

## United States Department of the Interior

BUREAU OF RECLAMATION Central Valley Operations Office 3310 El Camino Avenue, Suite 300 Sacramento, California 95821



CVO-100 2.2.4.23 April 17, 2020

VIA ELECTRONIC MAIL

Ms. Eileen Sobeck Executive Director State Water Resources Control Board 1001 I Street Sacramento, CA 95814

Subject: Order 90-5 Sacramento River Temperature Management Plan, Your Letter Dated

April 3, 2020

Dear Ms. Sobeck:

This letter is in response to your letter of April 3, 2020 regarding Water Rights Order 90-5 and Sacramento River Temperature Management Planning. As you are aware, Water Rights Order 90-5 provides that Reclamation will "report any change in the location where it will meet the temperature requirement" of 56°F on the Sacramento River and to "file an operation plan showing Permittee's strategy to meet the temperature requirement at the new location."

Order 90-5 recognizes that temperature objectives are highly dependent on a variety of factors, including the amount of water in storage, ambient air temperatures, tributary inflow and other factors. The order further provides that "it is necessary that the length of the reach to be protected be flexible" and that "maximiz[ing] salmon production with a limited supply of water will require careful planning" in order to avoid running out of cool water late in the season. Reclamation's new plan follows that approach.

Separately, but also addressing Shasta temperature management, the National Marine Fisheries Service (NMFS) issued a new biological opinion in October 2019. Reclamation worked with NMFS' experts and incorporated the best available science to develop a strategy that will make the best use of the available cold water pool at Shasta Dam. Reclamation's 2020 Record of Decision (ROD) provides that Reclamation will submit a cold water management plan to NMFS, based on feedback and recommendations from the Sacramento River Temperature Task Group (SRTTG). We continue to welcome input and feedback from the State Board staff through

SRTTG meetings and correspondence where all members have an opportunity to weigh in and discuss issues.

Consistent with the objectives of Order 90-5, the 2020 revised operations plan adopted in the ROD provides better cold water management at Shasta Reservoir to directly benefit incubating salmon eggs and avoid running out of cold water later in the year. It prioritizes the use of cold water based on metabolic needs of salmon eggs for dissolved oxygen. The tier-based system focuses the coldest water temperatures on the most critical egg incubation life stages in years when the availability of cold water is limited.

On April 13, 2020, Reclamation preliminarily determined that water year 2020 will be a Shasta Critical year due to poor hydrology since January. This poor hydrology is also an indicator that availability of cold water in 2020 will be limited. Responding to those hydrological conditions, Reclamation has worked proactively over the last few months with SRTTG and with your staff to provide updates on Shasta storage and cold water pool. That includes providing screening model simulation results that should help define the Shasta Cold Water Management Tier system that has been established as part of the new BiOp.

In connection with the Board's request to evaluate scenarios that would meet Tiers 1 and 2 in the new BiOp, the Central Valley benefited from wet weather and significant snowpack in late 2019, but precipitation and snowpack have been and are forecasted to remain below average in 2020. Accordingly, Reclamation is currently evaluating operating Shasta Dam's Cold Water Pool Management to Tier 3, as described in the new BiOp. If the hydrology and temperature updates suggest that operating to a colder tier is possible, this will also be evaluated and coordinated with SRTTG.

Reclamation is undertaking an extensive modeling effort to support the plan and suggests that you review the plan first before determining that more information is needed. In addition, Reclamation's view is that your request for multiple modeling scenarios of actions "within Reclamation's control" is inconsistent with Order 90-5, which requires that Reclamation "file an operation plan showing [its] strategy to meet the temperature requirement at the new location." It is also inconsistent with Reclamation's limited discretion regarding such contracts with senior water users and wildlife refuges.

Reclamation will continue to coordinate and communicate with the SRTTG to maximize Winter-Run Chinook Salmon redd survival by targeting the coldest water temperature during the hatching period, consistent with the 2019 BiOp. Our draft temperature management plan will be shared with SRTTG on April 23 and will be based on Reclamation's operational outlook based on meeting our requirements and the 90% exceedance hydrology from the April forecast. The draft plan will also include input from the SRTTG over the last month. Reclamation anticipates that the plan will accomplish the objectives set out in Order 90-5.

Reclamation concurs with the need for a temperature management planning protocol consistent with Reclamation's and the Department of Water Resources' 2019 BiOps and Order WR90-5.

In coordination with the State and Federal fishery agencies, Reclamation developed a Shasta Cold Water Pool Management Guidance Document for implementing this component of the 2019 BiOp. This document was shared with the State Water Resources Control Board on April 2, 2020. This document details the processes and protocols for monitoring and reporting throughout the year.

In closing, Reclamation looks forward to working with you and your staff as we manage water resources and temperature this water year. Should you have questions or wish to discuss further, please feel free to contact me at knwhite@usbr.gov or (916) 979-2199.

Sincerely,

Kristin N. White Operations Manager

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