



April 6, 2018

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Water Quality Program
Washington State Department of Ecology
P.O. Box 47600
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*Re: Association of Washington Business Comments on Proposed Water Quality
Program Policy 1-11 Revisions*

Dear Ms. Braley:

Presented in this letter are comments by the Association of Washington Business (AWB) on proposed revisions to Water Quality Program Policy 1-11. AWB is Washington's oldest and largest statewide business association and represents 7,000 business members of over 700,000 employees. AWB serves as both the state's chamber of commerce and the manufacturing and technology association.

AWB members and affiliates participated in an informal coalition representing a majority of NPDES permittees requesting in June 2015 that Ecology review and revise this Policy.¹ Stimulating this request was growing evidence that the current version of the Policy (2012) was yielding a thoroughly unmanageable outcome, a situation that would worsen once revised human health-based water quality criteria were finalized, new water column and tissue data collected, and subsequent Water Quality Assessments undertaken. The Coalition asked for a review of certain science and discretionary policy choices, and a recasting of the document to better serve as a foundational management tool to direct Ecology's Clean Water Act program work.

While the proposed revisions in this policy document include some important and beneficial changes, Ecology has resisted making fundamental and pragmatic adjustments that would better serve Washington state over the longer term. This is a missed opportunity.

This presentation of comments will first identify the topic and location in Policy 1-11, then articulate the concern or agreement with the policy choice.

General Comment - Ecology should be credited for conducting a thorough and well-documented public involvement process over the past two years. The agency was open to hearing perspectives on the deficiencies of the current Policy, improvement ideas presented by

¹ Letter from Association of Washington Business to Heather Bartlett, WDOE, June 5, 2015. Signatories included representatives from businesses, ports, cities, counties, forestry

various stakeholder groups, and providing full discussion opportunities. The administrative process leading to the proposed Policy modifications represents a “well-done.” That said, Ecology needs to set an expectation that groups with meaningful/influential interests participate in advisory committee meetings. There is a perception that some veto-wielding viewpoints were not heard. A more transparent involvement would be respectful of other participants and facilitate a pathway to (hoped for) consensus outcomes.

General Comment - The revised Policy 1-11 continues with minimal data and generous decision thresholds to justify Category 5 determinations. Ecology will defend this outcome as being what 40 CFR 130.7 requires and the Environmental Protection Agency expects. But this choice by Water Quality Program management team will likely perpetuate and aggravate what is already an unmanageable section 303(d) listing outcome. Ecology’s own summary states²:

- The 2014 Water Quality Assessment includes more than 4,500 Category 5 pollutant/waterbody listings in freshwaters alone.
- This represents a 70+ year backlog of TMDL work.
- Ecology estimates an average \$400,000 development cost and 3-5 years of effort to produce a TMDL.
- The implied Ecology/public cost to accomplish the current TMDL inventory is many hundreds of million dollars.

State water quality agencies have ample authority and discretion to shape a listing policy to fit with down-stream Clean Water Act program priorities and implementation constraints. Comments will be offered through this letter identifying adjustments in Category 5 decision listing criteria which if accepted would yield a more focused and realistic list. The encouragement is for the agency to be assertive in using discretion provided by regulation to make these adjustments.

Page viii of proposed Policy 1-11, Definition of “Impairment” and discussion in Section 1A.

Introduction and Background -- It is appropriate that Ecology will consider the magnitude, frequency and/or duration of a water quality standard exceedance in making a judgment on Category 5 “impairment.” The phrases “not consistently meet” and “are not persistently met” express qualified support for this direction. Ecology should clearly express its intention that any Category 5 listing be grounded on substantial and unequivocal water quality data exceeding numeric criterion and evidence of designated use impairment.

Numeric water quality criteria are intentionally conservative. Very stringent (and in some cases even aspirational) water quality standards are established to support designated uses across the full variety of state waterbodies. This conservatism means that infrequent, shorter-term

² “2016 TMDL Workload Assessment,” WDOE Publication no. 17-10-021, August 2017

and marginal exceedances of numeric criteria are very, very unlikely to threaten achievement of any designated use(s). While Ecology recognizes some flexibility in making an impairment judgment for the purposes of section 303(d); i.e., the “magnitude, frequency and/or duration” language, the regulatory consequences of Category 5 simply demands a much more robust decision threshold. As a policy matter, AWB requests the agency to require definitive, persistent and multi-year exceedances of numeric criteria and demonstrable impacts to a designated use before a Category 5 listing will be considered. This intention would be expressed throughout the “*Part 2: Specific Assessment Considerations for Water Quality Criteria*” section. Marginal, short-duration or infrequent exceedances of water quality numeric criterion could result in placing the waterbody on Category 2 *Waters of Concern*.

Page 5, Coordination with Tribes and Other States – Does Policy 1-11 have any relevance or effect for waterbodies on reservation lands for tribes who have chosen not to develop and promulgate water quality standards?

Most Washington tribes have not promulgated water quality standards. What government/tribal entity has authority or responsibility to implement Clean Water Act section 303 on those reservation lands? Does Policy 1-11 have any relevance for reservation waterbodies?

Page 15, Age of Data considered in the WGA – Ecology should review all outstanding Category 5 listings against the decision criteria in this revised Policy 1-11. If the information/data which supported an earlier Category 5 listing is insufficient when judged against the revised Policy Category 5 criteria, that listing should be downgraded to Category 2 *Waters of Concern* or Category 3 *Insufficient data to make a determination*.

Throughout the proposed Policy 1-11, the agency is suggesting revisions that ostensibly represent better science, better policy, etc., in short, more appropriate decision criteria on what constitutes impairment of a waterbody designated use. It is illogical and a bad public policy choice that Ecology would retain a provision in Policy 1-11 which explicitly precludes a fresh review of waterbody/pollutant information against the superior 2018 listing criteria. Any current Category 5 listings not satisfying the 2018 decision criteria can be reassigned to Category 2 or Category 3 and the agency can target those waterbodies for monitoring.

A Category 5 determination is a very consequential regulatory determination. It creates regulatory vulnerabilities and drives substantial public and private resource expenditures. When the agency undertakes its 2018 Water Quality Assessment a necessary work element should include a look-back evaluation of the current Category 5 inventory. The agency has discretion to do this, it is very logical, and the result will likely be a slightly reduced and more relevant Category 5 list.

Page 15, Age of data considered in the WQA – Applying the Category 5 listing criteria from prior versions of Policy 1-11 has produced an unmanageable backlog of Category 5/TMDL obligations. This situation is partly caused by Ecology’s policy choice to rely on >10-year old water quality data as representative of current conditions and still a valid basis for Category 5 placement and then TMDL development. See prior comment recommending a full review of existing Category 5 waterbodies against 2018 Policy listing criteria.

Ecology has authority to adjust Category 5 listing criteria and assess prior listings to mitigate the current 303(d) list overload. A credible assumption would be that there is low confidence that water quality data >10 years old is representative of current conditions.³ Accepting this view and being willing to reassess >10-year old Category 5 listings would almost certainly raise doubts on the appropriateness of old Category 5 listings. Policy 1-11 should create a mechanism to reassign Category 5 waters to Category 2 or Category 3 for the reasons just presented, where those waterbodies can become priorities for Ecology monitoring efforts.

An agency move in this direction would also align better with EPA expectations. EPA guidance states, “The timeframe for establishing TMDLs should be 8-13 years from the date of the original listing.”⁴ Perhaps the federal agency recognizes the waning confidence in old and (possibly) non-representative water quality data as the basis for important Clean Water Act determinations.

Page 20, Category 4b. Has a Pollution Control Program in Place that is being Actively Implemented. Ecology’s prescription for gaining approval of a Category 4b “Other Pollution Control Program” is simply too demanding. It unnecessarily mimics EPA guidance. Ecology should be encouraging and actively supporting “early-action” and all good-faith efforts to address Category 5 listings.

Ecology sets an unreasonably high bar to win approval of a Category 4b approach to address an impaired waterbody. More than 20 information needs are identified for a sufficient 4b application, with that information then serving as the basis for mostly subjective and inherently uncertain regulatory determinations. Ecology’s choice to accept EPA’s idealistic expectations

³ There appear to be several hundred Category 5 listings dating to the 1996 Water Quality Assessment for which no TMDL has been developed. Does Ecology maintain that data collected over 20 years ago sufficiently characterizes current water quality and can still serve as the sole trigger for launching an expensive, multi-year TMDL development activity?

⁴ “Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act,” EPA, July 29, 2005

for an approvable Category 4b will discourage early, perhaps innovative, and perhaps collaborative effort to address water quality issues.

Ecology should reconsider the opportunity presented by Category 4b and re-write this section of Policy 1-11 to be much more pragmatic and accessible. Consider this perspective:

- A Category 4b plan should credit responsible, good faith activities to understand and reduce pollutant loading. Monitoring and reporting will be required. An adaptive management approach to learn and adjust planning and implementation efforts is likely. There may not be a hard commitment on when water quality standards can be achieved. The 4b category description must provide the sufficiency criteria and mechanism to re-categorize from 5 to 4b. The attraction of a reformed 4b category could encourage earlier efforts toward water quality improvement by willing/energized stakeholders. The alternative of the traditional Category 5/TMDL development may be years/decades in the future.
- The regulation basis for a Category 4b plan is found at 40 CFR 130.7(b)(iii). This regulation simply allows for an “Other Pollution Control Requirement; e.g. Best Management Practices” approach to address an impaired waterbody, this in lieu of the Category 5/TMDL path. EPA has developed 10’s of pages of guidance in the last two decades offering their ideas on what constitutes an acceptable 4b plan. While there are certainly elements of that guidance that serve to frame-up a 4b proposal, Ecology need not accept it all. It is guidance, not regulation. States have the authority to respond to water quality problems, and there surely must be room for knowledgeable and independent approaches allowing for 4b. Ecology’s re-write should solicit and sanction 4b approaches as an alternative to Category 5/TMDL.
- This re-drafted Policy 1-11 should include commentary on the availability of “Straight-to-Implementation” (STI) and the relationship of that approach to Category 4b. Ecology has touted a STI approach that circumvents the need for a TMDL (a two-page description of STI exists on the agency web site). Straight-to-Implementation is the pure manifestation of a 40 CFR 130.7(b)(iii) “Other Pollution Control Requirements” approach. An obvious advantage resides in the structure of that federal regulation in that it does not require a Category 5 listing prior to devising a STI plan.
- Ecology should break from regulatory TMDL tradition and take the initiative to develop innovative Category 4b solutions. There are hundreds of Category 5 listings for ubiquitous pollutants that will ultimately rely, in large part, on common, BMP-based, pollutant control measures; e.g., PCBs. Rather than waiting years for a waterbody-specific TMDL, could Ecology imagine developing common, pollutant-specific Category 4b plans which waterbody representatives could subscribe to and begin implementing? This seems desirable, even recognizing it may be a partial approach and not address all the specific detail of the present Category 4b formulation. Check-in steps to share progress could be incorporated and adaptive management adjustments made to refine the work.

- As a specific example, Ecology could work to integrate the outcomes from the WAC 173-333 *Persistent, Bioaccumulative, Toxins* regulatory processes into Category 4b “solutions” which pre-empt the “Category 5 listing/Waiting years or decades for a TMDL.” The agency has completed Chemical Actions Plans for PCBs, Polycyclic Aromatic Hydrocarbons, Lead, Mercury, Polybrominated Diphenyl Ether, and Per- and Poly-fluorinated alkyl substances. The development of these CAP’s included research to create a source contribution inventory, which was soon followed by an assessment of source control opportunities. It should be possible to translate the CAP results into a starter-set of water quality improvement activities, and then implement through orders, permits, etc.

Page 24, Category 5. The 303(d) List – Ecology should offer commentary on the significance of a Category 5 listing in Washington state.

A Category 5 listing is a significant regulatory determination that should only be based on substantial evidence of persistent (multi-year) exceedances of numeric criteria and demonstrable non-achievement of the designated use(s). Ecology should endeavor to explain the regulatory, legal, and economic significance of a Category 5 listing decision. Category 5 means:

- A regulatory obligation to produce a TMDL. A multi-year effort, with a large public resource cost, and then substantial transaction costs as the Wasteload and Load allocations are driven into NPDES permits and implemented through other regulatory programs.
- The Pinto Creek reality. New additions of the listed Category 5 pollutant are prohibited until the TMDL is developed and approved by EPA. The obvious coming example will be with the inability of a POTW to receive NPDES permit approval for increased pollutant loadings while the TMDL for a trace toxic pollutant is completed and approved.
- The continuing vulnerability for NPDES permittees as they address “reasonable potential analyses,” mixing zone issues, the possible need for a variance or compliance schedule or completion of a Use Attainability Analysis or establishing site-specific water quality standards, threatened or actual legal challenges, and the possible demand for installation for advanced wastewater treatment technology to control ubiquitous trace pollutants.
- Stigmatizing the majority of Washington waters as unhealthy for aquatic life and human uses. The public perception of private/government inattention to and incompetence in effectively address water quality problems suffers.
- The possibility that commercial products from “toxic” state waters cannot receive necessary regulatory certifications or that customer expectations affect the ability market/sell products.

Page 24, Delisting from Category 5 – Ecology should create a path for Category 5 listed waterbodies to be relocated to Category 2 or 3.

A Category 5 listing is a significant regulatory determination with lasting consequences. Ecology should be intentional and creative in providing pathways for re-classifying Category 5 waters to other Categories. Several options have been presented in this comment letter.

Page 25, 1G. Natural Conditions – The consideration of Natural Conditions is an integral element of many pollutants and numeric criteria. Ecology has an obligation to define the natural condition of a waterbody. Only then can an assessment of numeric criteria attainment be made and ultimately an evaluation on whether designated uses are achieved. Ecology offers no direction on how to account for the “human actions” component of the dissolved oxygen and pH numeric criteria is deciding on “impairment.”

AWB disagrees with the statement “If there is insufficient information to determine the level of human influence, then Ecology will assume that human influences have contributed to criteria exceedances and that the contribution is measurable over natural conditions.” This statement is inconsistent with WAC 173-201A-260(a)

(1) Natural and irreversible human conditions

(a) It is recognized that portions of many water bodies cannot meet the assigned criteria due to the natural conditions of the water body. When a water body does not meet its assigned criteria due to natural climatic or landscape attributes, the natural conditions constitute the water quality criteria.

In addition, almost all aquatic life criteria include provisions to adjust the numeric criteria with evidence of natural condition influences. For example, WAC 173-201A-200 and -210 direct that the numeric criteria for dissolved oxygen, pH and temperature be adjusted for “human actions” based on determinations of natural conditions. The revised Policy offers no direction on how to apply this component of these water quality criteria. Toxic pollutant numeric criteria for inorganic arsenic and perhaps several other metals could also be adjusted due to natural condition considerations (WAC 173-201A-240(1)).

Ecology’s policy statement about human influence vs. natural conditions may be convenient for applying Policy 1-11, but is wholly inappropriate if it becomes the basis for a Category 5 listing. It amounts to a boot-strapping effort and exposes an agency bias to “over-list.” Category 5 must be supported by substantial information demonstrating persistent exceedances of a WAC 173-201A standard, which will include, where appropriate, the “natural conditions” provision

and adjustment for the “human actions” increment. While it may be appealing for the agency to “list first” and then rely on the TMDL development process to sort out the natural conditions component, this approach is not what the plain language of WAC 173-201A directs.

Page 27, 1H. Prioritizing TMDLs – Ecology lists logical criteria to prioritize TMDL development work. There can be many priorities but “Risks to public health” is certainly important.

The late-2016 adoption of extraordinarily stringent human health-based toxic pollutants into WAC 173-201A, and now Ecology’s proposed translation of those criteria to evaluate the “harvest” and “domestic water supply” designated uses, has redefined the “risk to public health.” As one example, there is evidence that fish and shellfish have PCB tissue concentrations above the Category 5 listing thresholds in many waterbodies and reportedly in salmonids produced at federal, state and tribal hatcheries. It may be appropriate for Ecology to complete a focused review on available data to characterize this risk, and then align listing and TMDL work.

Page 41, Evaluating Data using the Hypergeometric Test – “Hypergeometric” is a new term for Policy 1-11 and is used to describe data assessment for several pollutants. It would be useful to provide a definition and some commentary on use of the term.

Page 42, Dissolved oxygen and Page 47, pH – Category 5 determination options – Ecology’s proposal to list a waterbody on Category 5 based on data from a single day (and maybe even a single grab sample) is not reasonable.

Ecology rationalizes that an egregious exceedance of numeric criteria can justify a Category 5 listing. For both dissolved oxygen and pH the agency creates a listing path based on a single large magnitude exceedance. It is simply unreasonable to draw a Yes/No conclusion about water quality numeric criteria/designated use attainment based on a single data value or data from a single day. To do so ignores the many variables that could yield an anomalous value. A Category 5 listing is a significant regulatory determination which should be based on substantial, multi-year evidence of numeric criteria exceedances and demonstrable indications of designated use impairment.

Page 51, 2F. Temperature – Washington’s water quality standards regulation recognizes that natural climatic and landscape attributes; i.e., natural conditions, will affect waterbody temperature. Provisions are built into the regulations to adjust regulatory standards based on natural conditions and cumulative “human actions.” There is no indication the proposed Category 5 listing process takes any account of measured water temperatures that may be influenced by natural conditions or human actions. Ecology’s proposal to list a waterbody on Category 5 based on data from a single day (and maybe even a single grab sample) is not reasonable.

Natural conditions can have a marked effect on waterbody temperature. Consideration of natural conditions is an integral element of WAC 173-201A temperature criteria and Ecology has an obligation to evaluate that effect. In the five-page description of *Assessment Information, Data Requirements and Category Determinations*, there is no direction on how waterbody temperature data influenced by natural conditions/human actions is to be evaluated. For example, if recorded field data reveals a 7-DADMax of above the 16 degrees C criterion in a Core Summer Salmonid Habitat assessment unit, and that temperature is determined to be influenced by natural conditions, it is not an exceedance of the WAC 173-201A-200(1)(c). Yet, per the proposed Policy, such data would support a Category 5 listing. Ecology has side-stepped an assessment of the “natural conditions” and human actions components in favor of the convenience of assuming a human influence contribution. A Category 5 listing should not be based on assumptions. Categories 2 or 3 would be better choices and Policy 1-11 should be amended to set this direction.

In addition, Ecology rationalizes that a single egregious exceedance of numeric criteria can justify a Category 5 listing. It is simply unreasonable to draw a Yes/No conclusion about water quality standards/designated use attainment based on a single data value or data from a single day. To do so ignores the many variables that could yield an anomalous value. A Category 5 listing is a significant regulatory determination which should be based on substantial, multi-year evidence of numeric criteria exceedances and demonstrable indications of designated use impairment.

Page 65, 2I.1 Directly Assessing Human Health Criteria Attainment – It is likely that inorganic arsenic and perhaps other earth metals naturally occur in state waters at concentrations greater than WAC 173-201A-240 human health numeric criteria. Ecology should provide direction on how the proposed listing criteria will be applied for these data.

It is Ecology’s obligation to characterize natural conditions before any consideration for Category 5 listing can occur. AWB would again caution against the instinct to list on Category 5 and then depend on the TMDL development process to sort out the natural conditions component. This is counter to the plain language of WAC 173-201A. Category 2 or Category 3 would be appropriate interim listing choices while sufficient ambient monitoring is completed to more fully characterize water quality and natural sources.

Page 65, 2I(2) Fish and Shellfish Harvest Use Assessment – Ecology’s formulas for calculating tissue exposure concentrations effectively increase the stringency of WAC 173-201A-240 toxic pollutant criteria and contribute to an over-listing of assessment units as impaired.

Local toxic exposure concentrations should be based on fish consumption patterns in the assessment unit (AU). Accounting for the consumption of salmonids should be included. The proposed Policy 1-11 directs that only resident fish should be considered in assessing the TEC's, this because fish with high site fidelity will more closely respond to the pollutant load available to the fish in that AU. But it does seem unlikely that the target population harvesting within an AU will be consuming the 175 gr/day of resident fish species assumed in the TEC computation. (Note that carp, mountain whitefish, large scale sucker, and pikeminnow are several of the fish species that current Category 5 listings are based on.)

There are several Policy adjustments which would improve this situation. Ecology could specify that fish chosen for tissue analysis should mirror actual consumption patterns in the AU. That would inevitably mean considering salmonid consumption. Washington natural resource agencies could conduct a fish consumption survey in the AU to determine the actual consumption of resident fish, and then use that value in the TEC calculation. Alternatively, Ecology could further adjust the TEC decision point to determine "impairment." For example, another order-of-magnitude factor could be added to the decision criteria; i.e., to 100x and 1000x for TECc, and to 10x and 100x for TECn. This would essentially be acknowledging that resident fish consumption is closer to 17.5 gr/day for the target population, than the 175 gr/day now built into the TEC formulas.

This can be an important issue. Fish tissue pollutant concentrations will lag actual water column/sediment pollutant cleanup activities and in situ pollutant concentrations. Successful effort to reduce pollutant inputs to an AU could be accomplished, with ambient water column monitoring documenting achievement of WAC 173-201A numeric criterion. Yet the waterbody remains Category 5 listed on the basis of the narrative "harvest" designated use and presumably remain in that status until the contaminated fish die, purge pollutants, or move. Meanwhile, NPDES permittees remain vulnerable to the demands originating from whatever the TMDL product demands. Ecology needs to create a "delisting" or off-ramp process to address this situation. Perhaps a Category 1 or Category 4b relisting and allowing the Washington Department of Health to publish Fish Consumption Advisories, would be a sufficiently protective and reasonable approach.

Page 70, 2I(3) Category Determinations for Domestic Water Supply – The rationale for Category 5 listing based on the domestic water supply designated use is very confusing and reflects an improbable exposure scenario.

Does Ecology have evidence that the target population drinks 2.4 liters/day of untreated surface water from any Assessment Unit? Given this improbability, Ecology should be very careful that this proposed listing criteria does not actually drive a Category 5 listing independent of evaluation criteria for other designated uses.



As an example, why does the Category 5 evaluation criteria even mention fish/shellfish tissue concentrations detected during the last 10 years? These data would presumably be relevant for the harvest designated use, but not apparently for domestic water supply.

Thank you for your consideration of AWB members' comments. We look forward to continued discussion with Ecology's Water Quality Program on Policy 1-11.

Sincerely,

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