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Ms. Diana Eignor
U.S. Environmental Protection Agency
Office of Water
1200 Pennsylvania Ave., N.W.
Washington DC 20460

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

Dear Ms. Eignor:

This letter provides comments on behalf of the Western Urban Water Coalition (“WUWC”) on the Draft EPA–USGS Technical Report: Protecting Aquatic Life From Effects of Hydrologic Alteration jointly published by the U.S. Environmental Protection Agency (“EPA”) and the United States Geological Survey (USGS) (together, the “Agencies”). *See* 81 Fed. Reg. 10620, March 1, 2016 (“Draft Technical Report” or “Report”). WUWC appreciates the opportunity to comment on the Agencies’ Draft Technical Report.

Created in June 1992 to address the West’s unique water issues, WUWC consists of the largest urban water utilities in the West, serving over 35 million western water consumers in major metropolitan areas in the western states. The membership of WUWC includes the following urban water utilities: *Arizona* – Central Arizona Project, City of Phoenix and Salt River Project; *California* –Eastern Municipal Water District, Los Angeles Department of Water and Power, The Metropolitan Water District of Southern California, San Diego County Water Authority, City and County of San Francisco Public Utilities Commission, and Santa Clara Valley Water District; *Colorado* – Aurora Water, Colorado Springs Utilities, and Denver Water; *Nevada* – Las Vegas Valley Water District, Southern Nevada Water Authority, and Truckee Meadows Water Authority.

WUWC members have a strong interest in clean water for municipal water supplies. Simultaneously, WUWC supports preserving an adequate supply of water for environmental and recreational purposes. Recognizing that water is becoming more scarce and critical to the West's sustainability, WUWC advocates for effective and practicable approaches to water management. This includes ensuring that waterbodies can continue to support the various uses of waters that are considered desirable and should be protected. For these reasons, WUWC members are concerned with any technical guidance that may impact the future application of Clean Water Act ("CWA") programs, or impair the exercise of western water rights. Specifically, WUWC members believe that technical guidance should not impact state water rights and state water rights priority as they relate to municipal use.

I. BACKGROUND

The Agencies developed this Draft Technical Report out of a concern that hydrological alteration of natural flow can negatively impact aquatic ecosystems in waterbodies designated to support aquatic life. Draft Technical Report, at 7. The Report provides states, tribes and territories with information on: "(1) the natural flow regime and potential effects of flow alteration on aquatic life; (2) CWA programs that can be used to support the natural flow regime and maintain the health of aquatic biota; and (3) a flexible, nonprescriptive framework to quantify targets for flow regime components that are protective of aquatic life." *Id.*

II. OVERARCHING QUESTIONS

It would be helpful if the Agencies could address the following questions in order to assist the public in developing a better understanding of the purpose and context of the Report.

- Why did the Agencies decide to publish this Report at this time?
- Will there be additional reports that will address impacts of flow alteration on each of the common designated uses? If not, why did the Agencies choose to focus solely on the impacts of flow alteration on aquatic life?
- What stakeholder outreach was associated with the production of the Draft Technical Report? In particular, what was the extent of state involvement?
- When preparing the Draft Technical Report, did the Agencies take into consideration how the responsive or remedial actions referenced in the Draft Technical Report could be undertaken or implemented in states that have adopted a "prior appropriation" water allocation system without unduly interfering with such systems or water decrees obtained thereunder?

III. GENERAL COMMENTS

WUWC has the following general comments on the Draft Technical Report:

The Purpose of the Draft Technical Report: The Agencies repeatedly emphasize that this Draft Technical Report is scientific in nature and does not impose any requirements on states, tribes or territories. *See e.g.* Draft Technical Report, at 14. While the Agencies label the Report as a “nonprescriptive framework,” it contains content that more closely resembles policy recommendations and legal analysis. For example, in section 5, “Examples of State and Federal Actions to Protect Aquatic Life from Altered Flows,” the Agencies set forth a legal analysis that appears to set forth groundwork for subsequent policy decisions. The Agencies state “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 antidegradation requirements. Draft Technical Report, at 40 (citing *PUD No. 1 of Jefferson Cty. v. Washington Dep't of Ecology*, 511 U.S. 700 (1994); *S.D. Warren Co. v. Maine Bd. of Env'tl. Prot.*, 547 U.S. 370 (2006)); *see also* Draft Technical Report, at 135. The analysis found within the Report can easily be read as the foundation upon which regulatory decisions can, and will, be made by both federal authorities, including EPA, the U.S. Fish and Wildlife Service, the U.S. Forest Service, and the U.S. Army Corps of Engineers, as well as state environmental protection agencies, in the fulfillment of their regulatory responsibilities. Although the Draft Technical Report contains policy recommendations and legal analysis, Agency representatives refused to answer any questions surrounding the policy and regulatory implications of the Report in the Webinar held by the Agencies on May 12, 2016. Because the Agencies' competencies are on technical issues and proper stakeholder outreach was not completed, the Agencies should remove all policy recommendations and legal analysis from the Draft Technical Report.

The Scope of the Draft Technical Report: The scope of the Draft Technical Report is limited only to impacts of altered hydrological flow on a single designated use—protection of aquatic life. However, this is only one of many uses that may be designated for a particular waterbody or waterbody segment. The Report does not address drinking water, recreation or other designated uses, even though the Agencies acknowledge in the Report that these designated uses are also affected by hydrological alteration. Draft Technical Report, at 13. Further, at times these uses may be “competing” in nature, where the maintenance of a hydrologic regime to promote one works to the detriment of another. How is an appropriate balance to be achieved? The Report is silent on this.

The Implied Hierarchy of Designated Uses: By focusing solely on protection of aquatic life, the Draft Technical Report implies that the protection of aquatic life is superior to the support of other designated uses. Moreover, the Draft Technical Report identifies water diversion and storage activities, including water withdrawals, dams, impoundment and reservoirs, interbasin transfers and diversions, as sources of flow alteration that cause adverse impacts to aquatic life. *See* Draft Technical Report, at 1727. By emphasizing the importance of maintaining flow for the protection of aquatic life, and implying water diversion and storage activities are incompatible with the protection of aquatic life, the Draft Technical Report creates a hierarchy among

designated uses. This is inconsistent with the CWA. Under the CWA, various uses of water are considered desirable and should be protected. CWA §§ 101(a)(2) and 303(c). According to EPA, “[a]mong the uses listed in the CWA, there is no hierarchy.” EPA’s Water Quality Standards Handbook, Chapter 2, at 1. The Agencies should clarify that the Draft Technical Report does not create any hierarchy among designated uses listed in the CWA.

Sources of Flow Alteration: The Draft Technical Report sets forth the major potential sources of flow alteration and describes their typical effects on the natural flow regime. The Report focuses on the “deleterious alterations to habitat or the biological community” caused by these sources of flow alteration. The Report, however, fails to acknowledge that these human alterations can have positive impacts on hydrological flow.

- **Dams and Impoundments:** The Draft Technical Report fails to recognize three important benefits that dams and impoundments can have on aquatic life. First, the Draft Technical Report references studies demonstrating that dam reregulation can “restore ecological functions downstream of dams.” Draft Technical Report, at 21. The Report fails to recognize, however, that in many western states, fisheries are enhanced downstream of dams given the releases associated with the dam. In instances where historic dam operations have resulted in such improvements for aquatic life, the Agencies should address whether they advocate the maintenance of these man-made ecological enhancements even though they are not rooted in a “natural” flow regime.

Second, the Report fails to consider that the seasonal flood control provided by dams and impoundments can benefit aquatic life. For example, dams insulate the Lower Colorado River system from floods that would routinely degrade riparian and in-stream habitat. Also, the muting of peak runoff and later summer releases increases instream flows supporting riparian systems.

Third, the Report fails to acknowledge the multi-annual benefits from storage releases from flow-altered systems. The carry-over storage and later releases (year-to-year) protects riparian and in-stream systems from the impacts of drought, thus protecting aquatic life.

Moreover, it is important to note that while it may be true that dam reregulation can restore ecological functions downstream of dams in certain instances, dam reregulation can also impair the beneficial use of water rights dedicated to a variety of purposes, such as domestic water supply and irrigation.

- **Diversions:** The conclusions contained in the Draft Technical Report with respect to interbasin transfers are incomplete and unbalanced. The Report states that diversions remove “a greater proportion of flow...during low flow periods...” Draft Technical Report, at 24. In the case of interbasin transfers in the arid West, transfers occur primarily during spring run-off when flows are at their highest and the interbasin water

right decrees are in priority. Further, the Report fails to note that in an interbasin transfer, streams in the basin of receipt, which are often-times used for carriage, benefit from the additional flow. Moreover, after “first use,” the diverted water often times results in irrigation and/or point source discharge return flows, which can have both in-stream benefits and re-use benefits.

- **Regulated Discharges (Effluent):** The Draft Technical Report implies that effluent and other such discharges, which augment flow, have negative consequences on aquatic ecosystems. *See* Draft Technical Report, at 27-28. The impacts of this augmentation of hydrological flow are not necessarily negative. In fact, there are ecosystems in the arid West that depend upon such discharges. The existence of these ecosystems, in an otherwise arid environment, is often vital to aquatic life. Moreover, EPA promotes the discharge of effluent where necessary to attain another use. *See* 40 CFR 131.10(g)(2).
- **Additional Potential Sources of Flow Alteration:** Though the Draft Technical Report identifies a number of potential causes of hydrologic alterations, it fails to address, or at least note, how other policies and practices may influence watershed conditions and therefore, impact flow regimes. Of particular importance in the West is the health of the forests, most of which are found on federal lands. The failure to appropriately invest in forest health practices has been one factor that has led to catastrophic wildfires which, in turn, have very significant impacts on flow patterns.

The Impacts of Climate Change: The Draft Technical Report acknowledges that there exists a “lack of management options for direct mitigation” when dealing with climate change impacts which may “substantially alter historic flow patterns.” Draft Technical Report, at 30. The Report proceeds to state that the ability of the stream ecosystem to adapt to climate stressors is greater for those where “flow patterns more closely resemble the natural flow regime.” *Id.* at 31. There is then a suggestion that parties should enhance adaptive capacity. *See id.* at 31-33. There is no indication, however, of how this enhancement is to be accomplished given the acknowledged lack of management options, nor where the responsibility for such enhancement should fall.

In addressing “resilience,” the Report references the need for “restoring or maintaining a natural flow regime.” This raises the question of whether the climate variability currently being experienced represents the “new normal”. If so, how are the agencies proposing to appropriately define “natural” flow? Is it the climate modified flow regime? The Agencies should consider a more realistic approach to addressing the challenges posed by climate change.

Narrative Criteria in State and Tribal Water Quality Standards: The Draft Technical Report provides an overview of the various narrative water quality standards (“WQS”) that states use to address the impacts of hydrologic alteration on aquatic life. Draft Technical Report, at 46. In this guidance for states, the Report contains the generic assertion that “EPA recently reiterated that water quality standards...must ensure attainment and maintenance of downstream water quality standards, including the hydrologic condition...” *Id.* It appears that the citation is to

EPA's June, 2014 FAQ on the "Protection of Downstream Waters" ("2014 FAQ"). Although the Report fails to cite the exact page of the 2014 FAQ upon which this statement is based, in discussing the impacts from "hydrologic flow alterations" in the 2014 FAQ, EPA observes that "particularly where a state/tribe has approved hydrologic flow criteria in their WQS, EPA considers 40 CFR 131.10(b) to apply." 2014 FAQ, at 5. Thus, EPA evidently takes the position that upstream states must release an amount of flow adequate to meet the "flow criteria" of the downstream state. Unfortunately, this type of blanket conclusion may prove to be inconsistent with both state water court systems and decrees, interstate compacts, and Supreme Court decrees. Further, there is a legitimate question regarding whether there exists statutory authority under the CWA or its state counterparts to regulate "flow" as compared to simply providing information on the impact of flow changes in meeting designated uses and associated criteria. *See e.g.*, 33 U.S.C. § 1314(c); U.S. EPA, Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act," available at <http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2006irg-report.pdf> (discussion of waters impaired by pollution under Category 4c); *Virginia Dep't of Transp. v. U.S. Env'tl. Prot. Agency*, No. 1:12-CV-775, 2013 WL 53741 (E.D. Va. Jan. 3, 2013).

Legal Background and Relevant Case Law: It bears repeating at the outset that it does not appear to be appropriate to include a "legal analysis" in what is purported to be a "nonprescriptive" technical document. That said, since the Agencies included legal analysis both in the Report and Appendix, some response thereto is warranted. *See* Draft Technological Report, at 39-40; *see also id.* at Appendix B.

The Report proclaims that "case law has affirmed that the distinction between water quality and water quantity is artificial and that sufficient water quantity may be necessary to protect designated uses and meet antidegradation requirements." Draft Technological Report, at 40 (citing *Public Utility District No. 1 of Jefferson Cnty. v. Washington Dept. of Ecology*, 511 U.S. 700, 719-721 (1994); *S.D. Warren Co. v. Maine Bd. of Env'tl. Prot.*, 547 U.S. 370 (2006)). This overly broad statement could lead one to improperly conclude that the U.S. Supreme Court, in the two cases cited, endorsed the subjugation of decreed western water rights and the variety of beneficial uses associated therewith, to the protection of aquatic life. This is not the case.

In *PUD No. 1*, the Supreme Court was concerned with "whether the minimum stream flow requirement that the state imposed on the Elkhorn project is a permissible condition of a 401 certification under the Clean Water Act." 511 U.S. at 710. Therefore, the Court found it necessary to "determine the scope of the state's authority under [CWA section] 401," and whether its imposition of a minimum stream flow fell "within the scope of that authority." *Id.* at 710. The court analyzed the language of the pertinent provisions of the Act, most notably CWA section 401 itself, and concluded that the state "may incidentally affect individual water rights...." *Id.* at 721. Therefore, the state had the authority to impose a minimum stream flow requirement. *Id.* There is a significant distinction, however, between incidentally affecting water rights through the state imposition of water pollution controls and the abrogation of vested property interests through the preclusion of diversions or storage and the placement to beneficial uses of decreed water rights associated therewith in order to maintain a "natural flow regime."

In *PUD No. 1*, the Supreme Court did indicate that “minimum stream flow requirements neither reflect nor establish ‘proprietary rights’ to water.” *Id.* at 720 (citing *California v. FERC*, 495 U.S. 490, 498 (1990) cf. *First Iowa Hydro–Electric Cooperative v. FPC*, 328 U.S. 152, 176 (1946)). The two cases the Court cited for this proposition, however, turned upon an interpretation of the provisions of the Federal Power Act (FPA) which was “intended to allocate the regulatory authority of the States and the Federal Government.” *California v. FERC*, 495 U.S. at 497. The FPA provision in question, 16 U.S.C. § 821, states:

“Nothing contained in this chapter shall be construed as affecting or intending to affect or in any way to interfere with the laws of the respective States relating to the control, appropriation, use, or distribution of water used in irrigation or for municipal or other uses, or any vested right acquired therein.”

Thus, in *California v. FERC*, the Supreme Court found that the federal government had retained authority over minimum stream flows, but not over water decreed for municipal or agricultural purposes. “California’s minimum stream flow requirements neither reflect nor establish ‘proprietary rights’ or ‘rights of the same nature as those relating to the use of water in irrigation or for municipal purposes.’” 495 U.S. at 498 (citing *First Iowa*, 328 U.S. at 176). The state, despite the statutory delegation of power to FERC, maintained supremacy over the municipal and irrigation uses.

In *PUD No. 1*, the Court examined a comparable provision of the CWA, section 101(g), which states:

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. 33 U.S.C. 1251(g).

The Court determined that the imposition of minimum instream flows in the CWA section 401 state certification process did not run afoul of the first sentence of section 101(g), which indicates that the authority of states to “allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired.” 33 U.S.C. 1251(g). The court did not, however, address whether such minimum flow requirements could “supersede or abrogate rights to quantities of water which have been established by any state.” 33 U.S.C. 1251(g). There was, in fact, no reason to do so, for to the extent water rights have been decreed under state law, they constitute a vested property interest, and deference must be afforded to the state in the absence of a clear Congressional directive otherwise. CWA section 401 is clearly a state prerogative. Each state, operating under its individual laws and water allocation scheme, determines what conditions may be appropriately imposed and which may not. To the extent there are water

quality risks associated with flow alterations, “changes in the river like these fall within a State’s legitimate business, and the CWA provides for a system that respects the State’s concerns.” *S.D. Warren*, 547 U.S. at 386.

Thus, consistent the CWA and Supreme Court case law providing deference to the states, the Draft Technical Report should clearly state that authority to impose flow criteria which may directly impact the exercise of decreed water rights lies within the discretion of states. States can craft mitigation responses that are consistent with state law, including state constitutional provisions.

IV. TECHNICAL COMMENTS

In addition to the General Comments, WUWC has the following specific comments on the technical conclusions reached in the Draft Technical Report:

- The hydrology that best supports one indigenous species in a typical western ecosystem may, in fact, be detrimental to other indigenous species that reside in the same stream system. Contrary to the implicit conclusion of the Draft Technical Report, no “single” hydrologic condition, whether “natural” or otherwise, accommodates all species.
- Many western aquatic systems currently support “non-native” species considered of “high value,” such as trout or other recreation-related species. The Draft Technical Report cites literature which references non-native species in need of protection. This protection would not exist if a waterbody was returned to its “natural” flow.
- The Draft Technical Report assumes that the “natural” flow regime is the regime existing absent any and all human-induced alterations (i.e., the pre-settlement condition). In the arid or semi-arid West, however, this “natural” flow regime, may reference a condition that not only has been absent for over a century, but one which is inadequate to support the riparian and in-stream ecosystem that has developed as a consequence of flow regulation and augmentation.
- The Draft Technical Report repeatedly assumes that human activities that alter flow degrade the chemical, physical and biological properties of a water body. The Draft Technical Report fails to acknowledge that, in certain circumstances, human activities that alter flow can improve the chemical, physical and biological properties of a water body. In many areas within the arid and semi-arid West, hydrologic alterations routinely improve conditions for aquatic life by providing more desirable flow conditions than the “natural” flow regime, which is oftentimes characterized by extreme high peak flows of relatively short duration (snowmelt and thunderstorms), and extreme low flows present for much of the late summer, fall and winter months. Many aquatic species “survive” or adapt to such conditions, but do not thrive therein. The highest aquatic life biomass often can be found in streams where flow is enhance by return flows from irrigated agriculture or effluent discharges, or below dams which make periodic or continuous controlled releases. Further, human-caused hydrologic alterations, such as reservoir releases, currently support endangered species recovery programs.

Thank you for your consideration of these comments. If you have any questions, please contact our counsel Donald C. Baur of Perkins Coie, LLP at (202) 654-6200.

Sincerely,

A handwritten signature in blue ink that reads "Michael P. Carlin". The signature is fluid and cursive, with the first name "Michael" and last name "Carlin" being the most prominent parts.

Michael P. Carlin
Chairman

cc: Donald C. Baur
Perkins Coie LLP
700 Thirteenth St., NW, Suite 600
Washington, D.C. 20005-3960