May 21, 2021

Kristin White
Central Valley Project Operations Manager
U.S. Bureau of Reclamation
knwhite@usbr.gov

ORDER 90-5 SACRAMENTO RIVER DRAFT TEMPERATURE MANAGEMENT PLAN

Dear Ms. White:

This letter provides comments on the Draft Temperature Management Plan (TMP) submitted by the U.S. Bureau of Reclamation (Reclamation) on May 5, 2021, pursuant to State Water Resources Control Board (State Water Board or Board) Water Right Order 90-5. The Draft TMP was based on an April 1 operations forecast at the 90 percent hydrologic exceedance level. The Draft TMP did not reflect updated hydrologic conditions that degraded significantly between the April 1 Department of Water Resources (DWR) Bulletin 120 forecast and the May 1 DWR forecast, resulting in nearly 700 thousand acre-feet (TAF) less projected inflow to the Sacramento River Watershed.¹

Since submittal of the Draft TMP, there has been significant coordination among Reclamation, DWR, the State Water Board, state and federal fisheries agencies, and water users to address these shortfalls, water supply concerns, and temperature management on the Sacramento River. Our understanding is that actions are being taken to achieve a minimum end of September storage target of 1.25 million acre-feet (MAF) and that this storage target will be reflected in the final TMP submitted next week. Based on the extensive coordination, analysis, and information sharing that has occurred among the agencies over the last few weeks, a 1.25 MAF end of September

¹ The Bulletin 120 forecast also identified 100 TAF less inflow to the San Joaquin River Watershed. There have also been further reductions in expected inflows to the Sacramento River Watershed since the May 1 Bulletin 120 was issued.
carryover storage target represents a reasonable balance between temperature control this year, maintaining some carryover storage going into next year, and providing for consumptive water supply needs.

This minimum 1.25 MAF end of September storage target would both address the reductions in inflows expected for the Sacramento River and provide a modest increase in storage that will improve temperature control on the Sacramento River this year as compared to what would be achieved by the draft TMP if that plan were implemented under the current hydrologic conditions. While there is still uncertainty, modeling from the National Marine Fisheries Service Southwest Fisheries Science Center indicates that these end of September storage levels and associated operations could provide for temperature dependent mortality (TDM) levels for winter-run Chinook salmon eggs as low as 50 percent (with a range up to over 80 percent). This is compared to estimated best case TDM levels of nearly 80 percent (with a range up to nearly 85%) for Reclamation’s proposed operations under the draft TMP with the reductions in inflows projected in the May hydrology update (end of September storage level under 1 MAF).

Given the information summarized above, I will not approve Reclamation’s TMP if it does not include the following:

- An end of September carryover storage requirement of at least 1.25 MAF. Of course, the Board recognizes that the carryover storage requirement will only be one of the actions outlined in the TMP, and that other reasonable temperature control measures will also be used to optimize temperature control.

- A description of the operations, including releases from Shasta and Keswick, and deliveries to contractors, that will be implemented to achieve the carryover requirement in a manner that will not impact critically low storage levels in other Project reservoirs (including Trinity, Folsom, and Oroville Reservoirs). We recognize that preserving systemwide carryover storage will depend in part on the ongoing efforts to manage this year’s limited water supplies in collaboration with the State Water Board, other state and federal agencies, and water users in the watershed.

- A provision that Reclamation will report to the Executive Director in writing within 2 business days in the event that Reclamation’s operations deviate from those outlined in the plan. The report would explain why actual operations deviated from the TMP, address whether the carryover storage requirements and other TMP objectives will be achieved, and include a plan to address any deficiencies within Reclamation’s reasonable control.

- A provision for consultation on real-time management on a weekly basis with staff from the fisheries agencies, the State Water Board, and other appropriate entities to optimize real time temperature management for the protection of fish
and wildlife, including winter-run and fall-run Chinook salmon, and other native species.

- A provision for monitoring, modeling, and other evaluations needed to ensure that temperature management actions are optimized and in order to inform future management actions.

Failure to obtain the Board’s approval of the TMP and to operate Shasta Dam and Reservoir in accordance with the TMP as approved during periods when elevated temperatures are detrimental to the fishery would constitute a violation of Reclamation’s water right permits and licenses, and Reclamation could be subject to enforcement action.

The State Water Board appreciates the significant coordination that has occurred to date to address the shortages in supplies that have manifested (including groundwater substitution, delayed transfers, and increased releases from New Melones Reservoir). The State Water Board is committed to continue to work with Reclamation, other state and federal agencies, and other parties to take actions to address the critically dry conditions this year, including taking actions related to water unavailability and needed temporary urgency change requests to modify water right requirements.

If you have any questions regarding this letter, please contact Diane Riddle at diane.riddle@waterboards.ca.gov. Please be aware that due to the public health concerns regarding the COVID-19 virus and the resulting pandemic, many State Water Board staff are telecommuting; therefore, the best avenue of communication at this time is via email.

Sincerely,

ORIGINAL SIGNED BY

Eileen Sobeck
Executive Director
State Water Resources Control Board