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Submitted electronically through www.regulations.gov

**Re: Comments on EPA and USGS Draft Technical Report on Protecting Aquatic Life from Effects of Hydrologic Alteration
Docket ID No. EPA-HQ-OW-2015-0335**

Dear Ms. Eignor and Mr. Kennen,

The Interagency Team (Team) is a coalition of National Pollutant Discharge Elimination System (NPDES) municipal stormwater permittees in Washington State working with the Washington State Department of Ecology (Ecology) and the U.S. Environmental Protection Agency (EPA) Region 10 to improve policy and process for Clean Water Act (CWA) programs including Water Quality Assessment (WQA) and Total Maximum Daily Loads (TMDL)¹. Team members are regulated under NPDES municipal stormwater permits (Permits) and actively engaged in stormwater and watershed management to protect and restore beneficial uses. Currently, several Team members are required by Permit to model the effects of hydrologic conditions and water quality on benthic macroinvertebrates under historic, current, and future land-use scenarios². Through these efforts, the Team recognizes that altered hydrology is one of many stressors that can impact aquatic life, but that use of Clean Water Act (CWA)'s regulatory tools to restore flow to natural conditions have limitations.

¹ Brown and Caldwell. (2014). *Recommendations for Improving Water Quality Assessment and Total Maximum Daily Load Programs in Washington State*. Report prepared for the Interagency Project Team. Seattle, WA. [Stormwater and TMDLs > Washington Stormwater Center](#)

² Phase 1 Municipal Stormwater Permit (2013-2018). National Pollution Discharge Elimination System and State Waste Discharge Permit. State of Washington Department of Ecology. Olympia WA. <http://www.ecy.wa.gov/programs/wq/stormwater/municipal/phase1permit/5YR/2014mod/Phase1-Permit-2014Final.pdf>

The Team appreciates that the Draft Report does not create or substitute for existing law or regulation. Rather, it is intended to serve as a technical and informational resource for states, tribes, and territories that may want to pursue additional means to proactively protect aquatic life from the adverse effects of flow alteration.

However, our review of the Draft Report suggests it falls short of providing adequate technical rigor needed to provide scientifically credible guidance relative to comprehensive stressor identification. Instead, it provides a summary of existing knowledge and promotes the use of CWA tools, including State water quality standards (WQS), narrative criteria, Sections 303(d) and 305(b) of the CWA, NPDES stormwater permits, and the challenged TMDL program³ to restore receiving water flows.

Given the Team's experience in Washington State our concerns include, but are not limited to:

1. Use of CWA tools to restore receiving water flow to natural conditions

Team members feel that use of CWA tools for these applications, including WQS through narrative criteria, TMDLs, and NPDES stormwater permits is out ahead of science. This creates the potential for a less defensible use of NPDES stormwater permits to achieve our goals of protecting and restoring beneficial uses.

Listing waters as impaired by a pollutant is the first step in the CWA management process, followed by development of a TMDL to protect and restore beneficial uses. Section 5 of the Draft Report discusses development of narrative flow criteria in State WQS as the mechanism for placing waters on the 303(d) list and therefore driving flow based TMDL development. However, courts have recently ruled that flow is not a pollutant and therefore can't be used as a surrogate for pollutants in a TMDL⁴. Hence, the continued promotion of flow as a pollutant and use of CWA tools in the Draft Report raises concerns.

Further, suggesting that natural flow regimes can be restored through heavy emphasis on NPDES stormwater permits is not realistic nor practical. NPDES stormwater permits do not require a restoration of flow in receiving waters to natural regimes. In Washington State, municipal stormwater permittees are required to address stormwater flows from new development and significant redevelopment. Given that many urbanized areas are already developed, the application of stormwater controls during redevelopment alone within these areas will not adequately address the desired outcome of restoring natural flow regimes and protecting aquatic life. The Team recommends the Draft Report more clearly acknowledge the practical limitations in using CWA tools, including NPDES stormwater permits, to restore flow to natural conditions supportive of aquatic life.

³ United States Government Accountability Office. December 2013. *Clean Water Act Changes Needed if Key EPA Program is to Help Fulfill the Nation's Water Quality Goals*. Publication No. GAO-14-80. <http://www.gao.gov/assets/660/659496.pdf>

⁴ Va. Dep't of Transp. v. EPA, No. 12-775, 2013 WL 53741 (E.D. Va. Jan. 3, 2013).

2. Linking narrative criteria and stormwater to biological impairment

At the time of this letter, Ecology and EPA Region 10 are considering placement of 105 stream segments in Washington State on the 303(d) list for bioassessment using narrative criteria as the basis. The use of narrative criteria as a listing basis for bioassessment is similar to flow in that neither is a pollutant. At the same time, Ecology has not yet adequately articulated the policy rationale and relationships between narrative criteria and anti-degradation policy supportive of bioassessment listings. Nor has Ecology developed credible biological goals for benthic macroinvertebrates in a manner consistent with controlling laws⁵. The Team expects the same challenges would occur for flow.

These complications have been displayed locally through Ecology and EPA Region 10 study of stormwater flow as a primary surrogate measure having adverse effects on benthic invertebrates in Soos and Squalicum Creek⁶. The goal of the report was to link stormwater flow to impairments of benthic invertebrates and set TMDL targets for NPDES stormwater permittees to reduce impervious surface and flow. Statistically significant relationships were found benthic invertebrate biometrics, canopy cover and other stressors not conclusively associated with stormwater flow. As a result, TMDL stakeholders and the regulated community are concerned with the approach, causing Ecology and EPA Region 10 to proceed cautiously.

The Team believes that using narrative based criteria to support flow based 303(d) listings and TMDL development relative to aquatic life impairment is premature and recommends that EPA and states utilize stressor identification studies outside of the CWA regulatory framework to promote understanding of complex relationships between flow, other stressors, and aquatic life to support sound policy decisions.

⁵ Interagency Team Bioassessment Letter to EPA Region 10. 31, July 2015. [Stormwater and TMDLs > Washington Stormwater Center](#)

⁶ Washington Department of Ecology, April 2013. Squalicum and Soos Creek. Bioassessment Monitoring and Analysis to Support Total Maximum Daily Load Development. Publication Number 13-03-017

3. The report is primarily a policy statement, rather than technical guidance

The Team is generally supportive of comments provided by the National Association of Clean Water Agencies⁷ relative to concerns that the Draft Report goes beyond being a technical document, rather encourages regulatory agencies to implement EPA policy preferences to regulate flow under the CWA framework.

The Draft Report would be improved by providing technical guidance or reference to methods which more comprehensively evaluate all stressors to aquatic life. EPA's *Causal Analysis/Diagnosis Decision Information System* or CADDIS was designed specifically for this purpose, yet the authors fail to recognize its utility or provide other credible methods upon which practitioners can rely.

The Interagency Team appreciates the opportunity to comment on the Draft Report. For more information about the Interagency Team or to make contact please visit [Stormwater and TMDLs > Washington Stormwater Center](#)

⁷ National Association of Clean Water Agencies. Comment letter to EPA on the Draft EPA-USGS Technical Report: Protecting Aquatic Life from Effect of Hydrologic Alteration. 17, June 2016.