DRAFT in progress – updated 4/14/2016 and 4/24 following 4/12 committee call. To be revised again following meeting with NACWA on May 5)

(Final will be on AMWA letterhead)

Ms. Diana Eignor

USEPA Office of Water

1200 Pennsylvania Ave., N.W.

Washington DC 20460

Re: AMWA comments on Draft EPA-USGS Technical Report: Protecting Aquatic Life From Effects of Hydrologic Alteration, Docket ID EPA-HQ-OW-2015-0335

Dear Ms. Eignor:

The Association of Metropolitan Water Agencies (AMWA) is an organization of the largest publicly owned water utilities in the United States. AMWA is the voice of metropolitan water systems on federal water policy issues, and its programs foster sustainable, innovative utility management. Environmental stewardship is also an important part of both AMWA’s and any progressive utility’s mission as they balance the need to provide safe drinking water with the ecological impacts of water use, impacts at the core of the draft technical report

Our comments on the referenced draft technical report are provided as Attachment A. The comments cover four main topics:

1. Provide a greater, more holistic context for the other designated uses under the Clean Water Act (CWA);
2. Better define what the document is and is not, and how to use it;
3. Clarify implications on climate and climate change on hydrologic alteration; and
4. Carefully review the document and remove or edit text that implies policy recommendations.

If you have any questions please contact Erica Brown at 202-331-2820 or [brown@amwa.net](mailto:brown@amwa.net).

Sincerely,

Diane VanDe Hei

CEO

**Attachment A**

AMWA’s comments are organized under four main points for consideration. There is overlap between these points as described in our comments below, which provide recommendations and an explanation for why EPA and USGS should revise the draft technical document to:

* Better define what the document is and is not, and how to use it;
* Provide a greater, more holistic context for the other designated uses under the Clean Water Act (CWA);
* Clarify implications on climate and climate change on hydrologic alteration; and
* Carefully review the document and remove or edit text that implies policy recommendations.

An overarching concern that AMWA has about the document is its strong implicationthat any flow regime alteration, whether existing or proposed, that does not support fish and other biota dependent on the flow regime, is a violation of the water quality standards, and thus the CWA. Although the document is focusing on protection of aquatic life, it should provide a balanced approach to identifying ways to balance competing uses and recognize the other uses that are protected within the scope of the CWA and may be existing and/or designated uses on the same water body.

Finally, there is a bigger policy question that EPA needs to address in light of climate change at some point, but as this is not a policy document it should not be addressed here. And that question is, if climate is changing, and the environment is adapting to that change, does it make sense for our environmental policies to reflect environmental stationarity, or do these policies require a thoughtful assessment of whether they are in fact, enhancing the adaptive capacity and resilience of ecosystems and species and of the intended and designated uses protected under the CWA?

**Specific Comments**

**Better define what this document is and is not, and how to use it.**

1. What is this document intended to be? Is it a technical document? A guidance manual? A policy document? In many ways, it reads like all three types. Examples (polemic example), guidance example, technical examples
2. The *Federal Register* describes the draft report as a non-prescriptive framework to quantify flow targets for the preservation of aquatic life and habitat. It is unclear what the difference is between a framework, guidance and technical document. The description in the *Federal Register* implies that this is a guidance document, although USGS does not author guidance documents.
3. For example, it would seem that an example framework to “quantify flow targets” as described in the *Federal Register* should acknowledge that some water quality criteria are based on water temperature standards or a “do not exceed” concept. There is no detail or framework in this draft document about how a regulator would develop these flow/species relationships. For example, page 14 says that Section 6 will help water-resource managers develop “numeric flow targets” by following the framework, yet this is not achieved in this document.
4. The draft report only describes general ways to look at potential fish effects based on variable hydrologic flows and does not mention water temperature standards or the “do not exceed” concept that some permitted agencies are required to comply with for specific stream reaches.
5. Similarly, in the framework described in Section 6, there is again no description of how to make the judgments described. Instead, the document only provides a methodology for finding total restoration to the original natural condition of the water body per disturbance irrespective of public benefits and purposes served by the dam or other stream alteration.
6. Section 5.5. Consideration of Flow Alteration in Issuing 404 Permits. Pp 57-58 states,  “The Section 404 review entails evaluating efforts to avoid the adverse effects on aquatic resources, minimizing effects if they cannot be avoided, and mitigating any unavoidable adverse effects that remain.” Section 5.5 continues with example of potential minimizing or mitigating factors, but it provides no tools for making the second two sets of decisions, as related to the ecological flow values, acknowledged and described to be a part of the 404 statute. This should be expanded upon, to support the guidance this section is purporting to provide.
7. Section 6.8 Estimate Effects and Identify Acceptable Levels. P 82.  This section offers no guidance for how to select acceptable levels (i.e. numeric flow targets) unless the levels achieve the goal of total restoration or preservation of an ecological flow that fully supports the biota.  In addition, while this section does propose the use of adaptive management if the achievement of the goal is to be achieved in stages,.it does not provide guidance on how to establish the minimum recommended starting stage or how to set the time for the ultimate achievement of the goal.

**Provide a greater context for the other designated uses under the CWA.**

1. The narrow topical focus (i.e., protecting one of several designated uses in a stream) of the technical report raises the question about whether other technical documents will be released to address the other designated uses. Regardless of whether there will be other technical documents, this draft should be revised and written in such as way as to acknowledge the greater context of all designated uses under the CWA (i.e., how water resource managers and others responsible for maintaining hydrologic flow can work to achieve all CWA targets for the regulated water body.)
2. Addressing issues of resilience and sustainability in the context of water resources planning – should be done holistically if possible, to prevent a stove-piping of issues.
3. While the title makes clear that this report is focused on protecting aquatic life from hydrologic alteration, it should not focus solely on aquatic life at the detriment of the other designated uses of a water body. This bias is not reflective of the CWA, which should seek a means to provide for and maintain all protected uses without effectively calling for the cessation of another protected use, which is what is implied in Sections 4.1 and 4.3, noted below.
4. The draft report sets out a list of alteration sources that impact aquatic life, however many of these flow alteration sources pertain to water supply infrastructure, which is necessary to provide for public health and welfare (i.e., a vital designated use). For example, the list on page 17, at bullet item 3, calls out human activities that have modified channel storage or allowed for the removal of water from streams altering the natural flow regime. This of course, includes the diversion of water to be a supply for a population, which relies on the stream for its potable water supply. Section 4.2 lists the drivers for the natural flow regime and section 4.3 lists manmade sources of flow alteration, signaling that dams and water diversions for water supply or industry are antithetical to the fishable use. This lack of balance appears to be making a policy statement in that it is not provided in the context of how to appropriately allow multiple uses of water bodies - uses which are protected in such streams under the CWA.
5. Section 4.3.1 Dams and Impoundments. At pages 21-22, the document reads, “Studies have shown that dam deregulation (when operational guidelines for the dam are modified to address environmental concerns about downstream fisheries, riparian habitats, recreation, flow, etc.) has the potential to restore ecological function downstream of dams.” The section acknowledges that the primary purpose of the dam will be considered [“that is hydropower, flood control, irrigation, etc.], but it does not acknowledge that the dam, indeed, has a primary purpose, that must be fulfilled first when considering “deregulation” for the ecological flow needs.
6. Section 4.3.2. Diversions. There is no acknowledgement in this section of preserving the social and economic benefit from the diversion [“hydropower, irrigation, municipal, and (or) industrial purposes.”] when modifying a diversion to better support ecological flow. The section especially calls out low flow diversion so during drought, the primary purpose of the diversion will be compromised for ecological flow.
7. Section 5.4 Box F. 401 Certifications, Sufficient Flow, and Water Quality Standards. This section offers the example of a 401certification denial by SC Board of Health and Environmental Control in a hydroelectric power license renewal.  As a result of the denial, more water was provided to improve conditions for the sturgeon, but the document does not identify how an appropriate amount of additional flow was determined while preserving the hydroelectric primary purpose of the dam.
8. This document does not include any discussion of water reuse, save an indirect reference to decreases in flows and the impact on aquatic habitat. For example, when a municipality withdraws water from a stream, but no longer returns a similar amount (via wastewater discharge) due to water reuse or recycling activities, how does one change, use, or apply these criteria?

**Implications of climate and climate change on hydrologic alteration**.

1. Figure 2 notes that climate is part of the natural hydrologic regime, yet does not acknowledge that flow can be altered because of both anthropogenic and natural climate variability. The report should distinguish between these two sources of alteration.
2. In addition, the document does not describe at all how to consider this natural hydrologic effect, but rather, suggests that the “man-made” sources of alteration could be reviewed and modified (such as a “dam reregulation”) to address it.
3. The draft report implies that the proposed solution to address climate change impacts on the hydrologic regime is to restore the flow regime to protect the uses that existed before there were any recognized impacts from climate change.  This is an unrealistic and unreasonable approach to naturally occurring changes in the environment.

**Carefully review the document and remove or edit text that implies policy recommendations**.

1. The use of case law in the draft implies that this is a policy document and EPA is framing its argument to support a policy decision, rather than a technical document explaining the scientific state of the issue. For example, EPA states on page 40, “CWA case law has affirmed that the distinction between water quantity and water quality is artificial and that sufficient water quantity may be necessary in order to protect designated uses and meet anti degradation requirements.”  While sufficient water quantity MAY be necessary in order to protect designated uses, this assessment of case law (with only one example) is not only an example of a policy statement, but also would seem to be an overstatement of the body of case law.
2. The sections in the document that reference climate change imply that permits will be written such that holders will be required to somehow maintain “natural” conditions in streams - which will be increasingly challenging in a warming world. This is another example of a policy recommendation rather than a technical assessment.
3. CWA should not impair water rights (Need some language here with examples – from Denver Water)
4. The references to maintaining high flow volumes in Sections 1 (p. 8), 4.3 (p. 19) and 4.5 (p. 37) infer such as a policy recommendation. Greater streamflows do not necessarily equate to greater fish counts and healthier aquatic populations. Instead – increased flows should be highlighted as one of the strategies available to water managers to mitigate declining species populations – if it is shown that species populations respond positively to increased flows.