United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay-Delta Fish and Wildlife Office
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Sacramento, California 95814

In reply refer to:
08FBDT00-2015-F-0016

MAR 10 2015

Kathleen A. Dadey, Ph.D
Chief, California South Branch
Attn: William Guthrie
Regulatory Division
U.S. Army Engineer District, Sacramento
U. S. Army Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

Subject: Appending the California Department of Water Resources 2015 Construction of the Temporary Agricultural Barriers and Head of Old River Barriers Project, San Joaquin County, California (U.S. Army Corps of Engineers (Corps) File Number 2000-00696) to the February 21, 2014, *Programmatic Biological Opinion on the California Department of Water Resources' 2013-2017 Temporary Barriers Project, South Delta, San Joaquin County, California* (Service File Number: 08FBDT00-2012-F-0017)

Dear Ms. Dadey,

This letter is in response to the Corps' February 25, 2015, request for the U.S. Fish and Wildlife Service (Service) to append the California Department of Water Resources (DWR) 2015 Construction of the Agricultural Barriers and Head of Old River Barriers Project in San Joaquin County, California to the February 21, 2014, *Programmatic Biological Opinion on the California Department of Water Resources' 2013-2017 Temporary Barriers Project, South Delta, San Joaquin County, California* (Service File Number: 08FBDT00-2012-F-0017). Your letter was received in our office by electronic mail (email) on February 26, 2015. At issue are the potential effects of the proposed project on the threatened delta smelt (*Hypomesus transpacificus*) and its critical habitat. This document is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) (Act).

Your letter requested that the proposed project be appended to the February 21, 2014, *Programmatic Biological Opinion on the California Department of Water Resources' 2013-2017 Temporary Barriers Project, South Delta, San Joaquin County, California* (Programmatic Biological Opinion). The proposed project meets the suitability criteria and is within the geographic area analyzed in the Programmatic Biological Opinion. This letter is an agreement by

the Service to append the proposed project to the Programmatic Biological Opinion and represents the Service's biological opinion on the effects of the proposed action. A copy of the Programmatic Biological Opinion was issued to the Corps and DWR on February 21, 2014.

This document is based on: (1) the Programmatic Biological Opinion; (2) the Corps' February 25, 2014 letter requesting consultation; and (3) other information available to the Service.

BIOLOGICAL OPINION

Description of the Proposed Action

The DWR proposes to install a spring Head of Old River rock barrier (HORB) in March with an anticipated closure date of April 1, 2015. The agricultural barrier installation at the Middle River (MR), Old River at Tracy (ORT) and Grant Line Canal (GLC), will follow installation guidelines in the Programmatic Biological Opinion and will close by March 31, 2014. The purposes of the HORB and agricultural barriers are to protect San Joaquin River Chinook salmon and steelhead smolts migrating through the Delta while providing adequate agricultural water supply in terms of quantity, quality, and channel water levels to meet the reasonable and beneficial needs of water users in the South Delta Water Agency.

DWR may also install the HORB in fall 2015 as a result of ongoing drought conditions. Due largely to drought conditions, DWR installed the fall Head of Old River Barrier in 2014 at the request of California Department of Fish and Wildlife (Service File Number 08FBDT00-2014-F-0049). In 2014 the primary purpose of the fall HORB was to increase flows on the San Joaquin River and improve conditions for up-migrating Chinook salmon and steelhead.

DWR, in conjunction with the National Marine Fisheries Service Southwest Research Station, is planning to conduct the second year of the Predator Manipulation Study. This study, located at and near the Head of Old River, is intended to determine the effects of predatory fish population manipulation on salmonid smolt survival. This study would resume in March 2015, and involves the removal and relocation of predatory fish from the Head of Old River area and other sites in the San Joaquin River near the Head of Old River. Extensive monitoring of these areas would occur along with several control sites to study any potential benefits to migrating salmonid smolts from manipulating predator populations.

Avoidance and Minimization Measures

DWR will follow the specific avoidance and minimization measures, as described in the Programmatic Biological Opinion, for the construction and removal of the rock barriers and the predator study.

Status of the Species

Please refer to page 6 of the 2010 delta smelt 5 year review for a current status of the species. An electronic copy is available at http://ecos.fws.gov/docs/five_year_review/doc3570.pdf.

Environmental Baseline

The action area is located in and near the San Joaquin River, in the South Delta. The temporary rock barriers and fish study will be conducted at and near four locations: 1) the HORB is located at the confluence of the Old River and the San Joaquin River; 2) the Middle River barrier is located near Victoria Canal, about 0.5 miles south of the confluence of the Middle River, Trapper Slough, and North Canal between Middle Roberts Island and Union Island; 3) the Old River at Tracy barrier is located near the Tracy Pumping Plant, approximately 0.5 miles east of the Delta Mendota Canal; and 4) the Grant Line Canal barrier is located 420 feet east of the Tracy Boulevard Bridge between Union Island and Fabian Tract. The San Joaquin River, at the location of the proposed temporary barriers locations, is characterized by rip-rap levees with sporadic vegetation and/or vegetated levees.

California is experiencing its fourth consecutive dry, water-years due to low rainfall, and 2014 has been declared a drought year by the Governor of California (Office of the Governor 2014). As of March 2015, the Governor's drought declaration remains in place. In addition to factors discussed in the Programmatic Biological Opinion, low rainfall events decrease suitable and available aquatic habitat in the Delta for delta smelt breeding and survival, thereby reducing the overall population in the Delta, further imperiling the delta smelt.

The 2015 Fall Midwater Trawl abundance index which determines the relative population status for the delta smelt was set at 9, which is the lowest index on record. The 2014 20mm index was 1.1, which is not substantively different from the lowest 20mm index on record of 1.0 in 2007.

Effects of the Proposed Action

The barrier construction and removal effects, as well as the fish study effects to delta smelt and its critical habitat, have been analyzed in the Programmatic Biological Opinion. The proposed project will result in the temporary disturbance of 1.43-acre delta smelt critical habitat and has the potential to negatively affect the various life stages of the delta smelt within the 1.43-acre of designated critical habitat. The HORB may be installed and removed twice in 2015 due to drought conditions. If the fall HORB is installed, the temporary disturbance would increase by the additional effects of installation and deconstruction with the 0.34-acre HORB. To minimize the effects of the proposed project on delta smelt, the DWR will comply with the conservation measures and terms and conditions in the Programmatic Biological Opinion.

Conclusion

The 2015 Construction of the Agricultural Barriers and Head of Old River Barriers Project, as described, fits within the parameters of the level of effects analyzed in the Programmatic Biological Opinion, is not likely to jeopardize the continued existence of the delta smelt or result in destruction or adverse modification of its critical habitat. The Service has made this decision based on the relatively small project footprint, the rock barrier work is temporary in duration and delta smelt critical habitat will only be disturbed temporarily with the installation and removal of the non-permanent rock barriers.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act, provided that such taking is in compliance with this Incidental Take Statement.

The measures described in the Programmatic Biological Opinion are nondiscretionary, and must be implemented by the Corps so they become binding conditions of any grant or permit issued to the DWR, as appropriate, in order for the exemption in section 7(o)(2) to apply. The Corps has a continuing duty to regulate the activity that is covered by this incidental take statement. If the Corps: (1) fails to require the DWR to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document; and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, the Corps and/or the DWR must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR §402.14(i)(3)].

Amount or Extent of Take

The Service anticipates take of delta smelt will be difficult to detect and quantify because of the species' small size and therefore it is not possible to provide precise numbers of delta smelt that could be injured, harassed, harmed or killed from actions appended to the Programmatic Biological Opinion. To quantify the level of take associated with this project, the Service

anticipates that all delta smelt within the 1.43-acre barriers footprint will be subject to incidental take in the form of injury, harass, harm or kill, however, low fish mortality is anticipated because the duration and extent to construct and remove the barriers is relatively limited and the proposed fish study will utilize gear that minimizes harmful effects to delta smelt and will be conducted in small, localized sites within the action area. Upon implementation of the reasonable and prudent measures, incidental take associated with the project will become exempt from the prohibitions described under section 9 of the Act.

Effect of the Take

The Service has determined that the level of anticipated take is not likely to result in jeopardy to the species.

Reasonable and Prudent Measures

The Service has determined that the following Reasonable and Prudent Measure is necessary and appropriate to minimize the effects of the 2015 Construction of the Agricultural Barriers and Head of Old River Barriers Project on the species:

1) Adverse effects to delta smelt and its critical habitat shall be minimized to the full extent possible.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, the Corps shall ensure the DWR complies with the following Terms and Conditions, which implement the Reasonable and Prudent Measures described above. These Terms and Conditions are nondiscretionary.

The following Terms and Conditions implement the Reasonable and Prudent Measure One (1):

1) The DWR shall fully implement the proposed project, including the guidelines, implementing procedure, and Reasonable and Prudent Measures, avoidance and minimization measures, and corresponding Terms and Conditions as described in this biological opinion and the Programmatic Biological Opinion.

REINITIATION—CLOSING STATEMENT

This concludes formal consultation on the proposed 2015 Construction of the Agricultural Barriers and Head of Old River Barriers 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 retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that 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 the listed species or critical habitat that was not considered in this biological opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must immediately cease, pending reinitiation.

If you have any questions regarding this response, please contact Kim Squires, Section 7 Coordinator, by telephone at 916-930-5634 or via email at Kim_Squires@fws.gov.

Sincerely,

Kim S. Turner

Kim S. Turner
Assistant Field Supervisor

cc: Jacob McQuirk, California Department of Water Resources, Sacramento, California
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