



United States Department of the Interior

BUREAU OF RECLAMATION

Central Valley Operations
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IN REPLY REFER TO:

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VIA ELECTRONIC MAIL

Mr. Erik Ekdahl
Deputy Director, Division of Water Rights
State Water Resources Control Board
1001 I Street, 14th Floor, Office 54
Sacramento, CA 95814

Subject: Evaluation of Alternatives to the Shasta Reservoir Final Temperature Management Plan

Dear Mr. Ekdahl:

We received the State Water Resources Control Board's (Water Board) June 10 letter documenting no objection to the May 28, 2021 Final Temperature Management Plan (TMP). Reclamation recognizes the need to be flexible and collaborative in the extreme conditions this year and the challenges in meeting multiple competing objectives with 1 MAF less inflow to Shasta than our recent prior experience in 2015. Should the Water Board have additional future input on the location upstream of Red Bluff Diversion Dam for operating to 56°F, or other ideas on temperature and drought, we welcome the coordination.

The Water Board letter requested a rapid evaluation of alternatives to the TMP in coordination with the Department of Water Resources, Water Board, and fisheries agencies. Actions taken to support the development of the TMP, such as a significant warm-water power bypass and delayed delivery of transfer water, are included in the Temperature Management Plan. Other alternatives, such as modifying the pattern of Trinity River diversions, have been evaluated by various SRTTG members and discussed at the regular SRTTG meetings. The May drought contingency plan, completed May 28th, identified several actions should conditions be drier than anticipated. Some of these actions are either being implemented currently or are being considered for implementation as additional actions to preserve Shasta storage. The actions are listed below with their latest status.

- Increased releases from New Melones Reservoir – New Melones was increased to 1,500 cfs to protect storage in other upstream reservoirs, including Shasta Reservoir on June 7th.
- Increased releases from Lake Oroville – Lake Oroville releases were increased to 2,750 cfs to protect storage in other upstream reservoirs, including Shasta Reservoir, on June 16th.

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- Reduction of storage at Whiskeytown Reservoir – Reclamation is beginning the NEPA process to analyze reducing the storage in Whiskeytown Reservoir to preserve Shasta storage. This process is expected to be complete with a decision by August 31st. If implemented, this action is expected to take place in September.
- Reclamation and DWR are actively working on water purchases and re-operation agreements to provide additional flexibility within the system and preserve storage in upstream reservoirs, including Shasta Reservoir. The details of these actions will be reported in the monthly drought contingency plan updates.
- Requests for additional voluntary reductions from senior water right holders – Reclamation has been continuously working with the senior water right holders within the Sacramento Valley. Cooler weather in early June combined with appropriately timed groundwater pumping may result in additional voluntary reductions along the Sacramento River. The details and status of this action will be reported in the June drought contingency plan update.
- Short-term reductions in exports to meet unexpected Delta salinity conditions – Reclamation, in coordination with DWR, began a one-facility export operation on June 10th to further reduce exports by approximately 250 cfs. This action is not expected to be sustainable throughout the summer; however, may be used intermittently to address salinity concerns while limiting increases of upstream storage releases.
- Coordination with the Water Board for consideration of additional curtailments – Reclamation and DWR will continue to coordinate with the Water Board and support curtailments where appropriate based on water availability throughout this summer to conserve upstream storage for both water years 2021 and 2022.

The June 10th letter also requests a response to stakeholder proposals. Reclamation has not received any alternative proposals from stakeholders since the final Temperature Management Plan but is aware of one letter to the Water Board submitted between the draft and final temperature management plans with alternative water operations for addressing temperature management. The evaluation of the Proposed Alternative included in the California Sportfishing Protection Alliance et al. (CSPA) letter to the Water Board dated May 23, 2021 is listed below. As a general response, this proposal removes over 500 TAF from the Sacramento-San Joaquin system during the critical summer season. While the required deadline for this letter did not allow for specific modeling of this proposal, responses based on Reclamation’s experience within the system are explained below.

1. Limit June-through-October releases from Shasta-Keswick dams to 5000 cfs, using primarily cold-water pool, to maintain Keswick release at less than 54°F.

Response: Reclamation interprets this proposal to significantly reduce the volume of water being imported to the Sacramento River from the Trinity River watershed to a total of 300 cfs coming through Clear Creek only and to significantly decrease the total releases at Keswick to 5,000 cfs. A Keswick release of 5,000 cfs from June through October while maintaining 3,500-4,000 cfs at Wilkins Slough would not meet downstream diversions by both municipal and industrial contractors and senior water right holders. Decreasing flows further at Wilkins Slough would limit access to available water along the Sacramento River and limit the contribution to the Delta; placing a higher burden on another CVP or SWP reservoir.

2. Eliminate June-through-October use of the Spring Creek power tunnel between Whiskeytown and Keswick reservoirs.

Response: Reclamation interprets this proposal to significantly reduce the volume of water being imported to the Sacramento River from the Trinity River watershed to a total of 300 cfs coming through Clear Creek only and to significantly decrease the total releases at Keswick to 5,000 cfs. Reduced diversions from Trinity River basin will significantly warm Whiskeytown and impact ability to meet temperature objectives on Clear Creek at Igo. In addition, the reduced diversions would likely increase the residence time in Lewiston, causing increases in temperature down the Trinity River.

3. Maintain June-through-October flow of 300 cfs to Whiskeytown Reservoir through the Carr powerhouse, increase June-October releases to Clear Creek to 300 cfs, and increase June-October releases from Trinity-Lewiston dams to the lower Trinity River to 800-870 cfs

Response: See previous response above. In addition, a higher Trinity River release below Lewiston Dam would exceed the 2000 ROD flow volume for a critical water year. Per the 2000 ROD, "... the schedule for releasing water on a daily basis, according to that year's hydrology, may be adjusted but the annual flow volumes established in Table 1 may not be changed." Flows beyond those identified in the 2000 ROD (or the separate Record of Decision such as the 2017 ROD for the Long-Term Plan to Protect Adult Salmon in the Lower Klamath River) has not been analyzed. Although this proposal was developed to address temperature issues on both the Sacramento River and Trinity Rivers, the proposal also references the 2018 operation during the Carr Fire as evidence that this could result in improved temperature management. Given the unique operations and conditions during the Carr Fire, there is significant uncertainty in whether these operations would result in similar temperatures. Additionally, a flow of 300 cfs in Clear Creek may have fishery impacts when flows are reduced in the fall.

These alternative actions and the response to CSPA were raised at the Thursday June 17, 2021 Sacramento River Temperature Task Group for coordination and input from agencies. Water Operations are coordinated near daily with DWR and multiple times per week with fish agencies. Reclamation continues to operate for temperature, senior water rights, health and safety, and Delta objectives. Reclamation's allocation to agricultural water service contractors is zero and deliveries to municipal and industrial contractors are at or near health and safety levels. Reclamation has taken all reasonable actions within its authority to maximize the water available for temperature management.

Sincerely,

Kristin N. White
Operations Manager