge onto dump trucks. The contractors would haul the rock to an approved stockpile location. The potential stockpile locations–likely located in Hood, Rio Vista, or the Port of Stockton, based on capacity availability and permitting coverage–were depicted in Figure 9 of the Supplemental Information, Attachment A (Project Description).

DWR would monitor downstream water quality for parameters, including turbidity, identified in the Emergency Drought Barriers Water Quality Monitoring Plan, during the excavation process. Following barrier removal, DWR would complete bathymetric surveys to confirm that the rock has been removed.

We appreciate your expedient processing of the ENG Form 4345 and initiation of Section 7 consultation under the Endangered Species Act such that we can be ready to start installation, if necessary, in May 2015.

If you need additional information regarding the Emergency Drought Barriers Project, please contact me at (916) 653-9883.

Sincerely,

Jacob McQuirk, Project Manager
Emergency Drought Barriers

cc: Kim Squires
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