

Northwest Environmental Advocates

Please see attached letter.

NORTHWEST ENVIRONMENTAL ADVOCATES



September 16, 2021

Marla Koberstein
Department of Ecology, Water Quality Program
P.O. Box 47600
Olympia, WA 98504-7600

Re: **Washington 2022–2024 Triennial Review of Water Quality Standards**

Dear Ms. Koberstein:

The following are Northwest Environmental Advocates (NWEA) comments on the Washington Department of Ecology’s 2022–2024 Triennial Review, specifically on the Ecology document entitled “2021 Triennial Review of Surface Water Quality Standards Draft Work Plan to Update the Water Quality Standards for 2022-2024 (July 2021).”

I. GENERAL COMMENTS

To start, Ecology’s proffered excuse for not conducting a triennial review since late 2010—over a decade ago—is just that, an excuse. There is no legitimate excuse for not conducting the required reviews in a timely manner. The fact is that Ecology finds itself incapable of timely completing any of the regulatory actions required by the federal Clean Water Act; this is just one of many.

It is unclear why Ecology has not already, in preparation for taking public comment on its draft project list, “include[d] an evaluation of Clean Water Act Section 304(a) recommended criteria and determine[d] if we need to update our standards to align with these federally recommended criteria.” To have taken this relatively minor step prior to public comment, rather than after, would have been to provide much-needed illumination on the work that is required.

In addition, we would appreciate that Ecology be accurate and complete in its description of actions that it is taking. For example, the project entitled “Adopt updates to freshwater criteria for dissolved oxygen and fine sediment” is described as initiated “in response to federal, tribal, and public feedback for Ecology to better protect salmonid spawning habitat in our state freshwater criteria.” While there certainly has been federal and tribal feedback on the

deficiencies of Washington's dissolved oxygen criteria, it is equally true that Ecology is required, under the terms of a stipulated dismissal signed October 18, 2018, to propose a criterion and (likely) draft guidance for fine sediments by October 18, 2021, and to have issued a final rule by October 18, 2022, with final guidance not later than 18 months following the date of the final rule. *See Northwest Environmental Advocates v. United States Environmental Protection Agency*, No. C14-196 RSM, Stipulated Order of Dismissal (October 18, 2018). By not being accurate and forthright about this work, Ecology also manages to describe it as updates to criteria and rulemaking when it also, if the fine sediment criteria are narrative, requires the issuance of draft and final guidance on how those criteria will be implemented. The so-called project is far more than just rulemaking and will extend further than a rule adoption "in early 2022."

II. SO-CALLED PRIORITY ACTIONS

Ecology lists a hodgepodge of possible actions that would both theoretically enhance and diminish protection for various waters. Our view is that given the extreme delays in Ecology's taking actions that would provide much-needed protection for designated uses across the state, neither of these groups of proposed actions are likely of sufficient value to merit near-term action.

The first category that Ecology lists is to respond to nominations for outstanding resource water (ONRW) designation for various waterbodies. As Ecology should tell the public, the state has no Antidegradation Tier III ONRW-designated waters. Again, it might have been useful to add at least a sentence or two describing what this is in order to facilitate the public's comment. Regardless, the real issue is whether there is any value added to the named (and potential future nominated) waters by an ONRW designation in Washington State. Without looking at the details, nominations tend to be aimed at waters that are not used for permitted discharges, meaning that the greatest or perhaps only threats to their quality is from nonpoint sources. The ONRW designation only provides protection insofar as either the Washington antidegradation policy or Ecology's efforts do. Looking first at the antidegradation policy, Washington's water quality standards do not provide any more actual protection for ONRW waters than other waters, such as those covered only by Tier I protections that prohibit further degradation. *See* WAC 173-201A-330(4) ("A designated outstanding resource water will be maintained and protected from all degradation [with exceptions]."; *id.* (5)(b)(ii) ("Nonpoint sources must use all applicable structural and nonstructural BMPs with the goal of reducing the degradation of water quality to nonmeasurable levels where total elimination is not feasible.")). Without going into details, other provisions of Washington water quality standards require similar controls on nonpoint sources yet, typically, those requirements are ignored and nonpoint sources are not controlled.

For this reason, until Ecology adopts a policy on how specifically it intends to protect ONRW waters from nonpoint sources—including but not limited to inadequate logging practices, nonexistent or inadequate agricultural practices, nonexistent or inadequate rural development

practices, or inadequately regulated septic systems—Ecology’s designation of ONRW waters is a pointless feel-good exercise. Alternatively, where there are current or future threatened point sources, an argument can be made that such designations may have some merit.

The second category is where Ecology considers taking actions to remove existing protections provided by water quality standards through Use Attainability Analyses (UAA) and variances. As stated above, given that Ecology is seriously lagging behind in providing the most fundamental of protections to species and human health across the state, engaging in such proposed deregulation has little or no merit. Limited resources should be focused on providing environmental and public health protections.

III. AQUATIC LIFE CRITERIA FOR TOXICS

One of the areas where Ecology has failed to meet the requirements of the Clean Water Act and provide full protection for its designated beneficial uses, including many populations of Endangered Species Act (“ESA”)-designated threatened and endangered species, is keeping its aquatic life toxic criteria updated. Ecology’s description of how far behind it is in this work fails to provide the public with any meaningful information about how many criteria need to be updated, which criteria are already known to be of concern to some threatened and endangered species, and which criteria include “state-specific information to consider in a complete update to these standards” that would inform public opinion on the four proffered options. As a public notice and comment opportunity, this could not be more bare bones, particularly after an entire decade of failing to conduct the required triennial reviews. Moreover, Ecology has not even suggested a timeline for its options, that range from one to at least three separate rulemakings. For example, when Ecology states that rulemakings can take up to two years to complete, is it proposing to take six or more years to update all of the aquatic life criteria if it goes the route of Option 1? Why does Ecology note that “[t]here are advantages and disadvantages to each approach” but not give the public any insight into what those are in order to better inform public input?

In addition to Ecology’s noting that there are some (unnamed) criteria that require an understanding of Washington-specific water quality, Ecology should also have explained another significant barrier to its adoption of toxic criteria for aquatic species in Washington waters, namely whether it has the expertise to do more than adopt 304(a) recommended criteria. Specifically, the expert federal fish and wildlife agencies charged with protecting ESA-listed species in marine and fresh waters have already determined that species that are the same or similar to those in Washington waters are jeopardized by state regulatory criteria that mirror the 304(a) recommended criteria. The U.S. Fish and Wildlife Service and National Marine Fisheries Service (together the “Services”) have found jeopardy to threatened and endangered species in Oregon, Idaho, and California for some state water quality criteria addressing the following toxic chemicals: aluminum, ammonia, arsenic, cadmium, chromium III, chromium IV, copper, cyanide, lead, mercury, nickel, pentachlorophenol, selenium, silver, and zinc. As a result, in

some instances, EPA has updated its 304(a) recommended criteria to address the lack of protection and the sheer old age of these federal recommendations. Such federal updates may be sufficient to ensure the protection of species in Washington waters, but in other instances, there is no such assurance. Regardless, Washington cannot simply adopt the 304(a) criteria as a matter of course; it must first determine whether those criteria are in fact adequate to protect aquatic species in Washington.

This leads directly to the question: does Washington have the necessary expertise to adopt protective aquatic life criteria? If the answer is “no,” the outcome is both inevitable and will lead to an unnecessarily protracted regulatory process. The problem is this: if Ecology simply goes through the motions of updating its aquatic life criteria for toxics by adopting any new, revised, or more stringent 304(a) criteria, based on an assumption that the national recommendations are sufficient to protect species in Washington waters, it will consume Ecology resources and valuable time—during which these species will continue to receive inadequate regulatory protection—in order to come up with a result that will ultimately likely be changed in some respects. That is, EPA will review and approve or disapprove these criteria and in doing so, EPA will consult with the Services pursuant to the Endangered Species Act. In this process, EPA will draft a biological assessment (“BA”), in which it will pull together its version of current science and determine whether the criteria sufficiently protect the ESA-listed species, a process in which typically EPA finds the state’s criteria adequate. EPA will submit this BA to the Services, which typically do not fully agree with EPA’s assessment and, eventually, issue their own voluminous biological opinions laying out which criteria are inadequate, why, and how they need to be fixed. This result will go back to EPA, which will need to conform its past or future approval or disapproval actions to the binding opinions of the Services.

Ecology should determine now if it has the scientific capability of evaluating and adopting criteria that are sufficiently protective of T&E species. Where it knows that it does not have that capability, it should inform EPA now that it is unable to update its criteria, and request that EPA take the actions necessary to do what Washington cannot. It is not unheard of for a state to defer to EPA where it lacks the expertise to adopt criteria, as demonstrated by EPA’s recent promulgation of cadmium and aluminum aquatic life criteria for Oregon. *See* 82 Fed. Reg. 9166 (Feb. 3, 2017); 86 Fed. Reg. 14834 (March 19, 2021). Alternatively, Ecology could ask that EPA provide assistance now, rather than waiting to develop a BA later, on what may be unprotective criteria.

IV. WHAT’S MISSING

A. Interpretation of Narrative Criteria Prohibiting Toxic Effects

“When a State adopts narrative criteria for toxic pollutants to protect designated uses, the States must provide information identifying the method by which the State intends to regulate point source discharges of toxic pollutants on water quality limited segments based on such narrative criteria.” 40 C.F.R. § 131.11(a)(2). Ecology does not have a method by which it interprets and applies its existing narrative criterion to address toxic chemicals for which it has no numeric

criteria or for which its numeric criteria are out of date, as are so many of Washington's. *See* WAC 173-201A-240(1) ("Toxic substances shall not be introduced above natural background levels in waters of the state which have the potential either singularly or cumulatively to adversely affect characteristic water uses, cause acute or chronic toxicity to the most sensitive biota dependent upon those waters, or adversely affect public health, as determined by the department."). Such methods are needed to implement Washington's existing narrative criterion through 303(d) listings, Total Maximum Daily Loads, NPDES permits, and 401 certifications in what is likely to be an extended interim period before protective numeric criteria are developed, adopted, approved by EPA, and subjected to ESA consultation. They will be needed, again, in the future when numeric criteria once again become out-of-date. And they will always be needed when criteria simply do not exist for the innumerable chemicals in which aquatic species are awash.

For example, while Ecology professes a keen interest in helping to protect waters, such as Puget Sound, from so-called emerging chemicals of concern ("CEC"), it has taken no steps to use the regulatory basis in its water quality standards to actually control these pollutants. *See e.g.*, Ecology, *Contaminants of Emerging Concern and Wastewater Treatment* (June 2021) at 13 ("CECs do not yet have water quality criteria in EPA-approved water quality standards because of the challenges associated with use of traditional toxicity endpoints discussed above. This generally precludes permit writers from assigning water quality-based effluent limitations in permits."). This report quoted the 2019 Southern Resident Killer Whale Task Force Recommendations Report as including the following:

1. Recommendation 30: Identify, prioritize and take action on chemicals that impact orcas and their prey.
 - o By March 2019, the Department of Ecology should develop a prioritized list of chemicals of emerging concern that threaten the health of orcas and their prey and pursue policy and/or budget requests in the 2019 legislative session to prevent the use and release of chemicals of emerging concern into Puget Sound.
 - o Direct Ecology to convene discussions and develop a plan to address pharmaceuticals, identifying priorities, and source control and wastewater treatment methods.
 - o Periodically review and update toxicological information as new science emerges and adaptively manage plans and programs.
2. Recommendation 32: Improve effectiveness, implementation, and enforcement of National Pollutant Discharge Elimination System permits to address direct threats to Southern Resident orcas and their prey.
 - o Update aquatic life water quality standards focused on pollutants most harmful to Southern Resident orcas and their prey.

* * *

Id. at 16. The report stated that “Ecology is currently working through these SRKW Task Force recommendations.” Yet there is nothing in the Triennial Review request for public comments that indicates that Ecology is currently “working through” these recommendations. There is no reference to CECs, let alone how they are impacting orcas and their prey. There is no reference to any other pollutants as being identified now or in the near future as “most harmful” to orcas and their prey.

B. Nutrient Pollution

Washington lacks any water quality standards for nutrient pollution, including even a narrative provision addressing the unhealthy growth of algae and aquatic weeds, ocean acidification, and basic narrative biocriteria, other than in lakes. *See* WAC 173-201A-020 (definition of “Lake-specific study” includes determining if any designated uses are “lost or impaired because of nutrients, algae, or aquatic plants.”); WAC 173-201A-230 (lake nutrient criteria). The closest it gets is a narrative provision pertaining to aesthetic values. *See* WAC 173-201A-260(2)(b) (“Aesthetic values must not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste[.]”). As with the narrative provision on toxic effects, Ecology has not established how it will interpret and apply this narrative criterion in regulatory actions. As a result, it does not. Moreover, this narrative is very clearly focused only on aesthetic values. As such, it does not address the growths and deposits of nutrient-fueled plant life that affect water column chemistry, such as dissolved oxygen and pH, nor impacts to the food web, as Ecology has been studying in Puget Sound, nor harmful algal blooms (“HAB”). At the very least, Ecology should adopt some simple narrative provisions that will set the stage for guidance on how these future narrative criteria will be implemented in regulatory programs. To do otherwise—in the face of increasing nutrient pollution across the state and climate change that exacerbates this pollution—is to fail in providing the most basic protections required by a state’s water quality standards. In short, Washington’s water quality standards are part of the reason why Ecology lags so seriously behind in addressing the ever-growing problem of nutrient pollution.

C. Tier I Antidegradation Implementation

Washington’s water quality standards also are missing a method for implementing Tier I of the antidegradation policy including, in particular, a way in which Ecology can accept public and public agency input in an ongoing fashion on existing uses that are not designated. Then, periodically, it can take use that information to update its use designations. This really is just some form of a database that would give meaning to the requirement to protect existing uses that have not been designated. We suggest looking at Pennsylvania’s method of tracking where “surface water segments where data has been collected or evaluated which indicates that the existing use differs from the designated use[.]” The waters in this publicly accessible database “are compiled into rulemaking actions for the EQB to consider DEP’s recommendation on the designated use of the water.” Pennsylvania Department of Environmental Protection, *Water*

Quality Antidegradation Implementation Guidance (Nov. 29, 2003) at 86. Surely if Pennsylvania can do it, Washington can. The importance of Tier I's protection of existing uses is becoming more clear by the year as the ignored impacts of poor water quality on species—from marine mammals to freshwater amphibians—continue to lay waste to these populations.

D. Eliminate Mixing Zone Exceptions

Ecology needs to reform Washington's mixing zone rules. First, Washington does not have methods to ensure that the biological integrity of the waterbody is maintained within the boundaries of regulatory mixing zones established in NPDES permits. Biological integrity cannot be ensured without monitoring—within the mixing zone. NWEA has not been able to identify any NPDES permits that require such monitoring. EPA is able to provide Ecology with information on states that have such provisions.

Second, Ecology should provide guidance as to the meaning of the prohibitions in WAC 173-201A-400(4) (“No mixing zone shall be granted unless the supporting information clearly indicates the mixing zone would not have a reasonable potential to cause a loss of sensitive or important habitat, substantially interfere with the existing or characteristic uses of the water body, result in damage to the ecosystem, or adversely affect public health as determined by the department.”). Mixing zones are currently used, throughout Puget Sound for example, to avoid effluent limitations on the discharge of toxic chemicals, which are far-field pollutants causing sediment contamination and unsafe tissue residue levels in species. This prohibition could be used by permit writers to control such pollutants if the water quality standards division would clarify its intent and meaning. Quite frankly, Ecology makes a complete mockery of its detailed attention to water quality criteria for toxics when it blows the entire regulatory system out of the water with the use of mixing zones, particularly for pollutants that build up in depositional areas and bioaccumulate in animal tissue.

Third, Washington's standards should make clear or clarify that regulatory mixing zones are never allowed in at least the following circumstances:

- in waters that would restrict the movement in or out of a tributary;
- for parameters that affect public health where people are unable to discern that such pollutants are present (e.g., indicator bacteria);
- adjacent to public recreational areas;
- in waters containing bivalves; habitat for threatened, endangered, candidate, or sensitive species; fish spawning areas; and intake structures for public drinking water or food processing supplies;
- where the water quality standard for the pollutant or affected parameter in question is already violated in the receiving water; and
- for far-field pollutants—such as bioaccumulative toxics and nutrients—where effects occur downstream, sometimes far downstream, and for which monitoring is often not done.

E. Protection of Thermal Refugia

Protection of thermal refugia is not on Ecology's list of priorities but, based on information and belief, we think it should be a priority for this triennial review. As NWEA pointed out to the U.S. Environmental Protection Agency in 2013, one of the unintended consequences of Oregon's adoption of temperature standards was permittees' increasing interest in discharging heated effluent to hyporheic zones. *See* Letter from Nina Bell, NWEA, to Dan Opalski, EPA, *Use of Hyporheic Flows for the Cooling of Thermal Discharges* (July 26, 2013). Yet these hyporheic zones have been identified by EPA and others as critically important to moderating stream temperatures and providing thermal refugia, in stream nutrient cycling, and in creating unique habitats within streams. In the past, and possibly to this day, the Oregon Department of Environmental Quality ("ODEQ") has encouraged and likely issued NPDES permits to allow permittees to use hyporheic zones as discharge points. *See* ODEQ, *Disposal of Municipal Wastewater Treatment Plant Effluent by Indirect Discharge to Surface Water via Groundwater or Hyporheic Water Internal Management Directive* (Sept. 2013). In contrast, EPA has concluded that "permitting of discharges to the hyporheic zone [is] inconsistent with the intent of the State's water quality standards" for a variety of reasons it set out in a letter to ODEQ. *See*, Letter from Christine Psyk, EPA, to Jennifer Wigal, DEQ, Re: *U.S. Environmental Protection Agency Concerns about Oregon Department of Environmental Quality's (DEQ's) Internal Management Directive (IMD) - Disposal of of Municipal Wastewater Treatment Plant Effluent by Indirect Discharge to Surface Water via Groundwater or Hyporheic Water Internal Management Directive (DRAFT, dated September 2013)* (March 20, 2014). We do not know if Washington's NPDES permitting program has been doing anything similar to this but we do believe that that the best solution to the ambiguity that currently exists about whether permitting discharges in this fashion is protective of designated uses would be for Ecology to adopt a rule that makes clear that it is unambiguously prohibited. At the same time, it would be appropriate for Ecology also to make clear that any alteration of thermal refugia is prohibited (by any and all sources). In essence, Ecology should, by rule, grant all thermal refugia Tier III antidegradation protections.

Sincerely,



Nina Bell
Executive Director