

Northwest Public Power Association

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Washington Department of Ecology

300 Desmond Drive SE
Lacey, WA 98503

December 19, 2025

RE: Columbia & Snake River Temperature TMDL Implementation Plan

To whom it may concern:

The Northwest Public Power Association (“NWPPA”) appreciates the opportunity to comment on the Columbia & Snake River Temperature Total Maximum Daily Load (“TMDL”) Implementation Plan. NWPPA is a not-for-profit association representing more than **150 community-owned electric utilities** across Alaska, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, Washington, Wyoming, and British Columbia. For 85 years, our members have provided **affordable, reliable, and environmentally responsible electricity** to millions of homes, farms, businesses, schools, and essential service providers across the West.

Our members’ operations are directly affected by the TMDL and its implementation. As such, we submit the following comments to ensure that the final plan reflects scientific realism, accurately identifies sources of temperature influence, and supports decisions that promote ecological protection and grid reliability.

1. Upstream Waters Already Exceed Temperature Standards Before Reaching Washington

The Columbia and Snake Rivers enter Washington from upstream sources—Canada and Idaho—at **temperatures that already exceed Washington’s water-quality criteria during summer months**. This fact is well-established in federal analysis.

The EPA’s 2021 TMDL states:

Where the rivers cross the upstream boundaries of the TMDL study area (Canadian border and the Washington/Idaho border), the water temperatures exceed the

Washington water quality criteria by a substantial margin from June through September. The current water quality conditions present a significant challenge to achieving downstream water quality standards in Washington and Oregon.¹

Attempts to impose downstream temperature limits without addressing upstream realities will all but guarantee failure. Washington cannot meet its own temperature targets if the water entering the state already exceeds those standards, and downstream regulation will not change that fact. Ignoring this reality risks driving an enforcement regime that **misassigns responsibility, forces unwarranted costs onto hydropower operators**, and ultimately **raises electricity prices** for the very Washington residents the state is obligated to protect.

Washington's Department of Ecology ("Ecology") must address upstream conditions in both its modeling and enforcement strategies.

Recommendation:

NWPPA urges Ecology to recognize and account for upstream temperature exceedances, ensure that utilities are not held responsible for conditions beyond their control, and adjust enforcement approaches accordingly.

2. The Hydropower System Is a Thermal Buffer, Not a Primary Cause of River Warming

The existing TMDL and Ecology's current standard do not reflect the historic, pre-dam temperature characteristics of the Columbia–Snake River system. Multiple scientific analyses demonstrate that **federal hydropower projects moderate temperature swings**, reduce peak summer highs, and help stabilize river conditions during the critical summer months.

Below are key findings from independent experts and long-standing scientific literature:

NOAA Fisheries Science Center (2020)

- The unimpounded Salmon River—the largest Snake River tributary—experiences higher water temperatures than the impounded Snake River during the summer, even though the Salmon River is upstream and at a higher elevation.²

John McKern, retired U.S. Army Corps of Engineers Fish & Wildlife Biologist (2016)

- Before lower Snake River dams existed, water temperatures reached **83°F** at the river's mouth (1953) and **77°F** in the mid-1950s.³

- Following dam construction, **maximum temperatures never exceeded 77°F**, even with all four lower Snake River dams in place.³

Pacific Northwest National Laboratory (2002)

- “The unimpounded [Snake] river warms up faster and has higher midsummer temperatures than the impounded river.”⁴
- Pre-dam Columbia River temperatures at Rock Island Dam previously **exceeded modern temperature criteria**.⁴
- Reservoirs have reduced temperature variability and moderated extreme peaks.⁴

U.S. Geological Survey & National Marine Fisheries Service (2003)

- Adults returning to the Snake River **do not encounter warmer temperatures today than before dam construction**.⁵
- Temperature trends in the forebay of Ice Harbor Dam correlate **with regional air-temperature increases**, not dam presence.⁵

Taken together, these findings provide clear evidence that the hydropower system:

- **buffers thermal extremes,**
- **reduces peak summer temperatures, and**
- **supports fish migration through controlled cold-water releases.**

Recommendation:

Ecology’s implementation plan must accurately reflect hydropower’s thermal-moderating role and avoid attributing temperature challenges to dam operations when regional climate warming and upstream inputs are the primary drivers.

Conclusion

Thank you again for the opportunity to comment. NWPPA respectfully urges the Department of Ecology to:

- Fully incorporate upstream temperature exceedances into the TMDL implementation framework.
- Recognize the established science demonstrating that **Columbia–Snake hydropower projects do not drive temperature exceedances** and, in many cases, moderate river temperatures.

- Ensure that enforcement and compliance **expectations reflect the realities of hydrology, climate, and scientific findings.**

NWPPA and our members remain committed to supporting **science-based** approaches that improve salmon outcomes while maintaining the reliable, **carbon-free** hydropower system that millions of Northwest residents depend on.

Sincerely,



Kurt Miller

CEO & Executive Director

Northwest Public Power Association (NWPPA)

ENDNOTES

¹ U.S. Environmental Protection Agency. *Columbia and Lower Snake Rivers Temperature Total Maximum Daily Load (TMDL)*. August 13, 2021.

² Siegel, Jared E., and Lisa G. Crozier. *Impacts of Climate Change on Salmon of the Pacific Northwest: A Review of the Scientific Literature Published in 2019*. Seattle: U.S. National Marine Fisheries Service, Northwest Fisheries Science Center, 2020.
<https://doi.org/10.25923/jke5-c307>

³ McKern, J. *The Case Against Breaching the Four Lower Snake River Dams to Recover Wild Snake River Salmon*. Port of Lewiston, 2016.

⁴ Richmond, M., Perkins, W., & Chien, Y-J. *Regional Scale Simulation of Water Temperature and Dissolved Gas Variations in the Columbia River Basin*. Pacific Northwest National Laboratory (PNNL), 2002.

⁵ Peery, C., Bjornn, T., & Stuehrenberg, L. *Water Temperatures and Passage of Adult Salmon and Steelhead in the Lower Snake River*. U.S. Geological Survey & NOAA National Marine Fisheries Service, Technical Report 2003-2.