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SPK-2014-00187, Sacramento, Solano, and Contra Costa Counties, CA

Posted 4/7/2015

Sacrametno District

Comments Period: April 7, 2015 – April 22, 2015

ATTACHMENTS

SPK-2014-00187 PN Drawings

SUBJECT: The U.S. Army Corps of Engineers, Sacramento District, (Corps) is evaluating a permit application to construct the Emergency Drought Barriers project, which would result in permanent impacts to approximately 0.75 acres (20 linear feet) and temporary impacts to approximately 4.06 acres (555 linear feet) of waters of the United States in Miner Slough, Steamboat Slough, and False River. Temporary fill would be installed starting May and removed November. This Public Notice is a modification of the January 29, 2015, Public Notice for the Emergency Drought Barriers, the public comment period of which closed on March 30, 2015. This notice is to inform interested parties of the proposed activity and modification of the January 29, 2015, Public Notice and to solicit comments. This notice may also be viewed at the Corps web site at *www.spk.usace.army.mil/Media/RegulatoryPublicNotices.aspx*.

AUTHORITY: This application is being evaluated under Section 10 of the Rivers and Harbors Act of 1899 for structures or work in or affecting navigable waters of the United States and Section 404 of the Clean Water Act for the discharge of dredged or fill material in waters of the United States.

APPLICANT:

California Department of Water Resources

Attn: Paul Marshall

1416 9th Street, Room 215-37

Sacramento, California 95814-5511

LOCATION: The proposed project consists of three separate locations, Miner Slough, Steamboat Slough, and False River (Figures 1 & 2).

The Miner Slough site is located approximately 5 miles upstream of the confluence with the Sacramento Deep Water Shipping Channel (Cache Slough) and Miner Slough between Prospect and Ryer Islands. This site is approximately 7.7 miles southwest of Walnut Grove and is in Solano County. The banks of Miner Slough where the barrier would be placed are largely rock-lined levees with riparian vegetation (Figure 6). Fallow agricultural lands immediately surround the levees. Coordinates for the Miner Slough proposed barrier is

Latitude 38.255966˚, Longitude -121.652130˚.

The Steamboat Slough site is approximately 4.8 miles southeast of the Miner Slough site, on the south side of Ryer Island and west of Grand Island. It is approximately .8 mile upstream of the confluence with the Sacramento Deep Water Shipping Channel (Cache Slough) and is on the border between Sacramento and Solano counties. The banks of Steamboat Slough where the barrier would be placed are largely rock-lined levees with intermittent bands of riparian vegetation (Figure 7); one red alder and a narrow line of willow shrubs are located on the Ryer Island levee side. Grapes are planted on both sides of Steamboat Slough in the vicinity of the barrier site. Coordinates for the Steamboat Slough proposed barrier is Latitude 38.186479˚, Longitude -121.645500˚.

The West False River site is located approximately 0.4 mile east of the confluence with the San Joaquin River, between Jersey and Bradford Islands in Contra Costa County, and is about 4.8 miles northeast of Oakley. The banks of the West False River site are rock-lined levees (Figure 8). Coordinates for the West False River Slough proposed barrier is Latitude 38.057057˚, Longitude -121.670432˚.

The applicant has proposed the use of three potential material stockpile locations. All stockpile locations are existing Department of Water Resources (DWR) storage facilities at the Port of Stockton, Rio Vista, and the community of Hood (Figure 6).

PROJECT DESCRIPTION: The applicant is proposing to construct three temporary salinity/drought barriers in response to the current and forecasted drought conditions in the State of California. The temporary barriers would be rock (rip-rap) structures installed within Miner Slough, Steamboat Slough, and False River. The Miner and Steamboat Slough barriers would serve two important drought management purposes: redirect freshwater flows into the central Delta; and create a hydrologic barrier to repel high-salinity water. The False River barrier would be a physical barrier to reduce the intrusion of high-salinity water into the central and south Delta.

Rock fill would be placed along the base of the levees for support at the Miner and Steamboat Slough sites. The levees at the False River site were identified as weaker than those at the northerly sites due to peat soil foundations. The False River site would have transitions to the levees with 75-foot-long sheet pile walls supported by king piles and buttressed with rock. Refer to the impact maps in Figures 1 through 3 for additional design information. The applicant is currently finalizing project design drawings.

The proposed rock barriers would be installed at each of the sites in spring (beginning around May 1st) and removed in November. The timing of project removal would coincide with the beginning of the rainy season and the migration period for fall-run Chinook salmon. All material removed from the sites would be transported, primarily by barges, to nearby DWR stockpile locations. Potential locations are identified in Figure 6.

Miner Slough Site

The Miner Slough rock barrier (Figure 3) would be 220 feet long and up to 130 feet wide at the base and 12 feet wide at the top. The top of the barrier would be set at an elevation of 9 feet across the crest and would

include about a 50-foot overflow weir 20 feet wide at the top, set at 7 feet elevation. The weir would allow overflows at high stage, keep flow in the middle of the channel, and minimize the potential for erosion of the river banks. The barrier would include a submerged structure placed on a bed of crushed rock consisting of two steel frames with four 48-inch diameter corrugated metal culverts, approximately 60 feet long, set at an invert elevation of approximately -5 feet. The culverts would be operated to allow fish passage and to regulate water levels and water quality on the downstream side of the barrier. One culvert would remain fully open at all times for fish passage, and the other culvert slide gates would be operated such that the culverts are fully open, fully closed, or at least 50 percent open as needed to improve water quality and/or stage downstream of the barriers. Three 12-inch steel pipe piles would be installed for monitoring equipment.

The monitoring equipment and operable culverts would be accessed by the levee road adjacent to the barrier or via Ryer Island Road. The site is navigable and is used primarily by recreational traffic, but signs would be posted at both entrances to the slough, informing boaters that Steamboat Slough provides boat passage for vessels up to 24 feet long (subject to increase with final design plans) and up to 10,000 pounds.

Steamboat Slough Site

The Steamboat Slough rock barrier would be 580 feet long, up to 100 wide at the base, and 12 feet wide at the top (Figure 4). The top of the structure would be at elevation 9 feet and would include about a 60-foot overflow weir 20 feet wide at the top, set at 7 feet and is designed to operate similar to the weir in Miner Slough. Like the Miner Slough site, it would include a submerged steel frame set at an invert elevation of -5 feet with four 48-inch corrugated metal culverts, approximately 60 feet long, to allow fish passage and management of downstream water surface elevation and quality. One culvert would remain open at all times for fish passage, and the other culvert slide gates would be operated such that the culverts are fully open, fully closed, or at least 50 percent open as needed to improve water quality, stage downstream of the barriers, and/or fish passage. Three12-inch steel pipe piles would be installed for monitoring equipment.

This site is navigable by commercial and recreational traffic, and boat ramps on each side of the barrier would be provided on the east side of the channel. One new 12-foot-wide gravel driveway would connect to Grand Island Road. The driveway would be about 150 feet long. A State-provided boat tender would be present on the apron during daytime hours with a pickup truck and trailer. When a boat approaches, the trailer would be backed into the water, the boat would be placed on the trailer, and it would be driven to the boat ramp on the other side, where it would be placed back in the river. Boats up to 24 feet and 10,000 pounds could be accommodated; capacity may increase with the final design plans as DWR is attempting to design the site to accommodate the 29 foot emergency response boats at the Rio Vista Coast Guard Station and is working with the California Department of Parks and Recreation Division of Boating and Waterways to refine the portage design. The site would not be available for launching boats from the land. The ramps would be approximately 22 feet wide and would be placed on rock fill with a 15 percent slope. The south ramp would be approximately 120 feet long, and the north ramp would be approximately 120 feet long. Dock anchors (comparable to mooring lines) would be used to stabilize the boat ramps. Bollards and a chain would be installed to restrict access to the boat ramp from the public road.

Workers would access the boat ramps via Grand Island Road, and the monitoring equipment and operable slide gates would be accessed via Sutter Island Road, both of which are public roads, or by boat.

West False River Site

The West False River barrier would be approximately 800 feet long and up to 200 feet wide at the base, and 12 feet wide at the top (Figure 5). The toe fill would extend approximately 100 feet upstream and downstream of the barrier centerline. The top of the structure would be at an elevation of 7 feet across the entire crest. The barrier would include two king pile-supported sheet pile walls extending out from each levee

into the channel for a distance of 75 feet. The sheet piles/king piles would be required because the levees are weaker at this location; they sit on peat, and placing a large volume of rock directly on the levees would cause too much stress. The walls would be buttressed with some rock on both sides, however. After barrier removal, rock would be used to make smooth transitions around the sheet pile abutments which would remain in place for possible future use. DWR would assure that this rock is maintained and either contract with the Local Maintaining Agency (LMA) or use DWR resources or contractors to repair and or replace the transition rock as needed. The annual inspection of the rock would compare actual conditions with as constructed plans and/or bathymetric survey data. The results of the inspections and any bathymetric survey data collected would be made available to the LMAs. Any necessary repairs of the rock would be made using land or water-based construction equipment during summer and fall (July through October) when special-status species are less likely to be affected.

The piles to be installed at West False River site would include in total:

- Eight 36-inch-diameter king piles (barrier abutments)
- About 70 sheet piles (barrier abutments), or about 35 pairs of sheet piles totaling approximately 160 wall feet (including approximately 5 feet on either side that would be in the levee)
- Four 24-inch steel pipe piles (float line attachment, i.e., two piles upstream and downstream of the barrier)
- Four 12-inch steel pipe piles (monitoring equipment)

In addition to river sheet piles, approximately 300 feet of sheet piles would be installed parallel to the channel to prevent water piping from the river through the levee to a depth of approximately 35 feet. These piping preventer sheet piles would be set into the tops of the levees on each side of the barrier and would remain in place for possible future use.

No boat passage is provided around this barrier because alternative routes (Fisherman's Cut or False River east for vessel traffic between the South Delta to the San Joaquin River; and the Main San Joaquin River for vessel traffic between the Antioch and the eastern Delta) are available. No fish passage has been provided because migrating fish would use the adjacent San Joaquin River, Fisherman's Cut, or Dutch Slough and their access would not be restricted.

Purpose and Need: Based on the available information, the overall project purpose is to prevent the intrusion of saltwater into the Delta. The applicant believes there is a need to reduce the water supply risk for delta and upstream users. The applicant has stated that water quality conditions in the Delta are declining due to the severe drought conditions and have already approached human health criteria at many locations in the South Delta and as far south as the State Water Project and Central Valley Project intakes. These and projected conditions put several communities and local water purveyors at risk. Increased salinity levels and reduced levels of cold water in upstream reservoirs also have an adverse effect on sensitive aquatic resources in the Delta and waterways below the reservoirs.

Construction of the barriers would allow the retention of additional water available for upstream community needs and cool water to protect natural resource values later in the year. Additional water would be retained in upstream reservoirs for later use, as less water would need to be released for water quality earlier in the year.

Models and projections prepared by the applicant show that there may be insufficient water in natural runoff or stored in reservoirs that can be released to keep salinity intrusion out of the Delta without exhausting stored water before the end of the year. Given current reservoir storage and expected runoff, projections indicate that low river inflows will allow salinity intrusion to the extent that interior portions of the Delta will exceed water quality objectives by May. Once salinity intrudes into the Delta, moving it back toward San Francisco Bay is difficult; thus, high salinity could persist for an extended period if high winter and spring freshwater flows are not available to move it back downstream.

ADDITIONAL INFORMATION:

The Corps is currently processing this permit application under normal procedures. If the conditions change, the permit application may be elevated to emergency procedures as defined in regulations. At this time, the applicant is unsure of the need for all three barriers, which may change as a result of weather conditions and coordination with state and federal resource agencies.

Background. On January 29, 2015, the Corps issued a Public Notice for three emergency drought barriers in Sutter Slough, Steamboat Slough, and False River, which closed on March 30, 2015. After conducting numerous negotiations with land owners, the applicant has modified the location of the Sutter Slough and Steamboat Slough emergency drought barriers. The Steamboat Slough emergency drought barrier is now proposed to be constructed 9 miles downstream in the same waterway, and the Sutter Slough emergency drought barrier is now proposed to be constructed in Miner Slough.

Environmental Setting. The Project is located within the legal Delta, which includes 700 miles of channels and approximately 8,000 acres of tidal marsh. The Delta includes approximately 57 islands, many of which support farmland and/or residential housing.

Alternatives. At this time, the applicant has not provided information concerning project alternatives. Additional information concerning project alternatives may be available from the applicant or their agent. Information on other alternatives is currently being developed and will be considered during the review process for this permit application. All reasonable project alternatives, in particular those which may be less damaging to the aquatic environment, will be considered.

Mitigation. The Corps requires that applicants consider and use all reasonable and practical measures to avoid and minimize impacts to aquatic resources. If the applicant is unable to avoid or minimize all impacts, the Corps may require compensatory mitigation. The applicant has proposed to restore all temporary impacts to pre-project conditions and is currently developing compensatory mitigation options for 0.75 acre of permanent impacts.

OTHER GOVERNMENTAL AUTHORIZATIONS: Water quality certification or a waiver, as required

under Section 401 of the Clean Water Act from the California State Water Resources Control Board (SWRCB), is required for this project. The applicant has submitted an application which is currently being reviewed by the SWRCB.

HISTORIC PROPERTIES: The applicant has submitted a cultural resources inventory which includes a records search, pedestrian survey, and Native American consultation. No known cultural resources were identified within the project's area of potential effect. The applicant's consultant is still preparing an evaluation of the levees and a concrete structure discovered at the site. Once the evaluation of potential resources is complete, the Corps will initiate consultation with the State Historic Preservation Officer under Section 106 of the National Historic Preservation Act, as appropriate.

ENDANGERED SPECIES: The proposed activity may affect Federally-listed endangered or threatened species or their critical habitat. The Corps will initiate consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, pursuant to Section 7 of the Endangered Species Act, as appropriate.

ESSENTIAL FISH HABITAT: The proposed project may adversely affect Essential Fish Habitat. The Corps will initiate consultation with the National Marine Fisheries Service, pursuant to Magnuson-Stevens Fishery Conservation and Management Act, as appropriate.

The above determinations are based on information provided by the applicant and our preliminary review.

EVALUATION FACTORS: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the described activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit, which reasonably may be expected to accrue from the described activity, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the described activity will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership and, in general, the needs and welfare of the people. The activity's impact on the public interest will include application of the Section 404(b)(1) guidelines promulgated by the Administrator, Environmental Protection Agency (40 CFR Part 230).

The Corps is soliciting comments from the public, Federal, State, and local agencies and officials, Indian tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an

Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

SUBMITTING COMMENTS: Written comments, referencing Public Notice SPK-2014-00187 must be submitted to the office listed below on or before **April 22, 2015**.

William Guthrie, Project Manager

US Army Corps of Engineers, Sacramento District

1325 J Street, Room 1350

Sacramento, California 95814-2922

Email: *william.h.guthrie@usace.army.mil*

The Corps is particularly interested in receiving comments related to the proposal's probable impacts on the affected aquatic environment and the secondary and cumulative effects. Anyone may request, in writing, that a public hearing be held to consider this application. Requests shall specifically state, with particularity, the reason(s) for holding a public hearing. If the Corps determines that the information received in response to this notice is inadequate for thorough evaluation, a public hearing may be warranted. If a public hearing is warranted, interested parties will be notified of the time, date, and location. Please note that all comment letters received are subject to release to the public through the Freedom of Information Act. If you have questions or need additional information please contact the applicant or the Corps' project manager William Guthrie, 916-557-5269, *william.h.guthrie@usace.army.mil.*

Attachments: 6 drawings

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[1] Vertical elevations are based on the North American Vertical Datum of 1988 (NAVD 88).