



Trinity River Restoration Program

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VIA ELECTRONIC MAIL ONLY

Memorandum

To: James Lee, Interdisciplinary Team (IDT) Coordinator
Mike Dixon, Executive Director

From: Ken Lindke (CDFW), Seth Naman (NOAA), Kyle De Juilio (Yurok Tribe), Galen Anderson (USFS)

Subject: Water Year 2024 Flow Recommendation

This memorandum serves to inform the IDT that as Flow Workgroup members, the authors of this memorandum do not have a recommendation on how to release the remaining Trinity River water year 2024 water volume. As the TMC and others are aware, the large flow releases in the spring, which were intended to meet multiple purposes, reduce the growth of juvenile salmonids due to hypolimnetic releases from Trinity Reservoir causing unnaturally low water temperatures. As a result, Chinook salmon smolts are now smaller than they were before the ROD (see Pinnix et al 2022), likely reducing their downstream survival probability.

Additionally, continued fine sediment inputs from Deadwood Creek in recent years have likely increased mortality of millions of salmonid eggs deposited in the Trinity River since the Carr Fire in 2018 (see Buxton 2021). This occurs because low, simplistic flow releases from Lewiston Dam in the winter are unable to mobilize fine sediment delivered from tributaries, causing silt to blanket the riverbed, covering salmonid redds, and thereby depriving eggs of oxygen. This problem would have been ameliorated in recent years if the Winter Flow Variability (WV) had been implemented, as was recommended. These are just a few among a suite of impacts that degrade the hydrologic function of the Trinity River and reduce its ability to support salmonids and other important species.

While it is recognized that the TMC has a responsibility to provide a recommendation to the Department of Interior, and Reclamation has ultimate discretion regarding flow management, a technical recommendation that is not based on the best available science is unsupportable. The Flow Workgroup provided consensus recommendations to the TMC for water year 2024 flow management at their September and December 2023 meetings, and again at a special TMC meeting in January to accommodate constraints requested by Trinity County. These consensus recommendations were to implement WV (Abel et al 2022) based on the best available science

within constraints of existing legal coverage (USFWS, USBR, HVT and Trinity County 2000; NMFS 2000). The WFV proposal was also reviewed and supported by the Trinity River Restoration Program (TRRP) Science Advisory Board.

The TMC did not accept the Flow Workgroup recommendations, citing reasons beyond technical and scientific considerations. As TRRP scientists, our role is to offer advice based on the best available science to achieve the TRRP's core objectives within the legal parameters outlined in the 2000 Record of Decision (ROD). This decision document mandates (page 15) the TMC to enact the Adaptive Environmental Assessment and Management (AEAM) program, which includes managing variable annual instream flows—a key focus of the WFV.

The successful partial implementation of WFV in 2023 highlighted that these technical recommendations comply with TRRP's legal boundaries, indicating that the TMC's decision to reject the WFV for 2024 is based on policy, not on the scientific counsel provided by the Flow Workgroup. Consequently, the WFV remains as the technical recommendation based on the best available science. While it is acknowledged the TMC's role is advising the Department of Interior and that Reclamation has ultimate authority over flow decisions, TMCs recommendations should be grounded in science.

The TMC's inability to implement the WFV program, even with efforts to compromise and despite the knowledge of likely harm to the species in the Trinity River, is not consistent with the requirements of the ROD or NMFS (2000) and undermines the two fundamental goals of the TRRP.

References

Abel, C. E., K. De Juilio, K. T. Lindke, S. Naman, and E. E. Thorn. 2022. Trinity River winter flow project. Report for the Trinity River Restoration Program (TRRP). TRRP, Weaverville, California. Available: <https://www.trrp.net/library/document?id=2566>.

Buxton, T. H. 2021. History of fine sediment and its impacts on physical processes and biological populations in the restoration reach of the Trinity River, CA. Report TRRP-2021-1 for the Trinity River Restoration Program (TRRP). Trinity River Restoration Program, Weaverville, California. Available: www.trrp.net/library/document?id=2483.

National Marine Fisheries Service (NMFS). 2000. Biological opinion for the Trinity River mainstem fishery restoration EIS and its effects on southern Oregon / northern California coast coho salmon, sacramento river winter-run chinook salmon, central valley spring-run chinook salmon, and central valley steelhead. National Marine Fisheries Service, Southwest Region, Long Beach, California. Available: <https://www.trrp.net/library/document?id=1240>.

Pinnix, W. D., S. P. Boyle, T. Wallin, T. Daley, and N. A. Som. 2022. Long-Term Analyses of Estimates of Abundance of Juvenile Chinook Salmon on the Trinity River, 1989-2018. Arcata Fisheries Technical Series Report TS 2022-40, report for the Trinity River Restoration Program (TRRP). U.S. Fish and Wildlife Service, Arcata, California. Available: <https://www.trrp.net/library/document?id=2571>.

U.S. Department of Interior (DOI). 2000. Record of decision, Trinity River mainstem fishery restoration final environmental impact statement/environmental impact report. U.S. Department of Interior, Washington D.C., Washington D.C. Available: <https://www.trrp.net/library/document?id=227>.

U.S. Fish and Wildlife Service (USFWS), U.S. Bureau of Reclamation (USBR), Hoopa Valley Tribe, and Trinity County 2000. Trinity River mainstem fishery restoration final environmental impact statement/environmental impact report [Public Draft and Final]. October, 2000. State Clearinghouse No. 1994123009. USFWS, Sacramento, California. Available: <https://www.trrp.net/library/document?id=1238>.