



## United States Department of the Interior

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

IN REPLY  
REFER TO:

CVO-400  
WTR-4.10

**APR 02 2018**

VIA ELECTRONIC MAIL ONLY

Mr. Erik Ekdahl  
Deputy Director  
Division of Water Rights  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100

Re: Order 90-5 Sacramento River Temperature Management, Your Letter of March 14, 2018

Dear Mr. Ekdahl:

Per your letter of March 14, 2018, the State Water Resources Control Board (SWRCB) has requested a “strategy for temperature management in an initial Sacramento River temperature management plan by April 2, 2018” for your approval. At the first Sacramento River Temperature Task Group (SRTTG) meeting held on March 22, 2018, SWRCB staff clarified that the intent of the initial strategy due by April 2 was an overall description of the Bureau of Reclamation’s (Reclamation) intent for development of a temperature management plan, rather than a more operationally detailed plan itself. This letter provides that strategy.

Reclamation’s strategy for temperature management for the 2018 season will consist of using the SRTTG as the primary forum for developing this year’s Sacramento River Temperature Management Plan (TMP). At the SRTTG meeting held on March 22, the results of a preliminary temperature analysis based on March 1, 2018, hydrology were presented to the group and it was emphasized that the March 1 hydrology reflected a very dry scenario (due to lack of precipitation in February). As a result, the analysis had diminished value because it did not account for storms that occurred during the month of March. We are anticipating an improved forecast for the April 1 hydrology and will be performing a complete reassessment of operations and temperature management in April.

In addition to the regularly scheduled SRTTG meetings, we are planning a technical meeting of the agencies identified in your letter to discuss overall Central Valley Project (CVP) operations and the development of the TMP. This meeting will also highlight the implications to the rest of the CVP by specific operations for winter run on the Sacramento River and potential impacts to

other native species. The meeting is scheduled for April 19, 2018, in order to utilize the Department of Water Resources' April 1 hydrology information (anticipated to be available the second week of April), as well as Reclamation's initial operational forecasting based on that updated hydrology information. In addition to the technical meeting, Reclamation is planning to host a stakeholder workshop on Water Year 2018 Sacramento River Temperature Management in the latter part of April. Workshop details will be distributed to stakeholders in early April. We plan on having an initial draft temperature plan by the week of April 23 to accommodate SRTTG and stakeholder input into the TMP.

Based on previous forecasting, we recognize that there is a chance that this year may present challenges to meeting a 56° F daily average temperature target at Balls Ferry, and we are not currently contemplating a pilot study similar to last year's given the limited cold water pool available at Shasta for 2018. We hope to develop a TMP that accomplishes:

- reasonable early-season temperature management given the potential for warm side inflows downstream of Clear Creek and upstream of Balls Ferry
- a temperature compliance point that can be realistically managed throughout the season

We look forward to working with you and the SWRCB as we work through the development of this year's TMP.

Your March 14, 2018, letter also requests the development of a monitoring and reporting plan by April 15, 2018, in consultation with the SWRCB and fisheries agencies. We plan to provide this plan in the coming weeks, but as we work with SWRCB staff and others in the development of this plan, we wanted to make you aware of the wealth of information on our Central Valley Operations Office website pertaining to Sacramento River temperature and flows. The information displayed includes daily mean water temperature, release flow rates and air temperatures for various locations in numerical and graphical form, and isothermobath plots for Shasta, Whiskeytown, and Trinity Reservoirs. The direct link for daily information (updated on business days) is: <https://www.usbr.gov/mp/cvo/vungvari/sactemprrpt.pdf>

Daily information is also summarized by month from 1996 to the present and is available here: <https://www.usbr.gov/mp/cvo/temperature.html>

We intend to provide temperature profile measurements for Shasta, Whiskeytown, and Trinity Reservoirs as shown in the following table:

Reservoir	Every Month	Every Two Weeks	Every Week	Comment
Shasta	01/01 – 03/01 12/1 – 12/31	03/01 – 05/01 11/15 – 12/01	05/01 – 11/15	25 ft intervals for "Every Month", otherwise 5 ft intervals
Whiskeytown	01/01 – 12/31			25 ft intervals
Trinity	01/01 – 12/31			25 ft intervals

The time and depth intervals are linked to the historical stratification and de-stratification of the lakes. When de-stratified and temperature management is inactive, a finer resolution of the thermal profile is not needed.

We believe that monthly temperature profiles for Whiskeytown and Trinity are sufficient to capture the thermal dynamics; both have limited abilities to actively manage selective withdrawal and the cold-water-pool volume does not rapidly change for most of the year. We will post the corresponding isothermobaths on our daily website identified above as soon as the information becomes available.

We intend to work closely with you to meet the objectives of Order 90-5. Please contact me at 916-979-2197 if you have any questions regarding this letter.

Sincerely

A handwritten signature in blue ink, appearing to read 'Jeff Rieker', is written over a faint, illegible printed name.

Jeff Rieker  
Operations Manager