



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE  
Southwest Region  
501 West Ocean Boulevard, Suite 4200  
Long Beach, California 90802-4213

May 8, 2007 In response refer to:  
2006/03464

Kirk C. Rodgers  
Regional Director  
Bureau of Reclamation  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825-1898

Dear Mr. Rodgers:

This is in response to your letter of March 9, 2007 (Enclosure 1), addressing NOAA's National Marine Fisheries Service's (NMFS) concerns with the proposed South Delta Improvements Program (SDIP), and our intention to suspend formal consultation under section 7 of the Endangered Species Act (ESA). Formal consultation with NMFS was originally requested by the U.S. Bureau of Reclamation (Reclamation) on June 19, 2006, to assess the effects of the proposed SDIP on endangered Sacramento River winter-run Chinook salmon (*Oncorhynchus tshawytscha*), threatened Central Valley spring-run Chinook salmon (*O. tshawytscha*), threatened Central Valley steelhead (*O. mykiss*), threatened Southern Distinct Population segment of North American green sturgeon (*Ascipenser medirostris*), and the designated critical habitat of Central Valley steelhead. NMFS responded on July 25, 2006, that all information required to initiate consultation had been received; however, our letter of January 11, 2007 (Enclosure 2), identified four concerns with the proposed SDIP. These concerns related to the interdependent and interrelated aspects of SDIP with the reinitiated section 7 consultation for the operations and criteria plan (OCAP) for the Central Valley Project and State Water Project, and various hydrologic modeling issues.

This letter summarizes a mutually agreed-upon strategy to conduct ESA consultation on Stage 1 of the SDIP developed at a meeting involving staff from Reclamation, NMFS, and the California Department of Water Resources on March 30, 2007. All parties have agreed to address the potential effects of the operation of the permanent operable gates contained in Stage 1 of the SDIP in the 2007/2008 OCAP consultation. Computer modeling analyses for the 2007/2008 OCAP consultation will be conducted on the final proposed action, which will include the operation of the gates. This approach will address the interdependent and interrelated aspects of SDIP with OCAP and assure consistency in the modeling for the two projects. A separate section 7 consultation will be conducted on the construction and dredging aspects of SDIP Stage 1.


A biological opinion addressing the effects of construction of the permanent operable gates and related dredging activities in the South Delta on listed salmonids, green sturgeon, and designated



critical habitat for Central Valley steelhead will follow immediately or as soon as possible after the completion of the new OCAP biological opinion.

Please contact Mr. Jeffrey Stuart at 916-930-3607 or Dr. Elizabeth Campbell at 916-930-3611, or via e-mail at [J.Stuart@noaa.gov](mailto:J.Stuart@noaa.gov) or [Elizabeth.A.Campbell@noaa.gov](mailto:Elizabeth.A.Campbell@noaa.gov) if you have any questions concerning this response or require any additional information.

Sincerely,

  
for Rodney R. McInnis  
Regional Administrator

cc: Copy to file – ARN 151422SWR1999SA5950  
Copy to file—ARN 151422SWR2004SA9116  
NMFS-PRD, Long Beach, CA  
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CA 95814  
Lester A. Snow, Director, DWR, P.O. Box 942836, Sacramento, CA 94236-0001



# United States Department of the Interior

BUREAU OF RECLAMATION  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825-1898

IN REPLY  
REFER TO:

MP-700  
ENV-1.10

MAR - 9 2007

Mr. Rodney McInnis  
Regional Administrator  
National Marine Fisheries Service  
Southwest Regional Office  
501 West Ocean Boulevard, Suite 4200  
Long Beach, CA 90802-4213

Subject: Request to Continue Consultation on Stage 1 Actions of the South Delta  
Improvements Program (SDIP)

Dear Mr. McInnis:

This is in response to your letter to Mr. Alan Candlish, Regional Planning Officer, dated January 11, 2007, indicating the National Marine Fisheries Service's (NMFS) intention to suspend formal consultation for the SDIP. In the letter, NMFS identifies four concerns. These concerns are: 1) the analysis of Stage 1 of the SDIP as a separate project without consideration of how it will be used under SDIP Stage 2 would be seen as piecemealing under the Endangered Species Act (ESA); 2) the CalSim II modeling analysis done for the SDIP is no longer "in harmony" with current modeling being done for the reinitiated long term Central Valley Project (CVP)/ State Water Project (SWP) operations consultation; 3) modeling done for the SDIP actions neglected to assess the use of the permanent gates with the current level of CVP and SWP Delta exports; and 4) the analysis of alterations in hydrology for the November 30 through April 7 period should use a "no-barrier" condition for comparison and the results of the analysis in the Action Specific Implementation Plan (ASIP) for this period are not presented in a direct and easily understandable manner. Below is information regarding each of these concerns and the reasons for the Bureau of Reclamation (Reclamation) and the Department of Water Resources (DWR) requesting that NMFS continue with its consultation on the Stage 1 actions of the SDIP.

As you know, the SDIP Stage 1 proposed action is to construct and operate in-channel gates at four locations and to dredge certain channels in the south Delta. The SDIP Stage 2 proposed action is to increase the SWP Delta export limit to 8500 cubic feet per second (8500 cfs). Reclamation and DWR are deferring a decision on SDIP Stage 2 until more information is obtained regarding Delta fish. ESA consultation for Stage 2 has not been sought. Reclamation and DWR have clearly described this two-stage decision-making process in the Final Environmental Impact Statement/Report for SDIP and in meetings, letters, and announcements.

In the enclosed letter sent to NMFS on June 5, 2006, requesting consultation, it is clearly stated that consultation is to cover the effects of Stage 1. Reclamation did not request initiation of consultation on Stage 2. We believe that any concerns NMFS has regarding effects related to Stage 2 operations at 8500 cfs are misplaced and premature and may be the primary reason for the concern that a separate consultation on SDIP would be considered "piecemealing" under ESA. Reclamation and DWR believe that a separate consultation on SDIP Stage 1 is appropriate at this time because actions that would occur under Stage 1 have separate and independent utility and will provide important benefits to water users and fish in the south Delta. The dredging of south Delta channels will improve circulation and the ability of farmers to divert water for their crops. The dredging can occur without affecting export operations. The installation and operation of the gates will replace the current seasonal rock barriers to allow adaptive management of flows that will improve water quality and protection for fish. The replacement of the rock barriers with the gates will not change the operations at the pumping facilities. Therefore, Reclamation and DWR believe that there is no basis to suggest that separate consultations on the Stage 1 actions and the long term CVP/SWP operations give rise to a legal challenge such as piecemealing. We therefore request that NMFS conclude the formal consultation it began on July 25, 2006.

Items 2 through 4 relate to the sufficiency of the analyses conducted for the SDIP Stage 1 as provided in the ASIP. NMFS' letter of July 25, 2006 (enclosed) informed Reclamation that the information provided on SDIP was sufficient, or was otherwise accessible; that NMFS had begun formal consultation; and to expect a biological opinion by November 2, 2006. During the subsequent months of formal ESA consultation with NMFS and the U.S. Fish and Wildlife Service (Service), discussions with the Service focused on issues associated with the adequacy and format of necessary information for Delta smelt. The Service's primary request was for Reclamation and DWR to modify the proposed operation of the gates to match the operation described in the 2005 Biological Opinion (BO) regarding long term operations of the CVP and SWP, conduct any additional analyses, and format the new and existing information so it could be directly compared to the information in the 2005 BO. DWR will soon provide this, as well as other requested information, to the Service. If NMFS should require additional information to analyze the effects on anadromous fish in the Delta, NMFS should identify such information and Reclamation and DWR can provide it so that formal consultation can continue on SDIP Stage 1.

Regarding the concern that the CalSim II modeling analysis done for the SDIP is no longer "in harmony" with current modeling being done for the reinitiated consultation on long term CVP and SWP operations, Reclamation and DWR are pursuing a separate consultation for SDIP Stage 1 consistent with the 2004 NMFS BO and the 2005 Service BO; therefore, the relevant studies for consultation on Stage 1 of the SDIP are those done for the current Operations Criteria and Plan done in 2004 (OCAP 2004) and the related biological assessments. The CalSim II modeling for the SDIP uses essentially the same modeling assumptions as those used for the OCAP 2004 with respect to the without-project condition. The CalSim II studies for the SDIP Stage 1 are essentially the same as the studies for OCAP 2004 because the SWP and CVP export operations do not change significantly. (The assumptions for the CalSim II studies for SDIP Stage 2 are the same as those for OCAP 2004 except several export operations under the 8500

cfs limit are analyzed.) The CalSim analyses for the SDIP Stage 1 are consistent with the studies used for the 2004 NMFS BO and the 2005 Service BO and consultation should continue on this basis. The reinitiated consultation on the current BOs is scheduled to be completed in 2008. At that time, any BOs issued for the Stage 1 SDIP can be amended to address any substantive inconsistencies in the opinions.

The third concern is in regard to the technical adequacy of the environmental assessment in the ASIP and the analysis done using the current level of SWP diversions. Your letter states "The modeling conducted for the SDIP actions neglected to assess the use of the permanent barriers with the current level of water diversion (6680 cfs). This modeling run is important to know since the future increase in the SWP diversion rate to 8,500 cfs is not a guaranteed action. The "interim" period of barrier operations between completion of construction and the increase to water diversions of 8,500 cfs has not been presented to NMFS staff in the Action Specific Implementation Plan." NMFS has incorrectly concluded that the ASIP does not analyze Stage 1, referred to as "interim" period of operations, with the current SWP level of diversions. The ASIP includes an analysis of the permanent gate operations under the current SWP export operation rules, generally referred to as 6680 cfs.

Reclamation and DWR would like to clarify what is covered in the ASIP and what is not covered. Because we are seeking to implement SDIP Stage 1, and not Stage 2 (which would increase SWP diversion rates), the ASIP is designed to address all potential impacts to listed and sensitive species for implementation of Stage 1; i.e., installation and operation of permanent gates and dredging. While much of the ASIP is dedicated to the potential impacts on sensitive animals and habitat of constructing the gates and dredging channels and the associated mitigation activities, the ASIP also analyzes whether Stage 1 actions would cause potential increases in fish entrainment in the SWP and CVP diversions. This analysis shows that because the diversions at the SWP and CVP do not change significantly under Stage 1, effects on entrainment are not expected to change.

Late July 2005, NMFS staff requested additional information regarding dredging and gate design, as these pertain to green sturgeon. This information was included in the ASIP, except for the details of the gate foundations, which have been modified to provide a smooth transition ramp for sturgeon. In addition, information has been developed regarding the hydrodynamic effects of the permanent operable gates, which will soon be transmitted to NMFS and the Service. As the separate consultation on SDIP Stage 1 continues, additional information will be provided to NMFS as needed.

The final issue mentioned about the technical analysis is regarding the analysis of alterations in hydrology for the November 30 through April 7 period. The concern is that the analysis should use a "no-barrier" condition for comparison and that the results of the analysis in the ASIP are not presented in a direct and easily understandable manner. The analysis in the ASIP for this time period, however, is based upon having no barriers in place, and if this analysis is unclear we can provide supplemental information and correct any misunderstanding. Also, we are happy to

meet with NMFS staff to discuss re-formatting the information to help assess the validity of the impact assessments within the ASIP.

We will not make a decision on whether to proceed with SDIP Stage 1 until necessary environmental reviews, including ESA compliance, have been completed. The completion of ESA consultations are part of the process that will enable us to make a fully informed decision and issue notices of project approval. Only after Reclamation issues a Record of Decision and DWR issues a Notice of Determination, can the agencies move forward with the construction and operation of the gates and dredging of the channels.

We believe this response addresses your concerns and request that you proceed diligently with consultation for the project as we have defined it and as required by ESA. In our view we have provided the best available information as required by ESA and as indicated will provide further information as requested or as it is developed. If NMFS disagrees with the response in this letter, we request a meeting to discuss these issues before further action is taken. Please contact Al Candlish, Regional Planning Officer, at 916-978-5062 to discuss this further.

Sincerely,

  
FOR  
Kirk C. Rodgers  
Regional Director

Enclosures

cc: Lester A. Snow  
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**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE  
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January 11, 2007

In response refer to:  
2006/03464

Alan R. Candlish  
Regional Planning Officer  
Bureau of Reclamation  
Mid-Pacific Regional Office  
2800 Cottage Way  
Sacramento, California 95825-1898

Dear Mr. Candlish:

NOAA's National Marine Fisheries Service's (NMFS) intends to suspend formal consultation for the South Delta Improvements Program (SDIP). During the course of the project effects analysis, several areas of significant concern arose. These concerns were:

1. The interrelated aspects of the SDIP barrier construction actions with the long term operations of the Central Valley Project (CVP) and State Water Project (SWP) under the operations and criteria plan (OCAP). Analysis of the SDIP as a separate project without consideration of how it will be used under OCAP would be seen as piecemealing under the Endangered Species Act. The stated objectives and purposes of the SDIP confirm the interdependence and interrelatedness of the two projects.
  - ◆ Increase water supply to the SWP and the CVP water contractors south of the Delta by increasing diversions at the existing Clifton Court Forebay radial gates and maximizing the frequency of 8,500 cubic feet per second (cfs) pumping at the Harvey O. Banks Pumping Plant (Banks).
  - ◆ Ensure water of adequate quantity and quality for agricultural diverters within the south Delta.
  - ◆ Reduce entrainment of Central Valley fall/late fall-run Chinook salmon (*Oncorhynchus tshawytscha*) from the San Joaquin River.
2. The CalSim-II (SWP and CVP Operating Model) modeling analysis done for the SDIP is no longer in harmony with the current modeling being done for the reinitiated OCAP consultation. NMFS staff is aware of the changes being considered for the baseline programming assumptions in the reinitiated OCAP consultation, and has previously indicated that both SDIP and OCAP computer



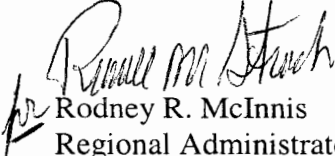
simulations must be based on the same common modeling assumptions to be valid and comparable.

3. The modeling conducted for the SDIP actions neglected to assess the use of the permanent barriers with the current level of water diversion (6,680 cfs). This modeling run is important to know since the future increase in the SWP diversion rate to 8,500 cfs is not a guaranteed action. The “baseline” modeling done with the permanent barriers under the 2004 OCAP modeling runs assumed that the diversion rate was 8,500 cfs. The “interim” period of barrier operations between completion of construction and the increase to water diversions of 8,500 cfs has not been presented to NMFS staff in the Action Specific Implementation Plan.
4. The true baseline conditions in the South Delta occur during the period between November 30 and April 7 of each year when the barriers are absent from the channels of the South Delta. The alterations in hydrology of the barrier installations from the true baseline have not been presented in a coherent fashion within the modeling run outputs.

NMFS recommends that the SDIP Stage 1 (and stage 2) actions be incorporated into the overarching OCAP action. This will avoid inconsistencies with the modeling assumptions between the two actions. In addition, by combining the two actions into one, all of the interacting effects of the two proposed actions are addressed at the same time in one consultation rather than breaking the effects into two consultations. This avoids the appearance of piecemealing the projects. Although other activities linked to OCAP have been proposed (*e.g.*, Yuba Accord water transfers, Red Bluff Diversion Dam Fish Passage Improvement Program, *etc.*), their potential effects to water operations are less clear. These activities will be evaluated for inclusion in the OCAP consultation on a case-by-case basis.

Please contact Mr. Jeffrey Stuart at 916-930-3607, or via e-mail at [J.Stuart@noaa.gov](mailto:J.Stuart@noaa.gov) if you have any questions concerning this response or require any additional information.

Sincerely,

  
Rodney R. McInnis  
Regional Administrator

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