



## United States Department of the Interior

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

JAN 25 2017



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IN REPLY REFER TO:

MP-100  
ENV-4.00

Mr. Barry Thom  
Regional Administrator  
NOAA Fisheries West Coast Region  
1201 Northeast Lloyd Blvd., Suite 1100  
Portland, Oregon 97232

Dear Mr. Thom:

Thank you for your January 19, 2017 letter providing us the National Marine Fisheries Service's (NMFS) draft of an amendment to the 2011 amended reasonable and prudent alternative (RPA) related to Shasta Reservoir operations (RPA Action Suite 1.2) from the 2009 biological and conference opinion (BiOp) on the long-term operation of the Central Valley Project (CVP) and State Water Project (SWP). As stated in your letter, we consider the document transmitted to us to be a draft, subject to further discussion and refinement.

As you are aware, the hydrologic situation in Water Year (WY) 2017 has been a tremendous improvement over the past four years. As of this date, we are currently experiencing one of the wettest water years on record. In the Sacramento River watershed, precipitation to-date for the Northern Sierra Eight-Station Precipitation Index has been over 200 percent of average, and has now exceeded the total annual precipitation of an average water year. Reclamation has been conducting flood control releases from Lake Shasta for the majority of the month of January to manage the necessary wintertime flood reserve space in the reservoir. In addition, based on data from 19 automated snow sensors throughout the northern Sierra, the snowpack is estimated at over 150 percent of average for this time of year, and almost 90 percent of the historic peak snowpack, which typically occurs near the beginning of April.

Based on the hydrologic indicators outlined above, at this time we believe that Lake Shasta is very likely to attain a storage level this spring that will be supportive of meeting the temperature management requirements contained in the current RPA Action 1.2.3.A. As a result, as of this date, we believe 2017 would be well suited for conducting a study in which the CVP is operated to meet a temperature target of 53.0° daily average temperature (DAT) near the Clear Creek Confluence as a surrogate for a target of 55.0° seven day average daily maximum (7DADM) at the most downstream winter-run redd<sup>1</sup> during the 2017 temperature management season. The

<sup>1</sup> In the event that a winter-run redd is detected considerably further downstream than the majority of the redds, an alternative strategy would be sought through discussions with the "Shasta Water Interagency Management" Team similar to that used in 2016, composed of representatives from Reclamation, NMFS, US Fish and Wildlife Service, California Department of Fish and Wildlife, California Department of Water Resources, and State Water Resources Control Board.

study must assess the efficacy of the DAT and temperature threshold. The study may help identify factors, other than temperature, that may be impacting survival of juvenile salmon migrating through the Sacramento River. Further, we believe this study, in conjunction with the data and information obtained from evaluations conducted in 2016, would provide an opportunity to further review the benefits and impacts of operating to a potential new temperature compliance location, value, and metric.

However, during the course of this study, should Reclamation determine continued implementation would adversely impact CVP/SWP operations, the environment, or other Endangered Species Act (ESA) listed species, Reclamation would suspend the study and work with NMFS to operate under the existing requirements of the BiOp, which we believe will continue to be adequately protective in a year such as this given the current state of the system and water year precipitation/snowpack.

Reclamation believes that a thorough analysis of the study, and of the elements of the draft amendment should be undertaken in 2017, as noted in your letter. This analysis would evaluate the impacts of the concepts contained in the draft amendment, including but not limited to the revised temperature management concepts, temperature-dependent mortality objectives, storage objectives, initial Keswick release schedules, and other changes to the RPA that have the potential to alter project operations. The draft amendment would be evaluated for its effects on CVP/SWP operations, other legal users of water, and river conditions for other fish species, including other ESA listed species.

The evaluation would include cooperation with CVP/SWP contractors, as required by the federal Endangered Species Act, which mandates that "Federal agencies shall cooperate with State and local agencies to resolve water resource issues..." Additionally, in the spirit of other legislation such as the Water Infrastructure Improvement for the Nation Act (WIIN Act), a concerted effort will be undertaken to include water users in a structured stakeholder engagement process similar to that identified in your letter.

Reclamation plans to provide more detailed initial comments on the NMFS draft amendment document, draft amendment memorandum, and draft science workplan, within the next two months, which will require a different schedule for the initial meeting proposed in your letter. Apart from that rescheduling, Reclamation will make every effort to adhere to the remainder of the schedule outlined. Ultimately, any decision must be based on a rigorous scientific environmental review. During the course of this year, Reclamation also believes time should be provided to further discuss how the draft amendment could be evaluated to determine whether the draft amendment is needed to avoid the CVP/SWP from jeopardizing listed species or adversely affecting designated critical habitat. In addition, we believe the broader analysis outlined above will provide an opportunity to guide the further development and refinement of those documents.

Should you have questions or wish to discuss further, please contact me at (916) 978-5000, or via email at [parroyave@usbr.gov](mailto:parroyave@usbr.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Pablo R. Arroyave".

Pablo R. Arroyave  
Acting Regional Director

cc:

Maria Rea, National Marine Fisheries Service  
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