



# Northwest Indian Fisheries Commission

6730 Martin Way E., Olympia, Washington 98516-5540  
Phone (360) 438-1180 [www.nwifc.org](http://www.nwifc.org)

FAX # 753-8659

September 16, 2021

Marla Koberstein, Water Quality Standards Project Manager  
Washington State Department of Ecology  
Water Quality Program  
P.O. Box 47600  
Olympia, WA 98504-7600

Re: Comments on Ecology's 2021 Clean Water Act Triennial Review

Dear Ms. Koberstein:

The Northwest Indian Fisheries Commission (NWIFC) is submitting the following comments in response to the Washington Department of Ecology's (Ecology) request for feedback on its Clean Water Act (CWA) Sec. 303(c) Triennial Review and work plan. The 20 member tribes of the NWIFC<sup>1</sup> are beneficiaries of a trust relationship with the United States, with constitutionally protected, treaty-reserved rights to harvest, consume, and manage fish and shellfish in their usual and accustomed areas. These comments are submitted in view of the need to ensure protection and restoration of these and other reserved rights, resources and habitats, and to safeguard the health, livelihoods and well-being of tribal members.

Ecology has proposed to adopt two water quality criteria regulations protective of salmonids: 1) dissolved oxygen (DO) and fine sediment, and 2) aquatic life criteria. Ecology needs to adopt protective criteria for affected fish species, and to support the designated harvest use including the treaty fishery. Ecology also must redouble its efforts to assess freshwater bacteria pollutants that could undermine downstream marine shellfish beds, which support treaty-reserved harvests.

## I. Dissolved Oxygen Criteria

"Early life stages of fish, specifically the developing embryo, are very sensitive to reduced oxygen levels. The scientific literature suggests that embryo survival drops markedly as [intra gravel] DO concentrations fall below 8 mg/L and is close to zero at 5 mg/L. Depending on the water temperature and permeability of the gravels, EPA (1986) has determined that there is an average 3 mg/L drop in DO levels between the water column and the gravel where fish eggs are deposited."<sup>2</sup> Ecology's DO criteria must ensure concentrations above 8 mg/L in spawning habitat.

---

<sup>1</sup> The NWIFC member tribes are the Hoh, Jamestown S'Klallam, Lower Elwha Klallam, Lummi, Makah, Muckleshoot, Nisqually, Nooksack, Port Gamble S'Klallam, Puyallup, Quileute, Quinault, Sauk-Suiattle, Skokomish, Squaxin Island, Stillaguamish, Suquamish, Swinomish, Tulalip and Upper Skagit.

<sup>2</sup> National Marine Fisheries Service, Endangered Species Act – Section 7 Consultation Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation EPA's Proposed Approval of Revised Washington Water Quality Standards for Designated Uses, Temperature, Dissolved Oxygen, and Other Revisions 93 (Feb. 5, 2008).

## II. Fine Sediment Criteria

"Fine sediment is the Nation's #1 pollutant." Ecology, Salmon Spawning Habitat Protection Rule PowerPoint Presentation 27 (Oct. 8, 2020). "Fine sediment settles over redds and in between gravel, blocking the flow of water and oxygen. Sediment covers eggs and reduces hatching success." *Id.* at 26. Without protection from fine sediment, future generation of salmonids are at risk of elimination along with the treaty-reserved right to harvest salmon. Ecology must adopt protective fine sediment criteria, and measures and monitoring to ensure protection of spawning habitat.

## III. Aquatic Life Criteria for Toxics

It's imperative that the State develop or revise criteria for several toxic pollutants. Washington has not adopted new or revised aquatic life criteria since at least 1997, while EPA has issued new or revised CWA Sec. 304(a) recommended criteria, for toxic pollutants, including: acrolein, aluminum, ammonia, arsenic, carbaryl, cadmium, chromium III, copper, cyanide, demeton, diazinon, dieldrin, endrin, guthion, heptachlor epoxide, iron, lindane, malathion, mercury, methoxychlor, mirex, nickel, nonylphenol, pentachlorophenol, PCBs, selenium and tributyltin. Meanwhile, Washington's Southern Resident Killer Whale Task Force recognized in 2019 the need to "[r]educe stormwater threats and accelerate clean-up of toxics harmful to orcas [and i]ncrease monitoring of toxic substances in marine waters." Southern Resident Orca Task Force, Final Report and Recommendations 12 (November 2019).

"These toxics can reduce salmon survival by making them more susceptible to disease, which in turn means less food available for the orcas. Toxic contaminants can also reduce immunity and cause reproductive disruption in orcas." *Id.* at 31. We support Ecology's decision to establish these long-awaited aquatic life criteria for toxics necessary for salmon fisheries and other species in the food web. Ecology should do so promptly, without further delays. Water quality that ensures the survival of salmon, which are safe to consume, helps support the designated fish harvest use.

## IV. Freshwater Bacterial Assessment

In recent comments to Ecology regarding the agency's proposal to modify freshwater bacterial monitoring and assessment, NWIFC explained that Ecology should continue to utilize all monitoring and assessment tools for fecal coliform in both marine waters, and upstream freshwater with a potential to deliver fecal loads to marine waters designated for shellfish use.<sup>3</sup> Ecology should not wait for Washington Department of Health shellfish bed closures, impaired waters listings under Clean Water Act Sec. 303(d), or Total Maximum Daily Load (TMDL) or TMDL alternative approval before commencing fecal coliform assessment. Ecology's assessment program should be proactive and prevent impaired waters classifications and shellfish bed closures by continuing assessment and remediation for fecal coliform in freshwaters upstream of marine waters designated for shellfish use. If needed, in order for Ecology to protect the designated use of marine shellfish and tribal

---

<sup>3</sup> NWIFC, Comment Letter re: Water Quality Policy 1-11 Revisions for Bacteria Criteria (April 30, 2020).

harvest, Ecology should establish numeric fecal coliform criteria<sup>4</sup> and implement water quality assessment for marine and upstream freshwater habitat through its upcoming workplan.

V. Conclusion

Ecology has proposed to adopt water quality criteria protections for salmonids, which are also important to supporting the treaty right to harvest fish, including DO, fine sediment and aquatic life criteria. Ecology needs to adopt protective criteria for affected fish species, and to support the designated use of the treaty fishery. Ecology also must increase its efforts to monitor and assess freshwater bacteria loads that could undermine downstream marine shellfish beds which support treaty-reserved harvests.

Finally, federal Endangered Species Act regulators have identified the need to “[e]ngage EPA in consultation during its triennial review of State water quality standards to identify comprehensive and systemic threshold water quality conditions necessary to maintain or reestablish habitat values necessary for listed fish.”<sup>5</sup> Ecology’s forthcoming workplan should demonstrate all necessary foresight and diligence needed for recovery of ESA listed species.

If you have any questions, please feel free to contact Michael Martinez, Habitat Policy Analyst, at [mmartinez@nwifc.org](mailto:mmartinez@nwifc.org).

Sincerely,



Justin R. Parker  
Executive Director

cc: Vince McGowan, Water Quality Program Manager, Washington State Department of Ecology  
Chad Brown, Water Quality Standards Unit Supervisor – Triennial Review, Washington State  
Department of Ecology

---

<sup>4</sup> See, e.g., WAC 173-201A-200(2)(b)(iii) Freshwater Designated Uses and Criteria, Water contact recreation bacteria criteria (“[M]ore stringent bacteria criteria may be established for waters that cause, or significantly contribute to, the decertification or conditional certification of commercial or recreational shellfish harvest areas, even when the preassigned bacteria criteria for the water are being met”); WAC 173-201A-210(2)(b)(iv) Marine Water Designated Uses and Criteria, Shellfish harvesting bacteria criteria (same); WAC 173-201A-210(3)(b)(iii) Marine Water Designated Uses and Criteria, Water contact recreation bacteria criteria (same).

<sup>5</sup> National Marine Fisheries Service, 5-Year Review: Summary & Evaluation of Puget Sound Chinook Salmon, Hood Canal Summer-run Chum, and Salmon Puget Sound Steelhead 74 (2016).