



**ASSOCIATION OF
METROPOLITAN
WATER AGENCIES**

LEADERS IN WATER

1620 I Street, NW, Suite 500
Washington, DC 20006

P 202.331.2820 **F** 202.785.1845
amwa.net

June 14, 2016

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 important to AMWA and a key component of any progressive utility's mission, which encompasses balancing the need to provide safe drinking water with the ecological impacts of water use.

Our comments on the referenced draft technical report are provided as Attachment A. The comments address four key recommendations, i.e., that the document should be revised to:

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

AMWA's overarching concern about the draft is that, as a technical document, it should neither infer nor include policy recommendations with technical information. As currently written, the document mixes policy, guidance and technical information. This should be corrected in the final document. Our comments point out several examples of this mixing and provide recommendations for how to address it.

If you have any questions please contact Erica Brown at 202-331-2820 or brown@amwa.net.

Sincerely,

Diane VanDe Hei, CEO

Cc: Jonathan Kennen, USGS

Attachment

BOARD OF DIRECTORS

PRESIDENT

Scott Potter
Nashville Metro Water
Services

VICE PRESIDENT

Mac Underwood
Birmingham Water Works
Board

TREASURER

Michael Wallis
East Bay MUD

SECRETARY

Steve Schneider
Saint Paul Regional Water
Services

Irene Caminer

Chicago Department of Water
Management

John Carman

Fort Worth Water Department

Jun Chang

Houston Public Utilities Division

John Entsminger

Las Vegas Valley Water District

Ray Hoffman

Seattle Public Utilities

Julia J. Hunt

Trinity River Authority of Texas

Robert Hunter

Municipal Water District of
Orange County

Carrie Lewis

Milwaukee Water Works

Angela Licata

New York City DEP

James S. Lochhead

Denver Water Department

Ron Lovan

Northern Kentucky Water
District

Sue McCormick

Great Lakes Water Authority

Chuck M. Murray

Fairfax Water

William Stowe

Des Moines Water Works

John P. Sullivan, Jr.

Boston Water and Sewer
Commission

Douglas Yoder

Miami-Dade Water and Sewer
Department

**CHIEF EXECUTIVE
OFFICER**

Diane VanDe Hei

Attachment A

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

- Provide a greater, more holistic context for the other designated uses under the Clean Water Act (CWA);
- More clearly define what the document is and is not, and how it should be used;
- Clarify implications of 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 draft document is its strong implication that 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 focuses on protection of aquatic life, it should provide a uniform approach to identifying ways to recognize and balance competing uses existing and/or designated for the same water body that are protected within the scope of the CWA.

A related and additional strong concern AMWA has is that this document is essentially a policy document or a guidance document or a mix of both; it is not a scientific investigations report. Two examples to illustrate this concern are the references to court cases to support policy interpretations under the CWA (policy), and the examples of how states are regulating water quality criteria for flow (guidance). If USGS is to be a party to this document, these references should be removed from the document and appendices. A published technical report will be part of the accepted history upon which future guidance and regulation is built. USGS credibility and the respect it has garnered for the technical work it has done should not include policy inferences and recommendations. Therefore, it is important for USGS to stay impartial and committed to its mission of scientific integrity as DOI's sole scientific agency. As stated on the USGS website (<https://www.usgs.gov/about/about-us/who-we-are>) impartiality is a key component of the work of USGS, "Our diverse expertise enables us to carry out large-scale, multidisciplinary investigations and provide impartial scientific information to resource managers, planners, and other customers."

As currently drafted, the document is not impartial with regard to policy and guidance recommendations and therefore cannot be classified a technical document unless major revisions are made, as described more specifically in our comments, below. Therefore, AMWA recommends that in order to maintain the objectivity and credibility it has as an authoritative source on technical issues, USGS should unilaterally draft a technical document on this topic, and EPA should draft a separate guidance and/or policy document, including the policy and guidance components of the current draft. AMWA recommends that any framework or criteria discussed should be part of a guidance document rather than a technical document. Our comments sometimes make recommendations about what should be done if EPA finalizes this document as a guidance document, and what policy suggestions should be removed from a technical document.

Finally, there is a bigger policy issue that EPA must address at some point in the future, in light of climate change (although as this is not purported to be a policy document it should not be addressed here). If climate is changing, and the environment is adapting to that change, our environmental 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

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

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.

The narrow topical focus of this document 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 a 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). Addressing issues of resilience and sustainability in the context of water resources planning – should be done holistically if possible, to consider how to best accommodate a resilient ecosystem in the context of not only the designated uses of the water body, but also the many different legislative authorities over the water resources and the different federal and state agencies and their related authorities.

Five specific examples are listed below:

1. 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 thus altering the natural flow regime. This of course, includes the diversion of water for a human 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 section appears to be making a policy statement and neglects to describe how to appropriately allow for multiple uses, which are protected in such streams under the CWA, and can be balanced to preserve all uses.
2. 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.” In addition, the section acknowledges that the primary purpose of the dam will be considered [i.e., 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.

3. 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 specifically calls out low flow diversion so during drought, the primary purpose of the diversion will be compromised for ecological flow.
4. Section 5.4 Box F. 401 Certifications, Sufficient Flow, and Water Quality Standards. This section offers the example of a 401 certification 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.
5. Finally, the draft document does not include any discussion of water reuse, save an indirect reference to decreases in flows and the impact on aquatic habitat. In a technical document, an acknowledgement of how water reuse may play a role should be described. Criteria would be acceptable in a guidance document. 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?

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

What is this document intended to be? Is it a technical document? Is it a guidance manual (per items 3 and 4 below)? Is it a policy document? Although EPA and USGS said during their May 12, 2016 webinar that the document is not intended to be a guidance or policy document, in many ways, the draft reads like all three types. 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. AMWA recommends that EPA and USGS remove the policy and guidance language, or develop separate documents, as noted above. At a minimum, USGS should reevaluate its participation in authoring this document to ensure the agency is maintaining the appropriate non-advocacy scientific role, as described in the agency’s [Guidance on Advocacy and Recommendations in USGS Information Products](#).

For example, it would seem that an example framework to “quantify flow targets” as described in the *Federal Register* is more characteristic of a guidance document, rather than a technical one. That guidance 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.

Following are additional examples for areas where EPA should revise the document in the event this is finalized as a framework/guidance document:

1. 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 with which some permitted agencies are required to comply for specific stream reaches. This discussion in the draft is characteristic of a guidance document, rather than a technical document, and if it remains, the final document should discuss both concepts for permitting.
2. Similarly, in the framework described in Section 6, there is no description of how to make the judgments outlined. Instead, the document only provides one methodology: i.e., 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. While the framework described is a technical description, by only describing the methodology for the restoration to the stream’s natural conditions, this section infers a policy judgment about the approach.
3. Section 5.5. Consideration of Flow Alteration in Issuing 404 Permits (pages 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.
4. 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 technical information about how to establish the minimum recommended starting stage or how to set the time for the ultimate achievement of the goal.

Implications of climate and climate change on hydrologic alteration.

Figure 2 of the report 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. The document does not describe at all how to consider natural hydrologic effects, but rather, suggests that the “man-made” sources of alteration could be reviewed and modified (such as a “dam reregulation”) to address it.

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 (either natural or manmade). 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.

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 seems to be an overstatement of the body of case law.

The CWA should not impair water rights. In fact, the CWA clearly limits EPA’s authority to hinder state control over water quantity in 33 USC 1251, paragraph **(g) Authority of States over water:**

“It is the policy of Congress that the authority of each State to allocate quantities of water within its jurisdiction shall not be superseded, abrogated or otherwise impaired by this chapter. It is the further policy of Congress that nothing in this chapter shall be construed to supersede or abrogate rights to quantities of water which have been established by any State. Federal agencies shall co-operate with State and local agencies to develop comprehensive solutions to prevent, reduce and eliminate pollution in concert with programs for managing water resources”

Similarly, state law where the state has primacy of the CWA notes has similar provisions, for example note Colorado’s statute 25-8-104.

“ Interpretation and construction of water quality provisions. (1) No provision of this article shall be interpreted so as to supersede, abrogate, or impair rights to divert water and apply water to beneficial uses in accordance with the provisions of sections 5 and 6 of article XVI of the constitution of the state of Colorado, compacts entered into by the state of Colorado, or the provisions of articles 80 to 93 of title 37, C.R.S., or Colorado court determinations with respect to the determination and administration of water rights. Nothing in this article shall be construed, enforced, or applied so as to cause or result in material injury to water rights. ”

If the language with legal analysis is to remain in the document, then it should clearly reference the CWA language that indicates that the authority to develop policy that address water quantity (i.e., flow) lies with the states. The references to maintaining high flow volumes in Sections 1 (p. 8), 4.3 (p. 19) and 4.5 (p. 37) infer such 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.

Finally, 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.