



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
650 Capitol Mall, Suite 5-100
Sacramento, California 95814-4700

AUG 20 2015

Mr. David Murillo
Regional Director
Bureau of Reclamation
2800 Cottage Way
Sacramento, California 95825

Mr. Mark Cowin
Director
California Department of Water Resources
1416 Ninth Street
Sacramento, California 95814

Re: Contingency Plan for Water Year 2015 Pursuant to Reasonable and Prudent Alternative Action I.2.3.C of the 2009 Coordinated Long-term Operation of the Central Valley Project and State Water Project Biological Opinion – Lower Klamath River 2015 Fall Augmentation Flows

Dear Mr. Cowin:

This letter is in response to the U.S. Bureau of Reclamation's (Reclamation) August 14, 2015, letter, wherein Reclamation, in cooperation with the California Department of Water Resources (DWR), proposes to amend its action, described in the document *Updated Project Description for July -November 2015 Drought Response Actions to Support Endangered Species Act Consultations* (Project Description)¹. Under the drought contingency provisions of NOAA's National Marine Fisheries Service's (NMFS) biological and conference opinion on the long-term operation of the Central Valley Project and State Water Project (NMFS 2009 BiOp), reasonable and prudent alternative (RPA) Action I.2.3.C, Reclamation proposes to augment river flows in the Lower Klamath River with the release of up to 88 thousand acre-feet (TAF) of water from Lewiston Dam into the Trinity River (tributary to the Klamath River) to avert a fish die-off during the late summer and early fall of 2015. This volume would be comprised of a preventative action (51 TAF) and the provision of an emergency flow augmentation release (37 TAF).

¹ Available at:

http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/bor_s_june_25_2015_request_for_nmfs_concurrence_on_contingency_plan_and_sac_tmp_for_july_through_november_2015.pdf, which incorporates the project description provided in:

http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/bor_s_may_18_2015_request_for_nmfs_concurrence_on_contingency_plan_for_july_through_november_2015.pdf



Reclamation has requested NMFS concurrence that the Lower Klamath River 2015 Fall Augmentation Flow is consistent with the NMFS 2009 BiOp. In addition to the proposed action, Reclamation and DWR commit to implementing the other provisions of the updated Project Description. Likewise, NMFS expects Reclamation and DWR to implement all conditions within the associated NMFS response letter², and therefore, incorporates those documents by reference.

To support Reclamation's proposed action, Reclamation provided updated information on the current water temperature conditions and cold water storage availability in the *Biological Review: Potential Flow Augmentation Action from Lewiston Dam to Protect Adult Salmon in the Lower Klamath River in 2015* (Biological Review), enclosed in its August 14, 2015, letter. That Biological Review provided an effects analysis of the adjustments to the Project Description through the end of November. The water temperature modeling conducted as part of the Biological Review was based on an earlier flow augmentation proposal (totaling 83 TAF), which Reclamation deems to be valid for this review because the volumes only differ by 5 TAF and the general patterns of release are similar.

NMFS has reviewed the analysis, and concurs with its conclusions. In summary, NMFS concurs that the proposed Lower Klamath River 2015 Fall Augmentation Flow, as it modifies water operations described in the June 25, Project Description, remains consistent with the drought contingency procedures of RPA Action I.2.3.C. We are making this finding in consideration of Reclamation and DWR's planned operations through November 15, and the information contained in the Biological Review. Specifically:

- The intent of the proposed action is to avert a catastrophic fish die off in the Lower Klamath River due to a combination of factors related to the volume and quality of water in the river and the prevalence of an *Ichthyophthirius multifiliis* (*Ich*) epizootic.
- Implementation of the proposed action would not deplete the cold water resources for immediate use this year or any thermal protection required for coho salmon during late September and October this year. Compared to the forecasted conditions in the updated Project Description the proposed action will not appreciably change the water temperature-related effects of Trinity River flow operations on the Sacramento River winter-run and Central Valley spring-run Chinook salmon and California Central Valley steelhead spawning, egg incubation, and rearing in the Sacramento River. The proposed action is also not expected to affect the Southern distinct population segment of North American green sturgeon.
- Although there is a potential benefit to Clear Creek temperatures gained by accessing cold water at Lewiston Dam via the auxiliary bypass as planned in the proposed action, water temperature differences are not expected to have any measurable effect on spring-run Chinook salmon and steelhead or their designated critical habitats in Clear Creek.

² Available at:

http://www.westcoast.fisheries.noaa.gov/publications/Central_Valley/Water%20Operations/nmfs_determinations_on_tuc_petition_and_sacramento_river_tmp_-_july_1_2015.pdf

- The extent that the release of up to 88 TAF could affect water storage in 2016 is dependent on the water year 2016 hydrology and operational objectives. However, at this time, long range predictions of the 2016 hydrology are speculative and not expected to be accurate enough to be meaningful, as the forecast spans a time when rainfall typically occurs. If drought conditions continue through water year 2016, diversion patterns and schedules would need to be altered to ensure an adequate supply of suitably cold water is available to meet in-basin needs. The degree to which these altered management strategies would be needed would largely depend on future hydrology that is at this time very difficult to predict³.


NMFS' concurrence is conditioned based on the following:

- Reclamation and DWR shall continue to operate the CVP and SWP, respectively, according to the updated Project Description included in Reclamation's June 25, 2015, letter, and NMFS' July 1, 2015, response.
- NMFS expects there to be continued close coordination with Reclamation and DWR on current and projected operations to assess the potential need for the emergency flow augmentation release (37 TAF).
- The potential for impacts to the cold water pool in water year 2016 as a result of the Lower Klamath River 2015 Fall Augmentation Flow, as stated above, is uncertain. Reclamation shall evaluate potential carryover storage effects in consideration of forecasted operations in water year 2016 for temperature control on the upper Sacramento River and Clear Creek.

As always, we look forward to continued close coordination with you and your staff throughout this extremely challenging water year.

If you have any questions regarding this letter, please contact me at will.stelle@noaa.gov or (206) 526-6150, or Maria Rea at maria.rea@noaa.gov or (916) 930-3600.

Sincerely,


William W. Stelle, Jr.
Regional Administrator

cc: Copy to file: ARN 151422SWR2006SA00268

³ http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=22309

Electronic copy only:

Lisa Van Atta
Acting Assistant Regional Administrator
NOAA Fisheries
777 Sonoma Avenue, Room 325
Santa Rosa, CA 95404

Pablo Arroyave
Deputy Regional Director
U.S. Bureau of Reclamation
2800 Cottage Way
Sacramento, California 95825

Sue Fry
U.S. Bureau of Reclamation
801 I Street, Suite 140
Sacramento, California 95814

Ron Milligan
Operations Manager
U.S. Bureau of Reclamation
3310 El Camino Avenue, Room 300
Sacramento, California 95821

John Leahigh
California Department of Water Resources
3310 El Camino Avenue
Sacramento, California 95821

Chuck Bonham
Director
California Department of Fish & Wildlife
1416 Ninth Street
Sacramento, California 95814

Carl Wilcox
California Department of Fish & Wildlife
7329 Silverado Trail
Napa, CA 94558

Laura King-Moon
California Department of Water Resources
P.O. Box 942836
Room 115-2
Sacramento, California 94236

Dean Messer
Chief, Environmental Services
California Department of Water Resources
P.O. Box 942836
Sacramento, California 94236

Ren Lohofener
Regional Director
U.S. Fish & Wildlife Service
2800 Cottage Way, W-2606
Sacramento, California 95825

Dan Castleberry
Assistant Regional Director
U.S. Fish & Wildlife Service
2800 Cottage Way
Sacramento, California 95825

Kim Webb
Acting Field Supervisor
U.S. Fish & Wildlife Service
650 Capitol Mall, Suite 8-300
Sacramento, California 95814

Felicia Marcus
State Water Resource Control Board
P.O. Box 100
Sacramento, California 95812

Tom Howard
State Water Resource Control Board
P.O. Box 100
Sacramento, California 95812