



April 15, 2021

Joaquin Esquivel, Chair
Members of the Board
State Water Resources Control Board
Via electronic mail to commentletters@waterboards.ca.gov

Subject: **04/20-21/2021 BOARD MEETING/BOARD WORKSHOP – ITEM #10**
2021 Sacramento River Temperature Management

Dear Chair Esquivel and members of the Board:

Save California Salmon submits these comments on the pending 2021 Temperature Management Plan affecting temperatures in the Sacramento and Trinity Rivers. We urge you to ensure that the Trinity River is adequately protected.

Save California Salmon is concerned about survival of salmon in the Sacramento, Trinity and lower Klamath Rivers and we encourage you only approve a temperature management plan that ensures adequate cold water supplies are available for the protection of fish in all these rivers. Since all other parties are commenting on Sacramento River protections, we will focus our comments on the Trinity and Lower Klamath rivers.

Most of the focus of the 2021 Temperature Management Plan is on temperatures in the Sacramento River. However, we remind the Board that Water Right Order 90-5 contains a “do not harm” clause for the Trinity River on pages 61-62:

"Permittee shall not operate its Trinity River Division for water temperature control on the Sacramento River in such a manner as to adversely affect salmonid spawning and egg incubation in the Trinity River. Adverse effects shall be deemed to occur when average daily water temperature exceeds 56OF at the Douglas City Bridge between September 15 and October 1, or at the confluence of the North Fork Trinity River between October 1 and December 31 due to factors which are

*(a) controllable by permittee and
(b) are a result of modification of Trinity River operations for temperature control on the Sacramento River.*

If the temperatures in the Trinity River exceed 56OF at the specified locations during the specified periods, Permittee shall immediately file with the Chief of the Division of Water Rights a report containing project operational data sufficient to demonstrate that the exceedance was not due to modifications of Trinity River operations for water temperature control on the Sacramento River. If, within fifteen days, the Chief of the Division of Water

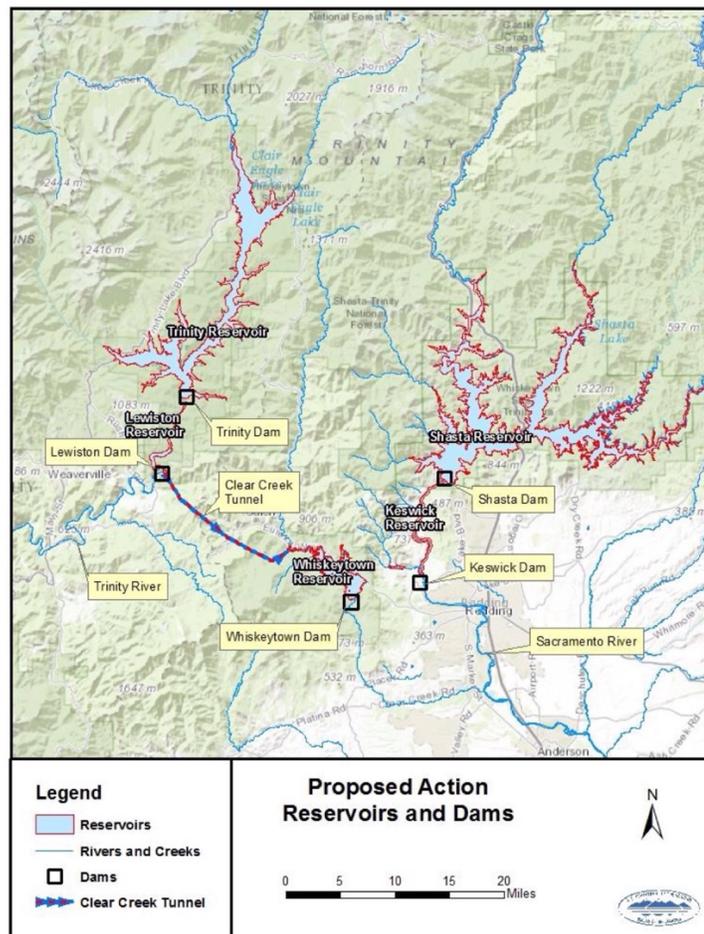
Rights does not advise Permittee that it is violating this condition of its water right, Permittee shall be deemed not to have caused the exceedance in order to control temperature on the Sacramento River.

This term is not to be construed as interfering with the U. S. Department of Interior Andrus Decision dated January 14, 1981 relative to Trinity River releases."

The Trinity River is the largest natural tributary of the Klamath River but it is also an artificial tributary of Clear Creek and the Sacramento River. The Trinity River Division of the CVP is scheduled to deliver over 400,000 AF of water to the Sacramento River this year via Lewiston Reservoir, Whiskeytown Reservoir and Keswick Reservoir. This is a substantial block of water, especially during drought.

The transfer of Trinity River water to the Sacramento River is problematic from the perspective of temperature control. See Figure 1. Trinity River water can heat significantly in Lewiston and Whiskeytown reservoirs, negatively impacting temperatures on both rivers. The Trinity River is in an unfortunate situation of needing a certain amount of water exported to the Sacramento River in order to keep it cold. The heating of water in Lewiston Reservoir can occur when there is inadequate turnover due to lower exports of water to the Sacramento River.

Figure 1



Conversely, the export of Trinity River water to the Sacramento River during the hotter summer months can significantly heat the Sacramento River, primarily due to heating in Whiskeytown Reservoir. The conundrum is that in order to keep the Trinity River cold, warm water is discharged into the Sacramento River.

Unlike Shasta Dam with a temperature control device, Trinity Dam has no TCD. The power outlets on Trinity Dam are significantly higher in elevation than the auxiliary outlet at the bottom of the dam. The result of this arrangement is that when Trinity Reservoir water levels get below about 900,000 acre-feet, the power outlets take in warmer water from the upper thermocline in the reservoir, which leads to heating of the discharges.

The 2000 Trinity River Biological Opinion for the Trinity River Restoration Program by the National Marine Fisheries Service¹ requires Trinity Powerplant bypasses to maintain Trinity River temperatures during low reservoir storage. These same powerplant bypasses will also help ensure that Trinity River water exported to the Sacramento River is also cold. We encourage the SWRCB to ensure that Trinity powerplant bypasses are included in Reclamation's Temperature Management Plan.

However, despite the installation and operation of temperature curtains in Whiskeytown Reservoir, Trinity River water discharged into Keswick Reservoir during hot summer months can be several degrees warmer than Shasta Dam discharges. Therefore, it is important to minimize Trinity River exports to the Sacramento River during hotter months to the minimum amount necessary to keep Lewiston Reservoir and the Trinity River cold.

In addition to providing water to the Trinity and Sacramento rivers, the Trinity River is also called upon to provide additional flows to the Lower Klamath River during periods of drought. The 2017 Record of Decision for the Long-Term Plan to Protect Adult Salmon in the Lower Klamath River² allows release of additional Trinity Reservoir water during late summer and the fall in order to prevent a repeat of the historic 2002 Lower Klamath fish kill. Given the historic dry conditions in the Klamath Basin it is imperative that adequate quality and quantity of water from Trinity Reservoir be available this year and in future years.

In summary, Save California Salmon recommends that the SWRCB reject any temperature management plan that does not adequately protect the Trinity River and the Lower Klamath River.

Sincerely,



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¹ See https://www.fws.gov/arcata/fisheries/reports/technical/TREIS_BO_NMFS.pdf

² See https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=22021