



IN REPLY REFER TO:

United States Department of the Interior

BUREAU OF RECLAMATION

Central Valley Operations
3310 El Camino Ave #300
Sacramento, California 95821



CVO-400
2.2.4.21

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: 2021 Draft Sacramento River Temperature Management Plan

Dear Mr. Ekdahl:

Reclamation provides the enclosed Draft Sacramento River Temperature Management Plan (Draft Plan) for Water Year 2021 pursuant to the 2020 Record of Decision and 2019 Biological Opinions on the coordinated Long-Term Operation of the Central Valley Project and State Water Project as a courtesy to the State Water Resources Board prior to the development and submittal of a Sacramento River Temperature Management Plan (Final Plan) in consultation through the Sacramento River Temperature Task Group (SRTTG), of which the State Water Board is a member.

The Draft Plan shows an operation based on April 1 conditions using 90% hydrology and a reservoir temperature profile from April 14, 2021. Updated hydrology after April 14 show drier conditions, which will be included in the Final plan as well as updated temperature and TDM modeling based on the updated hydrology. At the same time, a warm-water power bypass will preserve cold water pool while river temperatures allow and efforts with senior water right holders to allow for delayed or reduced releases from Shasta Reservoir may improve temperature capabilities. Reclamation will work with the State Water Board on managing uncertainties and estimating risks, including considering a 99% hydrologic condition. The Draft Plan describes the potential strategy Reclamation would use to manage temperatures.

The Draft Plan includes two candidate scenarios: 1.) Maintaining 56°F starting June 1 for the longest duration possible at the SAC gage (Highway 44 Bridge); and 2.) An effort to shape the temperature management season to better meet fishery needs. Shaping, as described in the “Temperature Strategy” of the enclosure, considers the following objectives that would benefit from further input and discussion in response to this Draft Plan and through the SRTTG:

INTERIOR REGION 10 • CALIFORNIA–GREAT BASIN

CALIFORNIA*, NEVADA*, OREGON*

* PARTIAL

1. Fall Conditions: End of September cold water pool volume and/or the date for the first use of side gates to manage risks during the fall period. These variables establish how much of the cold-water volume will be used in the summer.
2. Critical Egg Incubation Stages: Shoulder temperatures that, if warmer, may provide colder water during more sensitive stages of egg development. This variable helps assess the timing of the side gates.
3. Life History Timing Diversity: The duration versus value of the temperature target during months where colder water may be desirable for minimizing mortality versus a longer window that may better protect life history timing diversity. This variable helps consider the duration of colder temperatures upstream.
4. Life History Spatial Diversity: The furthest downstream extent to target. This variable helps consider the location of colder temperatures upstream.
5. Management Strategies: Targeting average temperatures versus using more cold water to avoid exceedances. This variable establishes a tolerance for meteorological-driven exceedances at a cost of a shorter or warmer temperature window.

Water Year 2021 is the driest on record since 1977 with a limited cold-water pool and a need to make difficult tradeoffs between fisheries needs. Water rights (managed by the State), statutory obligations, tribal trust, and contractual requirements control operations at Shasta Reservoir. Full shortage provisions are in effect for all senior water right settlement agreements. Agricultural allocations are effectively zero with municipal and industrial allocations at 55% of historical use or public health and safety, whichever is greater. We appreciate the weekly and sometimes daily coordination with our partner agencies in managing through these extreme hydrologic conditions.

Sincerely,

Kristin White
Operations Manager

Enclosures