



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

MAR 14 2018

Mr. Jeff Rieker
Operations Manager, Central Valley Project
U.S. Bureau of Reclamation
3310 El Camino Avenue, Suite 300
Sacramento, CA 95821
jrieker@usbr.gov

Dear Mr. Rieker:

ORDER 90-5 SACRAMENTO RIVER TEMPERATURE MANAGEMENT

This letter is in regard to State Water Resources Control Board (State Water Board) Order 90-5 requiring the U.S. Bureau of Reclamation (Reclamation) to maintain temperatures on the Sacramento River for the protection of fish and wildlife. I appreciate the recent discussions we have had on this matter and your willingness to work with the State Water Board. The recent drought highlighted the difficulties that exist with managing temperatures and related issues on the Sacramento River. In order to foster greater collaboration, communication, and timely consideration of management challenges, it is obvious that additional work, earlier in the water year, will be necessary. This letter identifies the specific work necessary to ensure compliance with Order 90-5 in a coordinated fashion this year and in future years.

As you know, Order 90-5 requires Reclamation to maintain a daily average temperature (DAT) of 56 degrees Fahrenheit (F) in the Sacramento River at Red Bluff Diversion Dam during times when higher temperatures will be detrimental to fish, unless factors beyond Reclamation's reasonable control prevent it from maintaining such temperatures. If Reclamation is unable to meet the temperature requirement at Red Bluff Diversion Dam throughout the temperature control season, Reclamation must develop an operations plan for approval by the Chief of the State Water Board's Division of Water Rights (Deputy Director). The plan, which is required to be developed in consultation with the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, National Marine Fisheries Service (NMFS) (collectively fisheries agencies), and the U.S. Western Area Power Administration (WAPA), must designate a location upstream of Red Bluff Diversion Dam where the temperature requirement will be met. Order 90-5 includes specific monitoring and reporting requirements in addition to a general requirement (Condition 3) that Reclamation conduct such monitoring and reporting as is required by the Deputy Director to ensure compliance with the terms and conditions of Order 90-5.¹

¹ Reclamation may, upon notice to all interested parties, petition the State Water Board to review any requirements imposed under this condition by the Deputy Director.

Managing temperatures and related issues on the Sacramento River is complex and challenging, not only during drought years, but also during other years requiring close planning and coordination. In past years, the practice of submitting a temperature management plan to the State Water Board in June has proven to be too late in the season to ensure that operations are planned in such a way as to ensure the protection of winter-run Chinook Salmon and other species in a coordinated fashion. In our recent meetings with you and other Reclamation staff, we specifically identified the need for closer and earlier coordination, planning, and monitoring and the need to coordinate between compliance with the NMFS Biological Opinion (BiOp) conditions related to Sacramento River temperature management and Order 90-5. As you know, NMFS has raised potential concerns with temperature management this year in response to Reclamation's initial water supply allocations, which also indicates a need for coordination with Order 90-5 compliance.²

Given the challenges of complying with Order 90-5, the State Water Board has determined that additional monitoring, reporting, and coordination are necessary to ensure compliance with Order 90-5. This letter specifies the additional monitoring, planning, and coordination requirements that I have determined are necessary pursuant to condition 3 and other provisions of Order 90-5. Specifically, I am requesting that Reclamation immediately begin coordinating on a regular basis with the State Water Board, the fisheries agencies, and WAPA on proposed operations for the remainder of the temperature control season. I appreciate that a Sacramento River Temperature Task Group meeting has been planned for next week in which this consultation can begin.

Based on next week's consultation and any necessary follow up consultations, Reclamation shall prepare and submit a strategy for temperature management in an initial Sacramento River temperature management plan (plan) by April 2, 2018, for my approval that identifies the measures that Reclamation will take to ensure that temperature and related impacts to winter-run Chinook salmon do not occur this year while avoiding impacts to other native species, including spring-run and fall-run Chinook salmon. The plan must be integrated with actions to implement the NMFS BiOp and must be updated with each month's hydrologic forecast or more often if reservoir temperature profile measurements or other information indicate temperature management concerns. The plan and monthly updates must be supported by temperature modeling conducted in coordination with the State Water Board and fisheries agencies and must include evaluation of alternative operational scenarios and assumptions requested by the State Water Board and fisheries agencies. The plan and updates must also identify projected operations throughout the temperature control season, including the basis for assumptions for accretions, depletions, and water supply needs for salinity control underlying those operations. Monthly updates to the plan shall be submitted within 2 weeks following receipt of runoff projections from the Department of Water Resources or more frequently as needed based on reservoir profile measurements or other conditions indicating a potential concern with temperature management.

In addition, Reclamation shall prepare a plan by April 15, 2018, in consultation with the State Water Board and fisheries agencies, for my approval identifying how Reclamation will ensure accurate, consistent, transparent, and timely monitoring and reporting of: 1) the Shasta, Trinity, and Whiskeytown reservoir temperature profiles; 2) temperature conditions in the Sacramento River; and 3) potential redd dewatering and stranding to ensure that

² Correspondence related to this matter can be found at:
http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/

impacts from flow ramping and related issues do not occur this year. Specifically, Reclamation must provide weekly reservoir temperature profile measurements and isothermobaths for Shasta Reservoir and bimonthly measurements for Trinity and Whiskeytown reservoirs in digital format. In addition, Reclamation shall provide daily temperature measurements of Keswick releases, and the Sacramento River at Clear Creek and Balls Ferry.

To ensure that we are well coordinated in future years, I also request that, in coordination with State Water Board staff and fisheries agency staff, Reclamation develop an updated protocol for conducting temperature monitoring, modeling, planning, and reporting pursuant to Order 90-5 that provides for coordination with the fisheries agencies and WAPA. I request Reclamation to submit the plan for my approval by November 1, 2018. That protocol should include the submittal of an initial temperature management plan to the State Water Board that identifies the strategies that Reclamation will employ to ensure that the requirements of Order 90-5 are met prior to initial water supply allocations in February, and updates to that plan throughout the temperature control season. The protocol should also provide for coordination with the NMFS BiOp process to avoid potential redundancy and unnecessary conflicts.

The State Water Board appreciates your cooperation on these matters and looks forward to working with you further to ensure compliance with Order 90-5. If you have any questions regarding this letter, please contact Diane Riddle at diane.riddle@waterboards.ca.gov or (916) 341-5297.

Sincerely,

ORIGINAL SIGNED BY:

Erik Ekdahl, Deputy Director
Division of Water Rights
State Water Resources Control Board