



Pierce County

Public Works and Utilities

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Director

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July 28, 2015

WP61079

David Croxton, Watershed Unit Manager
Environmental Protection Agency (EPA) – Region 10
1200 6th Avenue
Seattle, WA. 98101

Dear Mr. Croxton:

Pierce County would like to extend its appreciation for organizing the June 25th presentation and discussion about the intended use of bioassessment (B-IBI) data in Washington State's proposed Water Quality Assessment (WQA). We also want to thank you for the opportunity to provide additional feedback.

Pierce County supports use of B-IBI as a very useful tool in combination with other tools as an indicator of watershed health trends. However, Pierce County strongly opposes using B-IBI scores alone as justifications for listing on Washington's 303d under Category 5. Our position is based on almost 20 years of B-BIBI sampling, specific training from the methodology's developer, and a quality assurance review of our program by regionally-respected experts in the approach.

Included with this letter is a copy of Pierce County's current annual watershed health report card, which contains the results and analysis of our watershed trends program. Since 2008, we have been using B-IBI, together with monthly water quality index (WQI) sampling, as a "compound index" to measure watershed health. We use the results of these annual assessments to assign staff geographically in our workplan with the objective to "raise the grade" of watershed health in the identified, lagging streams. This is a much more appropriate use of these indices.

Over the years, our analysis has shown the independent nature of WQI and B-IBI conclusively. Meaning that improvements in water quality do NOT automatically translate to improvements in B-IBI scores. The reverse is also true. Additionally, our analysis shows that water quality, once it improves, continues to improve at an accelerated rate. We have NOT shown the same with B-IBI.

The consequence of these conclusions is clear: water quality standards are being, and can be, achieved but B-IBI scores can still be lagging. The practical ramification, if EPA and Ecology proceed as they propose to include B-BIBI scores on Category 5, is a virtual guarantee that those waterbodies will never come off the list, even after the streams meet water quality standards, ensuring continued inappropriate legal and fiscal obligations to cities, counties, and businesses.



Our other concerns include:

- Use of B-IBI, which is an index of benthic population parameters, is inappropriate with the purpose of the 303d list, to list streams by specific limiting parameters
- B-IBI have not been adopted under the Administrative Procedures Act as State Water Quality standards. Development and use of numeric B-IBI criteria for the Water Quality Assessment outside of any official rule-making violates due process protections.
- B-IBI methodology is a landscape-scale measure of aquatic health¹. Category 5 listings are specific hydrologic reach-based assessment units. Applying landscape-scale methods to make specific hydrologic reach-based assessment listings is inappropriate.
- Category 5 determinations should necessitate documented linkages between B-IBI and a specific pollutant or pollutants. B-IBI listings should not be employed as a “stand alone” determinant for placing a stream segment in Category 5 until these linkages have been further corroborated by regional research that has undergone a legitimate peer review process. The Water Quality Policy 1-11 (WQP) and Thresholds Rationale² for Category 5 B-IBI placement lack sufficient sample collection attributes, Quality Assurance/Quality Control measures and correlative analysis results to meet the intent of the Code of Federal Regulations (40 CFR parts 25, 31, 35, 130 and 131), the Washington State Administrative Procedures Act, and the Credible Data Act.
- A great deal of historic B-IBI sampling has often been conducted by untrained or minimally trained volunteers as “education and outreach” activities, rather than according to an approved Standard Operating Procedure with the intent of using the results for regulatory purposes that may have millions of dollars of regulatory ramifications.
- Historic B-IBI data may have been analyzed under differing degrees of taxonomic resolution.
- Minor deficiencies in the sampling site selection process can have major impacts on B-IBI scores resulting in unnecessary cleanup costs and incurring inappropriate liabilities.
- The narrative criteria or anti-degradation policy are invoked as the basis for listing in Category 5, but the relationships between them and numeric criteria are not articulated in Ecology’s Water Quality Policy.
- There remain persistent administrative uncertainties related to stressor identification, TMDL development and potential implementation requirements for NPDES permittees.
- It is inappropriate to bench mark urban streams against pristine streams, as the use of B-IBI would do for Category 5, for regulatory purposes. There are tools available to determine the appropriate or reasonable level of improvement that could be attained in urban streams.

¹ 2009. DeGasperi C., et al. Linking Hydrologic Alteration to Biological Impairment in Urbanizing Streams of the Puget Lowland, Washington, USA. *Journal of the American Water Resources Association*. Vol. 45, No. 2. Pages 512-533.

² 2015. Braley S. Department of Ecology. E-mail communication including document attachment titled *Establishing Benthic Index of Biotic Integrity (B-IBI) Thresholds for Use in the Water Quality Assessment*. 6 pages. June 11, 2015.

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The County strongly recommends that if EPA and Ecology proceed to using B-BIBI listings, that those listings be limited to Category 2 rather than Category 5, so that a scientifically credible collection protocol, analysis, data interpretation, and transparent stakeholder review process can take place, targeting the 2016 WQA cycle.

Before B-IBI listings are moved to any 303d list category, we recommend the following should be done:

- Document the policy rationale and relationships between the narrative criteria, anti-degradation policy and use of numeric B-IBI criteria as the basis for listing decisions.
- Perform and document a more thorough technical data analysis to improve transparency, use of credible data, and methods to establish numeric criteria, supportive of rule-making and updates to WQP.
- Incorporate meaningful public process into decision making.

In closing, the County strongly disagrees with the position EPA expressed during the meeting that if impaired water body segments are listed in Category 2, the jurisdictions will not programmatically address the restoration of the impaired water body in a timely manner. If EPA wants to make B-IBI scores a priority, we believe there are other ways of prioritizing them rather than placing them in Category 5. Our established "raise the grade" program described above is but one example how EPA misunderstands water quality implementation at the local level.

Additionally, Pierce County believes it is inappropriate and a violation of due process protections for Department of Ecology and EPA to make major policy changes to listing decisions without appropriate regulatory rulemaking. We urge Ecology to initiate rulemaking under the State's Administrative Procedures Act if it intends to continue to pursue Category 5 listing decisions based on B-IBI scoring to restore this lapse of due process protection for Pierce County.

Finally, again, Pierce County does not authorize or support the use of Pierce County's B-BIBI data for the regulatory purposes EPA and Department of Ecology are contemplating. The data were never collected with the purposes in mind to afford regulatory obligations on any party's part. We believe the mentality that it now proposes will stymie data collection and sharing instead of effectuating water body cleanups.

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Pierce County looks forward to working with the EPA and Ecology to address our concerns. Please feel free to call me at (253) 798-4672.

Sincerely,



Dan D. Wrye
Water Quality Manager
Surface Water Management
Pierce County Public Works

DDW:kj
Enclosure: "Pierce County 2014 Watershed Health Report Card"

cc (with enclosure):
Jill Fullagar, Watershed Unit (EPA)
Melissa Gildersleeve, Watershed Management Unit Supervisor (ECY)
Heather Bartlett, Water Quality Program Manager (ECY)
Patrick Lizon, Water Quality Program Assessment Coordinator (ECY)
Angela Bonifuci, Puget Sound Program (EPA)