



**DEPARTMENT OF THE ARMY**  
**U.S. Army Engineer District, Sacramento**  
**Corps of Engineers**  
**1325 J Street**  
**Sacramento, California 95814-2922**

Executive Office

Mr. Jay Punia  
Executive Officer  
Central Valley Flood Protection Board  
3310 El Camino Avenue, Room 151  
Sacramento, California 95821

March 24, 2011

Dear Mr. Punia,

The Director of Civil Works for the U.S. Army Corps of Engineers has approved your request to alter the Federal flood damage reduction project, Sacramento River Flood Control Project, Yuba River south levee from Simpson Lane to the Goldfields, Project Levee Miles 2.3 to 6.1 included in encroachment permit number 18577 BD as part of the Upper Yuba Levee Improvement Project, (Encl 1), pursuant to U.S.C. Title 33, Chapter 9, Subchapter 1, Section 408. Permission has been granted for you to alter the aforementioned project works as it has been determined that such alteration will not be injurious to the public interest and will not impair the usefulness of the project works.

This letter of permission approves your proposed work as summarized below and described in detail in the December 10, 2010 Conformed Contract documents for the Upper Yuba Levee Improvement Project, Yuba River South Levee STA 102+00 to 303+59 referred to herein as the Final Plans, the June 10, 2010 100% Design Submittal Final Design Documentation Report, and the June 11, 2010 Revised Geotechnical Basis Of Design Report Upper Yuba Levee Improvement Project Yuba River South Levee Evaluation Yuba County, California.

<b>Design Station Interval</b>	<b>Alteration</b>
Sta. 102+00 to Sta. 105+00	No work proposed
Sta. 105+00 to Sta. 109+00	Provide 20 foot crown width, 3H:1V waterside (WS) slope and 2H:1V landside (LS) slope
Sta. 109+00 to Sta. 120+00	Provide 20 foot crown width and 2H:1V LS slope
Sta. 120+00 to Sta. 125+00	Provide 20 foot crown width and 3H:1V WS slope
Sta. 125+00 to Sta. 136+50	No work proposed

Design Station Interval	Alteration
Sta. 136+50 to Sta. 143+50	Cutoff Wall WS of Existing Wall Approximately 65-foot-deep 3 foot wide soil bentonite cutoff wall through levee embankment Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 143+50 to Sta. 189+50	Approximately 65-foot-deep 3 foot wide soil bentonite cutoff wall through levee embankment Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 189+50 to Sta. 221+00	Approximately 70-foot-deep 3 foot wide soil bentonite cutoff wall through levee embankment Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 221+00 to Sta. 244+00	Approximately 55-foot-deep 3 foot wide soil bentonite cutoff wall through levee embankment Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 244+00 to Sta. 288+00	Approximately 45-foot-deep 3 foot wide soil bentonite cutoff wall through levee embankment Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 286+00 to Sta. 301+00	Landside Stability/Seepage Berm: Thickness of 5 feet, Width of 80 feet from levee toe Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 301+00 to Sta. 303+59	Transition at End of Berm into Goldfields. Thickness varies from 5 feet to height of levee, Width varies from 80 feet to 150 feet from levee toe Provide 20 foot crown width, 3H:1V WS slope and 2H:1V LS slope
Sta. 272+00 to Sta. 303+59	2 Foot Thick Rock Riprap on WS slope approximately 42 feet wide

The term “you” and its derivatives, as used in this approval letter, means the Central Valley Flood Protection Board or any future transferee. The term “this office” refers to the Sacramento District of the U.S. Army Corps of Engineers. Alteration of this project must be in accordance with the following conditions:

**Special Conditions:**

a. This letter of permission does not authorize you to take any threatened or endangered species or designated critical habitat. In order to legally take a listed species, you must have a separate authorization under an Endangered Species Act Section 10 permit, or a Biological Opinion under Endangered Species Act Section 7, with incidental take provisions with which you must comply. The U.S. Fish and Wildlife Service (USFWS) Biological Opinion Number 81420-2010-F-0814-1, dated August 16, 2010 contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with incidental take that is also specified in the Biological Opinion. Your authorization under this Corps permission is conditional upon your compliance with all of the mandatory terms and conditions associated with the Biological Opinion, which terms and conditions are incorporated herein by reference (Encl 2). Failure to comply with the terms and conditions associated with the incidental take statement in the Biological Opinion, where a take of the listed species occurs, would constitute an unauthorized take, and it would also constitute non-compliance with

your Corps permission. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its Biological Opinion, and with the Endangered Species Act. The Central Valley Flood Protection Board must comply with all conditions of this Biological Opinion, including those ascribed to the Corps. The Sacramento District has reinitiated consultation with the USFWS per your request to reflect a revised transplant plan for elderberry. You are required to comply with the terms and conditions included in the above mentioned BO until an amended BO is received from UFWS. Once the amended BO is received, you are required to comply with the terms and conditions of the amended BO.

b. You are required to submit a revision to the Operation and Maintenance (O&M) (33 CFR Section 208.10) Manual for this office's review within 180 days of project completion. This revision shall include all improvements to the Western Pacific Interceptor Canal, Bear River, Feather River, and Yuba River levee, or flood control feature, improvements. As-Built drawings and permanent maintenance easement boundaries shall be submitted in conjunction with the draft O&M manual. Upon receipt of the draft O&M manual, this office will schedule a transfer inspection with you to verify all construction has been completed in accordance with this permission. Any features found to be deficient during that inspection will require your correction prior to the Corps acknowledging that the work was completed in accordance with this letter of permission. Construction data is required to be provided to this office for review by our Engineering Division during construction. Within 180 days of project completion, you must furnish a certification report that the work has been completed in accordance with the conditions of this permission.

c. No work may result in a discharge, including a temporary discharge, of any material into any waters of the United States, including wetlands.

d. If any cultural artifact or an unusual amount of bone, shell, or nonnative stone is uncovered during construction, work should be halted in that area so that a professionally qualified archaeologist approved by the Corps can determine the significance of the find. If human bone is uncovered, the Yuba County Coroner and the California Native American Heritage Commission (NAHC) should be contacted immediately. If human remains are discovered in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until (a) the county coroner has been informed and has determined that no investigation of the cause of death is required; and if the remains are of Native American origin, (b) the descendants of the deceased Native Americans have made a recommendation to the landowner or the person responsible for the excavation work regarding the means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code, Section 5097.98, or (c) the NAHC was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission. According to the California Health and Safety Code, six or more human burials at one location constitute a cemetery (Section 8100), and disturbance of Native American cemeteries is a felony (Section 7052).

e. You will follow and abide by your approved Safety Assurance Review plan dated October 14, 2009, prior to and during construction.

General Conditions:

f. You must accept the operation and maintenance responsibility of the completed work including all vegetation management requirements specified in your O&M manual.

g. You are responsible for continued operations and maintenance for this project during construction.

h. Construction should be coordinated with this office. Additionally, the proposed work shall not be performed or remain during the flood season of November 1 to April 15, unless otherwise approved in writing by your Board.

i. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this approval.

j. You are required to submit to this office on a weekly basis construction records documenting field conditions.

k. You are required to submit to this office cross-sections and a survey of the levee centerline with your as-builts. Cross-sections shall be taken every 2.5 miles or at a change in cross-section, whichever is less. Surveys shall extend from the water line to 100 feet landward of the levee toe, or seepage berm toe if present. All data shall be in GIS format (ESRI Version 9.3 or latest version ) in correct projection for seamless geographic location, referenced in NAVD88 using Geoid03 and NAD83, using the relevant California State Plane Zone. Data shall also be provided in GIS ready georeferenced CADD data format as well as pdf format.

l. To ensure there is mitigation for any increased residual flood risk, you are required to develop and submit a Floodplain Management Plan within one year of issuance of this permission that includes elements for flood information dissemination, public awareness training, flood warning and evacuation plans, emergency flood operations plan with annual exercise, dedicated evacuation resources, post-flood recovery plans. You are required to participate in and comply with applicable Federal floodplain management and flood insurance programs.

Further Information:

a. Limits of this permission.

1. This permission does not obviate the need to obtain other Federal, state or local authorizations, approvals or permissions required by law.
2. This permission does not grant any property rights or exclusive privileges.
3. This permission does not authorize any injury to the property or rights of others.

b. The determination of this office to approve this action as not injurious to the public interest, nor will it impair the usefulness of the project works, was made in reliance on the information you provided.

c. The Corps may reevaluate its decision on this approval at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to the following:

1. You fail to comply with the terms and conditions of this approval.
2. The information provided by you in support of your application proves to have been false, incomplete, or inaccurate. Should field conditions or future investigations require a deviation from the Final Plans, this deviation must be approved by this office through a request from the Board.
3. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

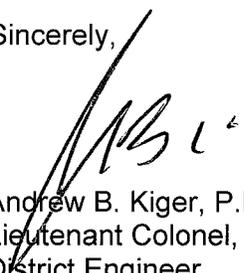
d. This approval should not be construed as an endorsement of certification for the FEMA base flood event.

e. The Corps acknowledges your commitment to accept the altered project for operation and maintenance and hold and save the United States free from damage due to the construction works.

My point of contact for this action is Ms. Meegan Nagy, Chief, Flood Protection and Navigation Section. She may be reached at 916-557-7257 or by emailing [Meegan.G.Nagy@usace.army.mil](mailto:Meegan.G.Nagy@usace.army.mil).

A copy of this letter is being furnished to Mr. Paul Brunner, Executive Director, Three Rivers Levee Improvement Authority, 1114 Yuba Street, Suite 218, Marysville, California 95901.

Sincerely,



Andrew B. Kiger, P.E.  
Lieutenant Colonel, U.S. Army  
District Engineer

Enclosures  
Encl 1 408 Approval Letter  
Encl 2 USFWS Biological Opinion