



The voice of fish and wildlife agencies

1100 First Street, NE, Suite 825
Washington, DC 20002
Phone: 202-838-3474
Fax: 202-350-9869
Email: info@fishwildlife.org

June 16, 2016

Ms. Diana Eignor
Health and Ecological Criteria Division
Office of Water (Mail Code 4304T)
Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Dear Ms. Eignor:

Attention Docket ID No. EPA-HQ-OW-2015-0335

Re: Notice of Availability-Request for public comments on the draft EPA-USGS Technical Report: Protecting Aquatic Life from Effects of Hydrologic Alteration

The Association of Fish and Wildlife Agencies (Association) is writing to provide comments for the record on the Draft Technical Report: *Protecting Aquatic Life from the Effects of Hydrologic Alteration* (Technical Report), prepared by the Environmental Protection Agency (EPA) and U.S. Geological Survey (USGS; Agencies). The Association is the collective voice of North America's state, provincial and territorial fish and wildlife agencies. Our mission is to support and advocate for state, provincial and territorial authority for fish and wildlife conservation and to assist those agencies in promoting science-based resource management in collaboration with public and private partners. All 50 states are members and have statutory authority to manage fish and wildlife within their borders as resources held in trust for public benefit. The Association appreciates the opportunity to share state perspectives on the Technical Report. We thank the Agencies for their attention to this critical issue which is of great importance to our state agency members.

Given the ever increasing challenges to the management of our aquatic resources, it is imperative that state, tribal, and local governments and federal partners hold a broad understanding of natural flow and water level regimes as well as the impacts of anthropogenic influences on those systems. To that end, we commend the drafters of the Technical Report for their comprehensive review of the current scientific literature surrounding natural flow regimes and their actions to summarize this complex information in one educational document.

The Association notes that the Technical Report outlines methods and concepts which are limited to riverine (lotic) systems and does not include methods and recommendations for addressing lakes (lentic systems), estuaries and other water body classifications. The Association suggests that it would be highly beneficial to include all systems in the final

Technical Report. Otherwise, per these qualifiers and other disclaimers included, it may be prudent to consider revising the title to, *Options and Examples for Protecting Aquatic Life from the Effects of Hydrologic Alteration in Riverine Systems* to more accurately represent the content and focus of the report.

We are pleased to see that the Technical Report references and relies upon the science provided in the Instream Flow Council (IFC) publication, *Instream Flows for Riverine Resource Stewardship* (Annear et al. 2004). The IFC, which drafted that publication, is comprised of members of state and provincial fish and wildlife agencies. All state fish and wildlife agencies reviewed the content of the IFC document prior to publication in order to ensure its nationwide applicability, accuracy, and utility, thereby establishing it as a foundational document on the impacts of natural flow regimes on fish and wildlife resources. We would like to call your attention to the fact that the citation of this publication in the Technical Report is incorrect; the preferred correct citation is provided below for your use.

The Association appreciates that Section 6 of the Technical Report outlines and recommends a framework for states and authorized tribes to reference as a starting point for quantifying flow targets which will be protective of aquatic life. Conservation of our fisheries and aquatic resources is critically dependent on our ability to ensure that anthropogenic actions are implemented in ways that fully address the needs of aquatic resources. We also recognize that, although methods for identifying variables to consider for inclusion in the decision framework are outlined and established in both the literature and Technical Report, these data are frequently inadequate or unavailable to those seeking to inform management and permit decisions especially when there are limited timelines and resources available for supplemental data collection and analyses. More specifically, Section 6.5 provides numerous sources of biological data for aquatic systems which, even when combined, only represent data on a fraction of the waters within the United States. The lack of standardized hydrologic and biological aquatic data across many of our aquatic systems can result in poorly informed models and biased results on which management and permitting decisions will be based.

The footnote on page 74 should be edited to accurately reflect the status and role of the National Fish Habitat Partnership (NFHP) database. Although a useful resource, the NFHP does not currently hold data for every stream reach and catchment in the United States and many regions lack the needed baseline hydrologic, hydrographic, and biological data needed to inform the modeling process. While numerous federal agencies hold hydrology data under the umbrella of certain projects and programs, to date, the stream gage network of the USGS is the primary source of standardized available data for continuous monitoring of stream flows and water levels nationally. Even so, this monitoring is only representative of less than one percent of census population stream reaches found within the conterminous United States (DeWeber et al. 2014). Furthermore, despite its high proportions of freshwater resources and land mass area compared to the remainder of the U.S., Alaska had the shortest median years of record for reference-quality stream gages in the nation (Kiang et al. 2013). It also has among the lowest density with approximately one active gage per 6,000 square miles.

Along these lines, it is unclear why Hawaii and Alaska are not included in Figures 3, 4, 7, 8 and thus only display conterminous/contiguous (lower 48 states) information versus all continental 49 states and Hawaii. Alaska and Hawaii collectively contain significant amounts of the nation's freshwater resources and coastal areas that produce important freshwater and estuarine dependent fish and wildlife resources. The Association requests information and illustrations on Hawaii and Alaska to be included in the final Technical Report or would appreciate a summary of why this information is not included in the final Technical Report. As mentioned in the Technical Report, many states also have data on numerous lentic and lotic waterbodies within their borders, but states also often lack the capacity to collect, analyze, and report natural and seasonal flow and water level regimes over long periods of time. It is also a resource challenge for some states to adhere to the standardized protocols necessary to appropriately inform risk assessments and models that seek to ensure both protection of aquatic resources and consistency in both regulatory and non-regulatory processes.

The Association recognizes the utility of qualitative flow modeling in the elementary stages of a decision making process but recommends that when possible quantitative based flow models with continuous real-time long-term mean daily flow and water level data be utilized in order to ensure a more accurate representation of flow and water level regimes to inform management and permit decisions. Further, given the adaptive framework recommended in the Technical Report and the need to achieve management goals based on biological objectives, we would also appreciate the inclusion of a section that speaks in more detail to the selection and inclusion of biological variables significant to the models outlined in the Technical Report.

Given these global needs, we feel that it is imperative that USGS and EPA work together with the states under their current authorities, expertise, and programs to develop a nationwide framework to gather, analyze and report the data necessary to achieve the goals outlined in this Technical Report and under the Clean Water Act. Accordingly, the Association would welcome the opportunity to work collaboratively with USGS and EPA in order to develop and implement this much needed initiative and discuss how current and future federal, state, and tribal programs may be utilized to help address our nation's aquatic resource data deficits.

The Association also supports common-sense application of the Clean Water Act that will improve administrative processes and support the water quality and quantity management under state and federal laws needed to maintain aquatic life, while also recognizing each individual state's authority to manage the fish and wildlife resources as public trust resources. We recommend that this document include a more explicit delineation of the existing authorities, including federal authorities, as well as state and tribal jurisdictions, which may help to increase some states' ability to work cooperatively with federal and tribal agencies to address ecological and public health needs and benefits. As such, the Agencies may want to consider adding germane IFC policy language in the Technical Report which states "Federal agencies should integrate their water and riverine management efforts within the constructs of state and provincial laws, regulations, and policies to protect riverine resources." (Annear et al. 2004).

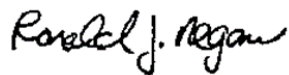
We thank you again for the content of the Technical Report and feel that it not only highlights the need for a more robust national data collection and monitoring program for aquatic resource functions, but also provides a conceptual basis for a dynamic standardized framework protective of aquatic resources on which managers across the nation can reference, and over time build upon and utilize, when those data are acquired.

We greatly appreciate the opportunity to provide comments on the Technical Report, and we look forward to the prospect of working the Agencies to refine its development and collaboratively work to ensure the additional baseline hydrologic, biological and hydrographic data needed to inform the models recommended in this Technical Report will eventually become available to those in the position to protect and conserve our aquatic resources as directed by state and federal laws.

We would also welcome the opportunity to meet with you to discuss other efforts, initiatives and programs that could help to address the known impacts to the natural hydrograph adversely affecting the integrity of the nation's aquatic resources.

If you have any questions about these comments, please contact Ms. Devin DeMario at ddemario@fishwildlife.org or at 202-838-2562.

Sincerely,



Ronald J. Regan
Executive Director

Citations:

Annear, T., I. Chisholm, H. Beecher, A. Locke, P. Aarrestad, C. Coomer, C. Estes, J. Hunt, R. Jacobson, G. Jöbssis, J. Kauffman, J. Marshall, K. Mayes, G. Smith, R. Wentworth, and C. Stalnaker. 2004. *Instream Flows for Riverine Resource Stewardship, Revised Edition*. Instream Flow Council, Cheyenne, WY. 268 pp.

Jefferson Tyrell Deweber, Yin-Phan Tsang, Damon M. Krueger, Joanna B. Whittier, Tyler Wagner, Dana M. Infante & Gary Whelan (2014) Importance of Understanding Landscape Biases in USGS Gage Locations: Implications and Solutions for Managers, *Fisheries*, 39:4, 155-163, DOI: 10.1080/03632415.2014.891503

Kiang, J.E., Stewart, D.W., Archfield, S.A., Osborne, E.B., and Eng, Ken, 2013, A national streamflow network gap analysis: U.S. Geological Survey Scientific Investigations Report 2013-5013, 79 p.