



Northwest Indian Fisheries Commission

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April 6, 2018

Kelly Susewind
Special Assistant – Water Policy
Washington State Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Re: NWIFC Comments, Water Quality Assessment: Policy 1-11 Update

Dear Mr. Susewind:

The 20 treaty Indian tribes of the Northwest Indian Fisheries Commission (NWIFC)¹ have 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 of these and other reserved rights and resources, and to safeguard the health, livelihoods, and well-being of tribal members.

NWIFC appreciates the Department of Ecology's commitment to work closely with tribes, in accordance with the co-management responsibilities shared by the state and the tribes; in furtherance of the Centennial Accord; and in line with the agreement *Cooperative Management of the Clean Water Act 303(d) Program for the Tribes in Washington State, the Washington State Department of Ecology, and the U.S. Environmental Protection Agency Region 10* (1997). We want to acknowledge the effort that Ecology staff have made to date to work collaboratively with its tribal partners, in recognition of the special relationship between the state and the tribes in managing the water and fish resources on which we all depend.

NWIFC continues to be dedicated to ensuring the health of these waters. We welcome Director Maia Bellon's ongoing commitment to work with the tribes toward this goal, as expressed, for example, during the most recent Centennial Accord meeting of state and tribal leaders. To this end, NWIFC was pleased to hear Director Bellon affirm the state's intention to move forward with implementation of the consolidated rule governing human health criteria (HHC) for Washington waters. NWIFC offers the comments below on Ecology's Policy 1-11 in the spirit of making progress toward achieving these and other aspects of the state's water quality standards (WQS). NWIFC incorporates by reference the comments we submitted on the pre-public draft of Ecology's Policy 1-11 update, on November 27, 2017. We acknowledge that Ecology has addressed some of these earlier comments. However, Ecology's current draft retains several features that NWIFC finds

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

troubling. Additionally, Ecology's current draft in some instances substitutes new approaches or language that raises concerns. NWIFC is particularly disappointed to see that Ecology's current draft departs from the applicable WQS in several significant ways. NWIFC continues to urge that Ecology's water quality assessment policy not serve as a vehicle for getting around the currently effective WQS.

I. General Comments

Under the Clean Water Act (CWA), a state is required to submit to the U.S. Environmental Protection Agency (EPA) a list of waters under its jurisdiction that do not meet applicable water quality standards – the 303(d) list. For purposes of the 303(d) list, water quality standards include numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements. 40 C.F.R. § 130.7(3). Several of the "uses" applicable to Washington waters are of utmost importance to NWIFC's member tribes. Among these are uses that protect against depletion and contamination of the fish² and other treaty-protected resources, ensuring supportive conditions for fish at every stage in their lifecycles and robust harvest of fish fit for human consumption (i.e., free of toxic or other contaminants). Historically, the waters were clean, the fish abundant and free of contamination, and the aquatic ecosystems healthy – this remains an immutable baseline from the tribes' perspectives.

It is crucial that Ecology's water quality assessment policy focus on measuring impairment of water quality standards in Washington, including the harvest and other designated uses. Water quality assessment figures as a distinct step in the larger process envisioned by the CWA, in order "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). An impaired listing triggers development of TMDLs, other pollution control requirements, and/or alternative approaches to identify the causes of and, ultimately, rectify, the impairment. It is important that the assessment policy not erroneously omit assessment units (AUs) from the roster of those that require these additional steps in order to restore them to health – the point of the state's 303(d) list.

It is vital, moreover, that water quality assessment not be conflated with other steps in the larger process, and that considerations germane to other steps (e.g., the challenges or costs of producing a TMDL or reducing contamination) not inappropriately drive the design of an assessment policy. In fact, Ecology devoted considerable effort during the HHC rulemaking process to expand its existing implementation tools and to develop new implementation tools, in order to accommodate industry's concerns with respect to feasibility and costs. An enlarged menu of implementation tools is now available in Washington: regulated sources can avail themselves of variances, compliance schedules, and/or intake credits in order to help them achieve compliance. Ecology's water quality assessment policy should produce an accurate snapshot of impairment – it should not be viewed as an additional opportunity to provide "regulatory relief" to sources.

² The term "fish," here and throughout, is intended to include shellfish, unless the specific context suggests otherwise.

Ultimately, Ecology's water quality assessment policy should not serve as a vehicle for avoiding or undermining the state's current water quality standards. This concern has been urged consistently by NWIFC and is elaborated further below.

When viewed against its previous water quality assessment policy, Ecology's current draft raises the bar for listing an AU as impaired for numerous parameters. In the case of WQS that protect the harvest use, Ecology's draft increases the number of composite-sample exceedances required for Category 5 listings for both carcinogens and non-carcinogens. It also ignores entirely the fact that dioxins and arsenic are carcinogens – and that the currently effective WQS recognize them as such. And it devises assessment benchmarks for carcinogens that are less protective than the state's current WQS. As a consequence, *Ecology's draft approach will result in fewer Category 5 listings* than would an approach that did not increase the evidentiary requirements and alter the assessment benchmarks.

For carcinogens, Ecology's draft approach is at odds with EPA regulations, which direct states to assess impairment as judged against the applicable water quality standards. More generally, Ecology's approach is troubling to the extent that it artificially narrows the universe of AUs deemed to be impaired. As a result, Ecology will effectively be divested of the ability to address waters that do not meet Washington's water quality standards. A better approach is to accurately assess the status of Washington waters, and then work creatively to remedy any impairment identified – ultimately attaining clean water and healthy fish. The tribes have consistently stated that they are willing to help tackle the challenges of meeting this goal, working to innovate within the bounds set by the Clean Water Act.

II. Human Health Criteria

A. Fish-Tissue Data Provide an Integrated Measure of Contaminant Uptake Over Time, Affording a Direct Assessment of Whether the Harvest Use is Being Supported

NWIFC supports a listing policy that is based on fish-tissue data, and strongly backs Ecology's continued embrace of this basis for its listing policy. NWIFC appreciates that Washington is a leader among states/tribes in relying upon this state-of-the science approach to assessment. Fish-tissue data provide a direct measure of whether the harvest use is being supported; as such, they are a tight fit for the question at hand in a listing policy, and thus the most scientifically defensible approach. For this and other reasons elaborated in NWIFC's earlier comments, we are pleased to see that Ecology's current draft continues to rely on fish tissue as the most credible source of data for listing determinations.

NWIFC also supports Ecology's recognition in this draft that a 10-year sliding window, rather than a 5-year sliding window, for data consideration is more appropriate. NWIFC further supports Ecology's recognition that it is appropriate to consider quasi-composite samples comprised of multiple fish species, as provided in this draft.

B. Policy 1-11's Assessment Metrics Should Reflect, Rather than Avoid or Undermine, the Currently Effective Water Quality Standards

NWIFC has consistently urged that the water quality assessment policy not serve as a vehicle for avoiding or undermining the state's currently effective water quality standards. For human health criteria, these standards are reflected in the consolidated rule. 81 Fed. Reg. 85417 (Nov. 28, 2016). As NWIFC has observed, these standards incorporate a fish consumption rate that does not fully account for tribal fish intake at heritage-based rates; as such, these standards represent a compromise in terms of fully protecting tribal consumption. Yet these are the standards that are currently in effect, and if the tribes must be reconciled to this fact, then so must the state. NWIFC therefore opposes all aspects of Ecology's draft that depart from or work to undermine the current standards applicable to Washington waters.

Specifically, NWIFC again urges that Policy 1-11 enlist benchmarks (e.g., a tissue exposure concentration (TEC)) for all contaminants that reflect the criteria in the currently effective water quality standards (i.e., Table 1 – Human Health Criteria for Washington, 81 Fed. Reg at 85430-31). Thus, Policy 1-11 should provide for a TEC_c for each of 2,3,7,8-TCDD (dioxins), and arsenic using the “cancer slope factor” in Table 1 to derive a TEC_c per the standard method outlined in Ecology's draft at p. 65 for “chemicals that have a carcinogenic effect.” Where these contaminants also have non-carcinogenic effects, it is appropriate that Policy 1-11 account for these effects via a TEC_N in addition to – but not in lieu of – their carcinogenic effects. Ecology's justification for ignoring these contaminants' carcinogenic effects misses the mark, given that “impairment” is a statement about whether or not waters are meeting the applicable WQS.

Ecology's draft includes a new approach for carcinogens that also departs from the applicable WQS; NWIFC finds this approach problematic. For carcinogens, a Category 5 listing could only be demonstrated where fish tissue contamination exceeds the TEC_c (which is derived from the currently effective water quality standards) by a factor of 10, as evidenced by a minimum of 3 composite samples (or by a factor of 100, as evidenced by a minimum of 2 composite samples). *Importantly, there is no mechanism for designating waters as impaired with data showing contamination levels at the TEC_c.* That is to say, Ecology's approach judges impairment against a benchmark reflecting contamination at levels at least ten times greater than the applicable WQS for carcinogens.

Ecology's rationale for introducing this “magnitude of exceedance” multiplier is unpersuasive. Ecology attempts to characterize the evaluation of fish tissue data as a “supplemental” basis for assessment and to distance the TECs from the water quality standards from which they are derived. Ecology then relies on this distance to set a new benchmark for the harvest use for carcinogens that is ten times less protective than the WQS. It is true, as Ecology points out,³ that the TECs are not themselves WQS. But the TEC_cs are derived from the very inputs used to derive WQS for human health – namely, the fish consumption rate, cancer slope factor, bodyweight, and risk level – and these are the WQS that are designed to ensure protection of the harvest use. The distinction that

³ Letter from Kelly Susewind, Department of Ecology, to Justin Parker, Northwest Indian Fish Commission (Feb. 9, 2018).

Ecology emphasizes is thus a distinction without a difference: the *point* of these inputs is to set standards that enable people to harvest and consume fish at the rates and under the circumstances (bodyweight, risk level, etc.) assumed. Moreover, Ecology's logic would support TECs that depart considerably from the WQS, allowing Ecology to reassess and revise each input for purposes of determining impairment. In fact, Ecology's discussion of the cancer potency factors and other bases for deriving standards for carcinogens does just this (Draft, p. 67). Ecology cites the uncertainty that results from the fact that "the slope of the cancer potency factor is extrapolated below the range of experimental results" as a basis for adding the magnitude of exceedance factor. But this uncertainty has already been accounted for in arriving at the cancer potency factor and in the derivation and application of the WQS. Ecology also notes its concern with the error bars given that many TECs are near detection limits. NWIFC agrees that this is a legitimate concern. However, Ecology's draft approach already includes multiple elements that address this concern (e.g., the use of composite samples; the requirement – increased from previous policies – of three such composite samples; etc.). These elements already permit confidence in an impairment designation at the TEC, rather than only where the TEC is exceeded by an order of magnitude. In sum, there is no justification for departing from the WQS for carcinogens by Ecology's "magnitude of exceedance" device.

Finally, with respect to carcinogens, NWIFC appreciates that Ecology's draft removes a requirement that sediment and/or water quality data would also be required for a Category 5 designation, and supports not requiring this additional evidence, for all of the reasons explained in its earlier comments.

C. A Scientifically Defensible Demonstration of Nonimpairment Cannot Rely Solely on Water Column Data, but Must Include Fish Tissue and Other Data

NWIFC has communicated its concern with a general "off-ramp" that would override a fish-tissue based assessment of impairment by means of a water-column based demonstration that the human health criteria are being met. According to Ecology's earlier drafts (Ecology, June 2017) such water-column data would "supersede[] any of the other methodologies described in this policy," including a fish-tissue based determination of impairment. However, as NWIFC has pointed out, this off-ramp runs counter to the science for many of the contaminants of concern for human health, which are often highly bioaccumulative. Fish-tissue data are particularly relevant for bioaccumulative contaminants, in as much as they provide an integrated measure of uptake from contaminants harbored in sediments, organisms, and the water column over time. For example, considering the 20 contaminants that currently account for the bulk of the Category 5 listed carcinogens, virtually all have a high BCF/BAF, defined as >1000 (ranging from 1500 to 3,100,000 – only arsenic and Bis(2-Ethylhexyl) Phthalate are lower, at 44 and 710, respectively). Bioaccumulative contaminants are unlikely to reside in significant concentrations in the water column, such that even a robust statistical water-column sample, as Ecology had proposed, won't detect contaminants that are hydrophobic and/or reside instead in the fish tissue.

NWIFC is aware that some stakeholders have urged this off-ramp, by arguing that "future regulatory action may not address the primary source of the fish contamination, and may inaccurately assume

that the water column is the sole basis of exceedances measured in fish,” and that the listing policy should be crafted “to avoid future problems in establishing a valid TMDL and associated load and wasteload allocations. Fish tissue concentrations will not improve if the actual source of the contamination is not identified and then subsequently addressed.”⁴ However, this argument misunderstands the point that the listing process is about ensuring an accurate diagnosis (e.g., are water quality standards being met?) – not about finding a cure (e.g., should we address contaminants in the water column, in the sediments, from an upland source, etc.). Policy 1-11 should be focused on science-based assessment and not driven by a need “to avoid future problems in establishing a valid TMDL.” This is a separate issue that should be kept distinct: within the bounds of the Clean Water Act, Ecology has numerous tools at hand to establish valid TMDLs, to ensure appropriate load and wasteload allocations that address the actual source of the contamination, and to allow flexibility and creativity in achieving compliance.

It is NWIFC’s understanding that Ecology’s intention in this draft is to alter its earlier approach to address NWIFC’s concerns. By letter, Ecology states that it has responded to NWIFC’s concern that “water data should not be used to override a fish-tissue based impairment.”⁵ Ecology explains that the draft policy provides that a “statistically sound study based on water data will take precedence over applying the alternative DWEC methodology, and a statistically sounds study based on fish tissue data will take precedence over the TEC methodology.”⁶ However, the language of the actual draft policy is ambiguous, and suggests that the water-column data off-ramp may have been preserved. First, Ecology has enlisted language in the draft (and in its public meetings) that distinguishes “direct” evaluation of the HHC from “supplemental” or “alternative” evaluation of impairment of the harvest use. Second, in describing the “direct” evaluation pathway, Ecology’s draft states merely that a study measuring whether HHC are being met in the water column “does *not necessarily* signify that the harvest use is supported” (emphasis added). This language, along with the rest of the passage, seems to leave open the possibility that such data *might* be taken to signify that the harvest use is supported. Additionally, as the passage below suggests, Ecology’s draft does not indicate the requisites for the “statistically rigorous study” it envisions, and doesn’t specify whether, for example, it would require fish-tissue data.

2l(1) Directly Assessing Human Health Criteria Attainment

The completion of a statistically rigorous study is the only pathway for directly evaluating whether or not the human health criteria are being met in a waterbody. A direct evaluation of human health criteria attainment has precedence over the water supply use assessment methodology described in this policy. Attainment of the human health criteria in the water column does not necessarily signify that the harvest use is supported. Entities would need to work with Ecology to design and implement a study to directly evaluate the attainment of

⁴ Spokane River Stewardship Partners, Letter to Susan Braley, Department of Ecology, at 2 (March 15, 2017) [hereinafter SRSP Letter].

⁵ Letter from Kelly Susewind, Department of Ecology, to Justin Parker, Northwest Indian Fish Commission (Feb. 9, 2018).

⁶ *Id.*

human health criteria as it is not practical to describe the study requirements in this policy. (Draft, p. 65)

As noted above, under EPA's implementing regulations, a state's 303(d) list must reflect AUs that are not meeting water quality standards, which include not only numeric criteria, but also designated uses (among other components). If an Ecology-approved comprehensive and rigorous study may be used to demonstrate "non-impairment" – it should be clarified that it must demonstrate that all components of Washington's water quality standards are being met – rather than "attainment of the human health criteria." Further, it should be clarified that any such demonstration would need to consider fish-tissue data.

III. Other Considerations

In earlier communications, NWIFC had emphasized that Ecology should not enlist Category 4 designations (whether via a new Category 4P or a lenient interpretation of Category 4B) as a means to avoid the legal and other protections afforded by a Category 5 determination for AUs impaired due to PCBs. While not limited to PCBs, Ecology's current draft describes the various Category 4 designations in a manner that appears to soften the requirements and enforceability of such designations. By comparison to the current Policy 1-11, for example, Ecology's draft substitutes vague language about "progress on water quality improvements" for stronger language requiring that Category 4B programs be designed to improve and attain water quality "in a manner comparable to a TMDL." Ecology's draft also omits the requirement in the current Policy 1-11 for "enforceable pollution controls or actions stringent enough to attain compliance with the water quality standards." NWIFC urges Ecology to revise the draft language to make clear that Category 4 serve as a means for AUs to attain water quality standards and that pollution controls and actions specified under Category 4B programs be enforceable.

Additionally, Ecology's draft describes the bases for Category 4 determinations in a manner that would inappropriately permit downlisting for all parameters when a TMDL or pollution control program has only been completed for one or some of the toxic substances for which an AU is listed. Ecology's draft provides, at p. 68:

An AU will be placed in Category 4A for a given parameter when EPA approves a TMDL for a toxic substance in an AU.

An AU will be placed in Category 4B for a given parameter when EPA approves use of a pollution control program for a toxic substance in an AU.

NWIFC requests that Ecology clarify that downlisting to Category 4 is only appropriate where a TMDL (in the case of Category 4A) or a qualifying pollution control program (in the case of Category 4B) has been approved by EPA *for the listed contaminant or parameter*. For parameters or toxic contaminants that are not covered by an EPA-approved TMDL or pollution control program, Category 5 remains the appropriate designation.

Conclusion

A water quality assessment policy should focus on diagnosis: whether the state's waters are meeting the applicable water quality standards. This should be an objective assessment. Other policy considerations – including the challenges of addressing those problems that are identified – should not color the assessment process. Importantly, water quality assessment should not be used to mitigate the state's water quality standards. Unfortunately, as detailed above, Ecology's draft Policy 1-11 often serves this end. NWIFC urges that Ecology revise its draft Policy to address this serious concern. NWIFC and its member tribes remain committed to working alongside Ecology to address those impairments that are identified. NWIFC encourages Ecology to keep in mind that there are now ample implementation tools available to ensure that sources' reasonable concerns with compliance can be addressed. NWIFC appreciates the difficulty of this work, but we continue to be steadfast in our desire to help tackle even our most vexing pollution problems so that we can ensure clean waters and healthy fish for all those who depend on Washington waters.

Sincerely,

A handwritten signature in blue ink that reads "Justin R. Parker" with a stylized flourish at the end.

Justin R. Parker
Executive Director

cc: Heather Bartlett, Department of Ecology
Susan Braley, Department of Ecology
NWIFC Commissioners