



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In Reply Refer To:  
81420-2010-F-0446-R003

**JUL 18 2012**

Mr. Michael S. Jewell  
Chief, Regulatory Division  
U.S. Army Corps of Engineers, Sacramento District  
1325 J Street  
Sacramento, California 95814

Subject: Reinitiation of Formal Consultation on the Natomas Levee Improvement Program's  
Landside Improvements Phase 4a Project, Sacramento and Sutter Counties,  
California

Dear Mr. Jewell:

This is in response to your June 5, 2012, request to reinitiate formal consultation with the U.S. Fish and Wildlife Service (Service) for a third time on the Natomas Levee Improvement Program (NLIP), Landside Improvements Project, Phase 4a (Phase 4a) in Sacramento and Sutter Counties, California. Your request was received in our office on June 7, 2012. The Phase 4a biological opinion (81420-2010-F-0446-1) was completed on May 24, 2010 and tiered off a programmatic biological opinion (81420-2008-F-0195-5) for the entire NLIP project that was issued on October 9, 2008. The U.S. Army Corps of Engineers (Corps) reinitiated consultation on Phase 4a due to project description changes and two previously revised biological opinions were completed on May 31, 2011 and June 15, 2011. This third reinitiation on the Phase 4a project is due to design changes to irrigation and drainage channels around the Fisherman's Lake borrow area. The changes will result in a decrease in the effects to the federally-threatened giant garter snake (*Thamnophis gigas*)(snake). This biological opinion is issued under the authority of section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

This biological opinion is based on: (1) your June 5, 2012, letter requesting reinitiation; (2) electronic mail messages between AECOM and the Service dated May 14, 2012 and May 8, 2012; and (3) other information available to the Service.

To provide ease of reading, language changed within a paragraph from the original biological opinion will be underlined. Therefore, the Phase 4a biological opinion is now amended as follows:

Page 21: Change the following paragraph in the **Project Description** under *Sharma and AKT Borrow Sites* from:

Excavation of the borrow sites would result in the borrow sites becoming lower than existing ground level. This has the potential to cause these sites to accumulate storm water. The Sharma and AKT borrow sites are located along either side of the Plant 3 Channel, which conveys water from Fisherman's Lake into the Sacramento River. In order to provide adequate drainage for these sites, culverts would be constructed from the borrow sites into the Plant 3 Channel. Culverts would be installed along both banks to connect the new managed marshes on the Sharma and AKT properties to the channel to allow drainage. A total of eight culverts will be installed from the borrow sites (four from each borrow site) into the Plant 3 Channel. Construction of these culverts would require the installation of pipes into the banks of the Plant 3 Channel and the placement of approximately 0.06 acre of fill within the Plant 3 Channel. The culverts that are used for drainage of the borrow sites would also be used as drainage for the open channels within the marshes.

To:

Excavation of the borrow sites would result in the borrow sites becoming lower than existing ground level. This has the potential to cause these sites to accumulate storm water. The Sharma and AKT borrow sites are located along either side of the Plant 3 Channel, which conveys water from Fisherman's Lake into the Sacramento River. In order to provide adequate drainage for these sites, culverts would be constructed from the borrow sites into the Plant 3 Channel. Culverts would be installed along both banks to connect the new managed marshes on the Sharma and AKT properties to the channel to allow drainage. A total of ten culverts will be installed from the borrow sites (five from each borrow site) into the Plant 3 Channel. Construction of these culverts will require the installation of pipes into the banks of the Plant 3 Channel and the placement of approximately 0.075 acre of fill. The culverts that are used for drainage of the borrow sites would also be used as drainage for the open channels within the marshes.

Page 21: Due to project modifications, the following paragraphs in the **Project Description** under the Sharma section will be deleted:

- *Sharma North Ditch* – The Sharma north ditch would supply water into the new Sharma managed marsh and also carry flows to Fisherman's Lake for ultimate drainage. In order to accommodate larger flows of water, the easternmost portion (totaling 750 linear feet) of the Sharma north ditch would be wider with 3H:1V slopes, resulting in 0.13 acre of temporary effects.

A culvert would be constructed that sends water from the existing TNBC supply ditch into the easternmost segment of Sharma north ditch. When the culvert is constructed, the outlet for the culvert would have rock slope armoring and a new fill embankment on the back side of the culvert outlet – thus, isolating the east-to-west running segment of the Sharma north ditch from the easternmost segment of the Sharma north ditch. This ditch segment would receive no flowing water from the managed irrigation system, although it would get some water from storm events, which would be conveyed eastward through the ditch to Fisherman’s Lake. However, this 0.34-acre segment of the ditch would not be disturbed and no fill or dredged materials would be placed in it.

The irrigation and drainage connections into the easternmost section of the Sharma north ditch would result in the placement of 0.01 acre of fill (rock slope armoring) at the culvert connections to the TNBC supply ditch and to the Sharma marsh. At its outlet into Fisherman’s Lake, a 24-inch culvert would be extended into the Sharma north ditch to make room for an expanded RD 1000 service road; new rock slope armoring would be installed on the Fisherman’s Lake side. These improvements would require a total of 0.02 acre of additional fill (0.01 in the Sharma north ditch for the culvert and 0.01 in Fisherman’s Lake for the rock armoring).

Page 21: Change the following paragraph in the **Project Description** under Sharma from:

- *TNBC Supply Ditch* –The existing TNBC supply ditch would receive the water from the relocated Riverside Canal, via a newly created spur ditch called the Kimura west ditch. Water from the Riverside Canal would flow into the Kimura west ditch and then into the existing TNBC supply ditch. The TNBC supply ditch would carry the water to the existing TNBC Natomas Farms Preserve managed marsh and to the new proposed Sharma managed marsh.

To:

- *TNBC Supply Ditch* –The existing TNBC supply ditch would receive the water from the relocated Riverside Canal, via a newly created spur ditch called the Kimura west ditch. Water from the Riverside Canal would flow into the Kimura west ditch and then into the existing TNBC supply ditch. The TNBC supply ditch would carry the water to the existing TNBC Natomas Farms Preserve managed marsh and to the new proposed Sharma managed marsh. A 0.007 acre check structure would be built within the Kimura ditch. Water from the Kimura ditch and TNBC supply ditch would be allowed to drain to the Plant 3 Channel or be contained on the west side of the check structure to help manage water supply to the Sharma managed marsh. This would be a permanent effect to aquatic giant garter snake habitat.


Page 35: Add the following paragraph at the end of the **Conclusion**:

Given the overall scope of the project that was analyzed in the May 24, 2010, May 31, 2011, and June 15, 2011, Phase 4a biological opinions, the changes reflected within this reinitiation are minor and reduce the effects to the snake. The SAFCA has incorporated conservation measures within their project description that will minimize and avoid effects to the giant garter snake. This change in project description will result in a net decrease in effects to the giant garter snake by decreasing the amount of aquatic and upland giant garter snake habitat affected by 0.468 acre. Therefore, the effects analysis and incidental take statement would not result in additional take due to these project description changes.

This concludes formal consultation with the Corps on the Natomas Levee Improvement Program, Landside Improvements Phase 4a Project. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the proposed action may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in this opinion; or (4) a new species or critical habitat is designated that may be affected by the proposed action.

If you have any questions regarding this biological opinion on the Natomas Landside Improvements Project, please contact Jennifer Hobbs, Senior Fish and Wildlife Biologist at (916) 414-6541 or Kellie Berry, Chief, Sacramento Valley Division at (916) 414-6645.

Sincerely,

  
fsv Susan K. Moore  
Field Supervisor

cc:

Elizabeth Holland, Corps, Sacramento, CA  
Kathleen Dadey, Corps, Sacramento, CA  
Amy Kennedy, CDFG, Sacramento, CA  
Peter Buck, SAFCA, Sacramento, CA  
Kelly Holland, AECOM, Sacramento, CA