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via Regulations.gov federal rulemaking portal

U.S. Environmental Protection Agency
EPA Docket Center
Office of Water Docket
Mail Code 28221T
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Re: Revised Definition of “Waters of the United States;” Docket ID No. EPA-HQ-OW-2018-0149; Comments of Sierra Club, Puget Soundkeeper Alliance, Idaho Conservation League, Pacific Coast Federation of Fishermen’s Associations, Institute for Fisheries Resources, Tucson Audubon Society, National Association for the Advancement of Colored People (“NAACP”), and Southeast Alaska Conservation Council

To U.S. Environmental Protection Agency and U.S. Dep’t of the Army, Corps of Engineers:

These comments in opposition to the Revised Definition of Waters of the United States, 84 Fed. Reg. 4154 (Feb. 14, 2019) (“Dirty Water Rule” or “proposed rule”), are submitted by Earthjustice on behalf of the Sierra Club, Puget Soundkeeper Alliance, the Idaho Conservation League, Pacific Coast Federation of Fishermen’s Associations, Institute for Fisheries Resources, Tucson Audubon Society, the National Association for the Advancement of Colored People (“NAACP”), and Southeast Alaska Conservation Council (collectively “Clean Water Groups”).¹ We rely on clean water for drinking, to irrigate crops, for swimming and fishing, and as habitat for wildlife. Wetlands and other waters also reduce flooding and filter pollution. Since 1972, the Clean Water Act, one of our earliest and most important environmental laws, has helped restore and protect our Nation’s waters. The Clean Water Groups are opposed to the Dirty Water Rule as contrary to law, contrary to science, and contrary to the overwhelming evidence in the record that this rule will leave America’s waters unprotected from pollution, and subject to destruction and degradation. This Dirty Water Rule is contrary to the intent and purpose of the Clean Water Act and will reverse decades of progress on protecting and cleaning up one of our most precious natural resources: clean and healthy water for all. Further, this Dirty Water Rule will increase degradation of the Nation’s waters by incrementally allowing human alterations to waters of the U.S. to remove or cut off otherwise protected waters from the reach of the Clean Water Act.

¹ These comments are also submitted with, and fully incorporate, the separately submitted exhibits A through K-20, submitted to the federal rulemaking portal for EPA-HQ-OW-2018-0149 by Earthjustice on behalf of Sierra Club, et al. on April 12, 2019.

I. THE AGENCIES OFFER NO RATIONAL JUSTIFICATION FOR THEIR POLICY REVERSAL AND THEIR PROVIDED EXPLANATIONS ARE IRRATIONAL, ARBITRARY, AND CAPRICIOUS UNDER THE ADMINISTRATIVE PROCEDURE ACT.

The Agencies have pointed to no need or reasoned bases for their proposed rule to replace the 2015 Clean Water Rule with an entirely different rule that substantially narrows the scope of the Clean Water Act. The Agencies' few provided rationales contradict the Clean Water Act and its legislative history, and are arbitrary and capricious under the Administrative Procedure Act ("APA"). Specifically, the Agencies' claims that the Dirty Water Rule is intended to better align the definitions of "waters of the United States" with the text and legislative history of the Clean Water Act, to increase certainty, and reduce confusion with the 2015 Clean Water Rule, are all belied by the record. *See* 84 Fed. Reg. at 4156, 4196-97.

A. The Dirty Water Rule Contradicts the History, Intent, and Purpose of the Clean Water Act.

The Agencies' proposed severe narrowing of the term "navigable waters" and accompanying purported reliance on states to absorb losses in Clean Water Act coverage is not supported by the text and legislative history of the Clean Water Act, and also ignores important limitations in states' abilities to successfully regulate water pollution.

1. *Congress Passed The Clean Water Act Because States Had Failed To Adequately Protect Waters.*

The Federal Water Pollution Control Act of 1972 (the "Clean Water Act" or "CWA") was the culmination of years of failed efforts by states to protect and clean up the Nation's waters through the implementation of state-based water quality standards. S. Rep. No. 92-414 at 7 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3672; James Salzman & Barton H. Thompson, Jr., *Env'tl. L. and Pl'y* 141 (2d ed. 2007); *see also* Glicksman, Robert L. and Matthew R. Batzel, *Science, Politics, Law, and the Arc of the Clean Water Act*, 32 Wash. U. J. L. & Pol'y 099, 102-03 (2010). At the time of the passage of the Clean Water Act, half of the states had not adopted standards and there was little to no implementation of limits or enforcement against polluters, despite significant funding for the states' water quality standards programs. *See* Glicksman, *supra*, at 102; *see also* *EPA v. California*, 426 U.S. 200, 202-09 (1976); *American Paper Inst., Inc. v. EPA*, 890 F.2d 869, 870-71 (7th Cir. 1989). Because the situation had reached a critical stage, and because waters are national resources, Congress realized that a national strategy and system of requirements—a federal "floor"—would be necessary to ensure that waters would be cleaned up and protected into the future. *See* Glicksman, *supra*, at 102. Against this backdrop, Congress passed the Clean Water Act, wherein Congress' stated purpose and intent was to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a).

2. *Congress Intended The Broadest Possible Interpretation Of Navigable Waters.*

The Clean Water Act's legislative history does not support the narrow reading of "navigable waters" that the Environmental Protection Agency ("EPA") and the Army Corps of Engineers ("Corps") (collectively, "the Agencies") propose in the Dirty Water Rule. To the contrary, the legislative history repeatedly points to the breadth of both the term "navigable waters" and the overall statutory scheme to protect all waters. In a Senate floor debate in 1971, Senator Randolph called the bill "perhaps the most comprehensive legislation ever developed in its field." A Legislative History of the Water Pollution Control Amendments of 1972 (Cong. Res. Serv. 1973) ("CWA Legislative History"), Sen. Debate on S.2270 at 1269 (Nov. 2, 1971). In Senate debate on overriding President Nixon's veto of the bill the next year, Senator Cooper described the Clean Water Act as "one of the most significant, most comprehensive, most thoroughly debated pieces of environmental legislation ever to be considered by the Congress," and Senator Eagleton remarked: "If one word best describes the [CWA], it is the word 'comprehensive.'" CWA Legislative History, Senate Debate on Overriding the President's Veto of S. 2770 at 189, 218 (Oct. 17, 1972). As Justice Rehnquist later observed, "[t]he most casual perusal of the legislative history demonstrates that these views on the comprehensive nature of the legislation were practically universal." *City of Milwaukee v. Illinois & Michigan*, 451 U.S. 304, 319, n.12 (1981).

In developing a law that would provide more consistent and comprehensive protections to waters across the Nation, Congress directed the "broadest possible" definition of "navigable waters" of the United States, unencumbered by earlier narrower interpretations made for administrative purposes. H.R. Rep. No. 92-911 at 76-77 (1972); *see also EPA v. California*, 426 U.S. at 202-09; *American Paper Inst., Inc.*, 890 F.2d at 870-71; *Montgomery Env'tl. Coal.*, 646 F.2d at 574; and H.R. 11,896, 92nd Cong. (1971) and S. 2770, 92nd Cong. (1971) (the Clean Water Act bills were written to expand federal authority and control over waters in order to control and eliminate pollution across the country). In so doing, Congress spoke to the science of waters being interconnected and the need to ensure that aquatic ecosystems—waters upstream of and within connections with "traditionally navigable" waters—be protected if the Clean Water Act's purpose is to be fulfilled. Congress recognized that "[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source." S. Rep. No. 92-414 at 77. Members noted that the intent was to move away from the constrained notions of jurisdiction and in particular notions regarding navigation, in order to ensure that waters are

protected in a full and comprehensive way. *See* CWA Legislative History at 178-79, 250-51, 327, 818, 1495.²

With respect to the term “navigable waters” specifically, the Conference Report states: “the conferees fully intend that the term ‘navigable waters’ be given *the broadest possible constitutional interpretation unencumbered by agency determinations which have been made or may be made for administrative purposes.*” CWA Legislative History, Senate Consideration of the Rpt. Of the Conference Committee, Oct. 4, 1972, at 178 (emphasis added). Congress originally defined navigable waters to mean “the navigable waters of the United States,” but the word “navigable” was later deleted from this definition in an amendment intended to broaden the term. CWA Legislative History, Joint Explanatory Statement of the Committee of Conference at 327; *see also* H.R. Rep. No. 92-911; S. Rep. No. 92-1236 (Sept. 28, 1972). During the course of the Clean Water Act’s passage, discussion centered on ensuring that the term navigable waters would not be defined or construed narrowly, as to do so would defeat the intent of the Act. H.R. Rep. No. 92-911 at 76–77 and S. Rep. No. 92-414 at 77; *see also* 118 Cong. Rec. 33,756–57 (Oct. 4, 1972). Congress recognized that to achieve its ambitious goal of restoring and protecting our Nation’s waters, it would be necessary to “control pollution at the source,” and not just rely on inadequately enforceable state by state standards. S. Rep. No. 92-414 at 77. Indeed, the Senate Committee on Public Works, in considering the bill, “was reluctant to define” the term navigable waters “based on the fear that any interpretation would be read narrowly.” CWA Legislative History at 818. After expressing this concern, the Committee then again reiterated that it “fully intends that the term ‘navigable waters’ be given the broadest possible constitutional interpretation.” *Id.*

During debate on the bill, Representative Dingell expounded further on Congress’ intended definition of the term “navigable waters,” stating it “means all ‘the waters of the United States’ in a geographical sense. It does not mean ‘navigable waters of the United States’ in the technical sense as we sometimes see in some laws.” CWA Legislative History, House Consideration of the Rpt. Of the Conference Committee, Oct. 4, 1972, at 250 (remarks of Rep. Dingell). He explained that the new, broad definition of the term was explicitly intended to go beyond the scope of the definition of “navigable waters” in the *Daniel Ball* case, *id.*, which was very similar to the definition that was (and still is) used in the Rivers and Harbors Act. 33 C.F.R. § 329.4. The definition of “navigable waters” used in the Rivers and Harbors Act and outlined in the 1871 *Daniel Ball* case only covers waters that have been used or are susceptible to being used to transport commerce. *Id.*; *The Daniel Ball*, 77 U.S. 557 (1870) (superseded by statute as stated in *Rapanos v. U.S.*, 547 U.S. 715 (2006)). The explicit rejection of the existing definitions

² A pointed reminder that Congress intended the definition of “navigable waters of the United States” to mean waters beyond those considered traditionally navigable can be found in the provisions directing states to adopt and implement water quality standards that are protective of water uses “taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial and other purposes, and also taking into consideration their use and value for navigation.” 33 U.S.C. § 1313(c). Plainly, navigation was only one consideration in the direction to protect water quality.

of navigability found in other statutes and case law bars any interpretation of navigability that harkens back to a commerce-based navigability test. Therefore, the Agencies' repeated citations to the old superseded definition of navigability in *The Daniel Ball* in this proposed rule—including their statement that in that case the Supreme Court “long ago recognized the distinction between federal waters traditionally understood as navigable and waters ‘subject to the control of the States,’” 84 Fed. Reg. at 4168—are simply wrong and contrary to law and Congress' plain intent.³ Congress made clear that in contrast to the old, pre-Clean Water Act legal definition of the term “navigable waters,” “this new definition clearly encompasses all water bodies, including main streams and their tributaries, for water quality purposes.” CWA Legislative History, House Consideration of the Rpt. Of the Conference Committee, Oct. 4, 1972, at 250 (remarks of Rep. Dingell). Therefore, the Act applies not just to navigable-in-fact waters and waters susceptible to being navigable-in-fact, but to the “waters of the United States,” with Congress recognizing that waters are hydrologically-connected, necessitating broad application in order to ensure the Nation's waters are clean and safe. S. Rep. No. 92-414 at 77 and H.R. Rep. No. 92-911 at 76-77.

Finally, when Congress enacted the major 1977 amendments to the Clean Water Act, it specifically rejected some calls to narrow the definition of “navigable waters,” stating:

The objective of the 1972 act is to protect the physical, chemical, and biological integrity of the Nation's waters. Restriction of jurisdiction to those relatively few waterways that are used or susceptible to use for navigation would render this purpose impossible to achieve. Discharges of dredged or fill material into lakes and tributaries of these waters can physically disrupt the chemical and biological integrity of the Nation's waters and adversely affect their quality. The presence of toxic pollutants in these materials compounds this pollution problem and further dictates that the adverse effects of such materials must be addressed where the material is first discharged into the Nation's waters. To limit the jurisdiction of the Federal Water Pollution Control Act with reference to discharges of the pollutants of dredged or fill material would cripple efforts to achieve the act's objectives. The committee amendment does not redefine navigable waters. Instead, the committee amendment intends to assure continued protection of all the Nation's waters.

Legislative History of the Clean Water Act of 1977, H.R. Rep. 95-139 at 75 (March 29, 1977); *see also id.* at 54, 63, 70-71. Further, as part of the decision to allow states to be delegated the authority to do some permitting under § 404, Congress reserved navigable-in-fact waters, making it abundantly clear that Congress considered § 404 and the Clean Water Act to protect all waters, not just those that are navigable in fact. *Id.* The proposed rule's narrowing of the term “navigable waters” and emphasis on navigability is thus contrary to the statutory scheme, as the Agencies themselves admit.

³ In fact, the Agencies concede as much elsewhere in the proposed Dirty Water Rule when they admit “[t]his suggests that Congress had in mind a broader scope of waters subject to CWA jurisdiction than waters traditionally understood as navigable.” 84 Fed. Reg. at 4164.

3. *States Are Still Not Attaining The Goals And Purposes Of The CWA.*

States continue to struggle to implement (and some actively resist) their Clean Water Act responsibilities to set standards, assess water quality, and issue and enforce permits to limit pollutants, with the result that our waters still do not attain basic standards of cleanliness and protection. EPA's most recent summary of states' reported water quality data shows not only that states have a poor record of assessment with only a fraction of waters assessed, but also that 53% of assessed rivers and streams, 68% of assessed lakes, reservoirs, and ponds, and 78% of assessed bays/estuaries are failing to meet one or more water quality standards.⁴ Toxics are still discharged into our waters and agricultural discharges are almost wholly unregulated, accounting for almost half of the pollution entering waterways, and accounting for a significant portion of the waters that currently fail to meet basic standards of cleanliness (including the hypoxia problem in the Gulf and toxic algae blooms in lakes, including Lake Erie). *See, e.g.,* Michael Wines, "Behind Toledo's Water Crisis, a Long-Troubled Lake Erie," *New York Times* (Aug. 4, 2014), <https://www.nytimes.com/2014/08/05/us/lifting-ban-toledo-says-its-water-is-safe-to-drink-again.html> (discussing Toledo's closure of water supply due to toxic algal blooms in 2014).

Wetlands also continue to suffer, and have been declining more rapidly in recent years. In 1989, the U.S. Fish and Wildlife Service informed Congress that since the 1700s, twenty-two states had lost more than 50% of their wetland acreage, ten states in the Midwest and coastal areas had lost more than 70%, and California had lost 91%, with attendant disastrous results for clean water. *See* Dahl T.E., *Wetland Losses Since the Revolution*, U.S. Fish and Wildlife Service at 16-17 (1990), <https://www.fws.gov/wetlands/Documents%5CWetlands-Loss-Since-the-Revolution.pdf>. Against this historical backdrop of substantial losses, we are currently witnessing even more rapid declines in our wetland acreage. In the last comprehensive report for wetlands published in 2011, the U.S. Fish and Wildlife Service reported that the rate of annual wetland loss increased between 2004 and 2009, reversing the decades-long trend of decreases in annual wetland loss, and representing a 140% increase in the wetland loss rate compared with the prior reporting period. *See* Dahl T.E., *Status and Trends of Wetlands in the Conterminous United*

⁴ EPA, National Summary of State Information (last updated April 8, 2019), http://ofmpub.epa.gov/waters10/attains_nation_cy.control. *See also* EPA, Nat'l Rivers and Streams Assessment 2008-2009: A Collaborative Survey, Draft at 23 (Feb. 2013) (attached as Ex. A), where EPA reports that as of 2013, their data from 2008-2009 indicated 55% of the waters assessed exhibited poor conditions and only 21% were classified as "good." The results by region were even more disappointing with 63% of the waters in the eastern highlands classified as poor and 58% classified as poor in the plains and lowlands states. *Id.* These numbers continue to disappoint, even though EPA lowered these numbers slightly in the final report published in March 2016, reporting that 46% of waters were in poor condition and 28% in good condition, and 50% of waters were in poor condition in eastern highlands and plains and lowlands states. EPA, Nat'l Rivers and Streams Assessment 2008-2009: A Collaborative Survey at 25 (March 2016) (attached as Ex. B).

States 2004-2009, Report to Congress, U.S. Dep't of Interior, Fish and Wildlife Service, at 45 (2011) (attached as Ex. C). Our coastal wetlands, which filter contaminated runoff from urban areas and agriculture and protect coasts from storms, experienced a 25% increase in the rate of wetland loss from 2004-2009, compared with the previous reporting period. USFWS, *Status and Trends of Wetlands in the Coastal Watersheds of the Conterminous United States, 2004 to 2009* at 1-2 (2013) (attached as Ex. D). Even when wetland acres are not lost, they are often degraded, losing functions as wildlife habitat, flood control and water quality control.

EPA and Congress are well aware that the state of our waters is poor. In 2017, EPA reported to Congress that over 46% of the nation's rivers and streams were in poor biological condition (with the percentage even higher in some regions) and 32% of remaining wetlands were in poor biological condition. EPA, *National Water Quality Inventory: Report to Congress* at 2 (Aug. 2017) (attached as Ex. E). These figures call for an increase in CWA protections, not a decrease.

4. *The Agencies' Claim That The Clean Water Act's Regulatory Mechanisms Are Divorced From Its Purpose Have No Foundation In The Law.*

There is no support in the law for the Agencies' attempt to create a false distinction between the Clean Water Act's stated purpose and its regulatory mechanisms. 84 Fed. Reg. at 4163-64, 4169. Congress' stated intent and purpose for the Act is to preserve and protect the chemical, physical and biological integrity of the Nation's waters. 33 U.S.C. § 1251. The Act's regulatory mechanisms are designed to fulfill that purpose and to do so across waters. *See, e.g.*, 33 U.S.C. § 1313(c)(2)(A) (water quality standards must take into consideration waters' "use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, and also tak[e] into consideration their use and value for navigation"); *id.* § 1311(a) (prohibiting the discharge of any pollutant).

The Agencies' attempt to strip the overall objective of any meaning by re-defining it as a mere "goal" for non-regulatory programs, 84 Fed. Reg. at 4169; *see also id.* at 4163-64 and n.18, is contradicted by the Clean Water Act itself and by the Clean Water Act's legislative history. *See, in particular*, Senator Edmond Muskie linking the overall purpose of the Act to its regulatory programs: "The Federal Water Pollution Control Act Amendments of 1972, for example, charge the Administrator of EPA with a direct mandate to regulate the discharge of pollutants into the waters of the United States. The sole purpose of the Act is to establish a detailed regulatory mechanism for restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters." CWA Legislative History, Senate Consideration of the Report of the Conference Committee at 181 (Oct. 4 1972) (statement of Sen. Muskie). In justifying anticipated costs associated with the then bill, Senator Muskie also explained that the objective to restore the chemical, physical, and biological integrity of the Nation's waters is substantive and serious, stating that the objectives "are not merely the pious declarations that Congress so often makes in passing its laws; on the contrary, this is literally a life or death proposition for the Nation." *Id.* at 164. The Agencies' false distinction between the objective to restore the Nation's waters via non-regulatory programs on the one hand, and the restoration of

navigable waters via regulatory programs on the other hand, contradicts the text and legislative history of the Clean Water Act and is simply a naked attempt to justify the cramped and illegal restrictions on the application of the Clean Water Act through the Dirty Water Rule.

5. *Cooperative Federalism Requires A Federal Floor For Protecting The Nation's Water Resources, Allowing States To Be More, But Not Less, Stringent.*

While Congress preserved and directed a role for states in carrying out the intent and requirements of the Clean Water Act, giving them the first obligation and authority to develop water quality standards and the ability to be delegated permit authority, Congress made plain that state obligations and authorities are *always* subject to the backstop of EPA review. Congress also was clear that the federal law sets the Clean Water Act minimum for water quality standards, permitting, and effluent limits in the effort to address previous shortcomings in state-based clean water efforts. *See* 33 U.S.C. §§ 1313, 1314, 1316, and 1342. The cooperative federalism concept was based in minimum federal requirements and standards for all the Nation's waters, overseen by a strong federal agency backstop. States are required to adopt water quality standards, subject to EPA review and approval, for all waters that are protective of fishing, swimming, public health, aquatic life, and all the uses to which we put our waters. *Id.* § 1313(c) and (d). States may be delegated authority over permitting programs in the Clean Water Act, but again they are subject to certain federal minimums and oversight by the federal agencies. *See id.* §§ 1342(b)-(d) and 1344(g)-(j). As to any one of these requirements, states can always be more protective than the federal minimums. *See Montgomery Env'tl. Coal. v. Costle*, 646 F.2d 568, 574-575 (D.C. Cir. 1980).

The Agencies' and states' arguments that broad protections under the Clean Water Act are an intrusion on that structure and/or on states' rights, and that states can absorb losses in federal protections by strengthening their state protections, is also shown to be false by examination of the applicable state laws themselves. Seven to nine states have laws that prohibit the state from adopting any protections more broadly applicable or more protective than federal law.⁵ Another approximately nineteen states would allow more stringent or broad protections, but erect barriers to doing so with the result that no more protective requirements are adopted (or likely to be adopted).⁶ Five states do not even adopt the "no net loss" goal for wetlands that has been an integral part of attempts to protect our wetland resources under the Clean Water Act since the first President Bush.⁷ Most states (thirty) have no program for permitting in so-called "isolated" wetlands, meaning any wetland that is carved out of the Clean Water Act by virtue of the Dirty Water Rule will no longer be protected by any permitting program in those states.⁸

⁵ EPA and Dep't of the Army, *Appendices to the Resource and Programmatic Assessment for the Proposed Revised Definition of "Waters of the United States,"* (Dec. 11, 2018).

⁶ *See id.*

⁷ *See id.*

⁸ *See id.*

Most states (thirty-three) have no wetland monitoring or assessment program.⁹ Even a cursory look at the applicable state laws shows that without the Clean Water Act, wetland and waters protections will be greatly reduced with significantly more waters and wetlands at risk of pollution, destruction, and/or degradation. The federal component of “cooperative federalism” is critical to the protection of the Nation’s water resources.

B. The Agencies Will Foster Further Uncertainty With This Action.

The Agencies claim that many of the new definitions and exclusions in the Dirty Water Rule will lead to more “regulatory certainty” and/or ease of application of the rule. *See, e.g.*, 84 Fed. Reg. at 4169, 4194, 4197. However, the Agencies’ claims are empty when one reviews the details of the Dirty Water Rule. As discussed in detail below, a number of the new definitions (*e.g.*, “typical year”) are non-scientific and utterly opaque. Further, in its effort to push more waterbodies out from the protections of the Clean Water Act, the Agencies have created the need to assess rain and snow records, records of multiple years, and to make subjective judgments about whether a dry water body is intermittent or just ephemeral, or maybe even a perennial water in a dry year. All of these individual judgments, based on data that may not even yet exist, will create substantial new uncertainty about which waters are protected.¹⁰

Further, the Agencies’ abrupt about-faces regarding the definition of “waters of the United States,” are dizzying. In less than four years, the Agencies have finalized the Clean Water Rule, announced an intent to repeal and replace the Clean Water Rule, proposed to repeal the Clean Water Rule outright and recodify the pre-2015 regulations, proposed and finalized a two-year inapplicability period instead of a repeal (which has been found illegal by two federal

⁹ *See id.*

¹⁰ The Agencies’ idea of allowing states, tribes, and other federal agencies to create new geospatial datasets identifying all waters of the U.S. and all excluded waters, *id.* at 4155-56, 4198, would fail to remedy the uncertainty and would lead to the loss of protections for waters that Congress intended to protect. Even if such datasets are theoretically possible (which is unclear due to gaps in national hydrology mapping), they could categorically list all waters as either included or excluded, which would destroy the ability of the Agencies to make science-based judgments regarding the connectivity of waters. Furthermore, because jurisdictional determinations under the Dirty Water Rule are based in the permanence of surface water, but such permanence is constantly changing due to alterations in local climates (especially in this time of climate change), any databases purporting to identify waters of the U.S. would constantly become out of date. In addition, the entire process of making jurisdictional determinations could become obsolete, leaving our waters subject to polluting activities without any individualized review of the nature of the waters on a site. The absence of a water body on a dataset could potentially be used as a defense to a claim of an unpermitted discharge. Finally, if states are permitted to create their own datasets within their borders, there would almost certainly be a race to the bottom, with states competing to “delist” as many water bodies as possible in order to attract industry. The Clean Water Groups are strongly opposed to the Agencies’ proposal of a future effort to create geospatial datasets identifying waters of the U.S.

courts), and now have created an entirely new rule which abandons the significant nexus test that has been adopted by all courts that have addressed it as well as by the Agencies. The Agencies have done nothing but sow regulatory chaos with these numerous reversals of position, leaving the Nation's waters significantly less protected as the outcome.

C. There Was No "Confusion" Over The Clean Water Rule.

In addition, the Agencies' claim that there is stakeholder confusion regarding the scope of the 2015 Rule is unsupported by the record. 84 Fed. Reg. at 4197. In an attempt to support this assertion, the Agencies cull a handful of statements from litigation over the 2015 Rule. However, most of these statements actually demonstrate *disagreement* with the 2015 Rule, not uncertainty. As an example, the Agencies point to a statement made by certain states in a brief before the Sixth Circuit, in which the states argued that the 2015 Rule extends "'jurisdiction to virtually every potentially wet area of the country.'" 84 Fed. Reg. at 4197. The Agencies' attempt to twist this hyperbolic statement into an assertion of regulatory uncertainty is misleading and incorrect. The statement actually demonstrates a level of certainty (albeit an incorrect certainty) regarding how the 2015 Rule applies, as it expresses discontent with the purportedly broad scope of that application. Furthermore, in other portions of the proposed rule, the Agencies point to confusion with the *pre*-2015 regulatory regime, without acknowledging that the 2015 Clean Water Rule was promulgated in large part to address that uncertainty and did in fact create substantially more certainty regarding the scope of protected waters. *See, e.g., id.* at 4170, 4179.

Finally, the Agencies continue to assert the confusion caused by litigation over the 2015 Rule is a reason supporting the proposed rule. *Id.* This is not a reason for replacing a rule. There is often litigation over rules, but that litigation is not and cannot be a reason, on its own, to simply abandon a rule and replace it with a dramatic policy reversal. Facts and issues that arise in litigation may contribute to an agency reconsidering a position, but the existence of litigation alone cannot serve that purpose. If that were the case, then the best-funded entity who may have the most to gain from forestalling legitimate regulation (or the most litigious and belligerent party) would have incentive and be rewarded for highly obstructionist actions. This is not how the APA works, nor should it. Moreover, the Agencies ignore the likelihood that their proposed actions will prompt new litigation and all the uncertainties that may flow from there.

The Ninth Circuit held that an agency action violated the APA in a similar case involving a challenge to the agencies' move to exempt the entire Tongass National Forest in Alaska from the Roadless Rule, *Organized Vill. of Kake v. U.S. Dep't of Agric.*, 795 F.3d 956, 970 (9th Cir. 2015), cert. denied sub nom. *Alaska v. Organized Vill. of Kake, Alaska*, 136 S. Ct. 1509 (2016). In promulgating the "Tongass exemption" the U.S. Department of Agriculture claimed that its rule would "reduce[] the potential for conflicts regardless of the disposition of the various lawsuits" over the Roadless Rule. *Id.* But this claim was easily belied by the subsequent turn of events: the Tongass Exemption "predictably led to [another] lawsuit, and did not even prevent a separate attack by Alaska on the Roadless Rule itself." *Id.* "At most," the Ninth Circuit found, "the Department deliberately traded one lawsuit for another." *Id.* The same is true here. The

foregoing and forthcoming discussions demonstrate that the proposed actions are, at a minimum, contrary to the APA and other statutes and are likely to be challenged in court. The initiation of new litigation would again subject the nationwide interpretation of the “waters of the United States” to procedural uncertainty and confusion. In light of these uncertainties, the Agencies’ purported goal of reducing uncertainty appears to be a pretext for simply repealing and replacing 2015 Clean Water Rule without bothering to provide a substantive, rational justification for that decision.

II. THE DIRTY WATER RULE IS CONTRARY TO CASE LAW THAT DICTATES BROAD APPLICATION OF THE CLEAN WATER ACT WITH A GROUNDING IN SCIENCE.

The Dirty Water Rule is inconsistent with long-standing case law interpreting the scope of the Clean Water Act. Consistent with Congress’ vision, for nearly three decades the Agencies followed this case law and implemented the Clean Water Act to fully and broadly protect the Nation’s waters, including tributaries and wetlands. Yet, the Agencies are now reversing their years of broad protection and proposing a rule that conflicts with case law.

Immediately following passage of the Act, the Corps adopted regulations protecting only tidal and navigable-in-fact waters previously regulated, but a court quickly rejected that narrow interpretation, *Nat. Res. Def. Council, Inc. v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975), holding that the Corps was “without authority to amend or change the statutory definition of navigable waters,” ordering regulations “recognizing the full regulatory mandate” of the Act. Courts have consistently found, both before and after the Supreme Court’s decision in *Rapanos v. U.S.*, 547 U.S. at 779-81, that Congress intended to “occupy the field” of protecting waters; that the Clean Water Act was intended to wholly supplant the law that came before; that Congress intended to regulate the discharge of pollutants into non-navigable tributaries and adjacent wetlands because anything less leaves even traditionally navigable waters unprotected; and that Congress “knew exactly what it was doing” when it defined “navigable waters” broadly to mean the “waters of the United States.” *U.S. v. Ashland Oil & Transp. Co.*, 504 F.2d 1317, 1321, 1324-25 (6th Cir. 1974); *see also, e.g., City of Milwaukee v. Illinois and Michigan*, 451 U.S. 304, 317-19 (1981); *Middlesex County Sewerage Auth. v. Nat’l Sea Clammers Ass’n*, 453 U.S. 1, 22 (1981) (existing statutory scheme of state control and incentives was completely revised by Clean Water Act); *U.S. v. Hubenka*, 438 F.3d 1026, 1030-1032 (10th Cir. 2006); *U.S. v. HVI Cat Canyon, Inc.*, 213 F. Supp. 3d 1249, 1268 (C.D. Cal. 2016) (citing *Leslie Salt Co. v. Froehlke*, 578 F.2d 742, 754-55 (9th Cir. 1978), wherein the Circuit Court held that “navigable waters” must be given the broadest possible constitutional interpretation). The Supreme Court recognized the Clean Water Act’s broad scope when it upheld the Act’s application to adjacent wetlands in *United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 132 (1985), observing that the Clean Water Act incorporates a “broad, systemic view of the goal of maintaining and improving water quality.” The Court also noted Congress’ determination that “[p]rotection of aquatic ecosystems . . . demanded broad federal authority to control pollution, for ‘[w]ater moves in hydrologic cycles and it is essential that discharge of pollutants be controlled at the source.’” *Id.* at 132-33 (quoting S. Rep. No. 92-414 at 77).

Thirty years later, after decades of successful Clean Water Act implementation and improving the status of the Nation's waters, two cases created some confusion over the scope of the Act's coverage. In *Solid Waste Agency of Northern Cook County ("SWANCC") v. United States Army Corps of Engineers*, 531 U.S. 159, 162, 164 (2001), the Court ruled that the Agencies' "Migratory Bird Rule" could not be used to extend the reach of the Act to "an abandoned sand and gravel pit." Then, in *Rapanos*, the Court issued a fractured opinion with no majority. A four-Justice plurality authored by Justice Scalia proposed one test for determining whether a water body is a "water of the United States"; Justice Kennedy, concurring in the judgment, proposed another, commonly referred to as the "significant nexus" test; and four dissenting Justices would have left the Agencies' definition in place, but also said they would uphold protection for waters satisfying *either* the plurality's or Justice Kennedy's test. *Rapanos*, 547 U.S. at 810 (Stevens, J., dissenting). More specifically, Justice Kennedy concluded that the Clean Water Act protects wetlands with a "significant nexus" to waters traditionally considered navigable. *Id.* at 759, 787. Such nexus exists where the water, including wetlands, "either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.'" *Id.* at 780. Justice Scalia took a much narrower view of Clean Water Act jurisdiction, but in a few respects, his approach would find jurisdiction in instances where Justice Kennedy might not. *Id.* at 732-36 (discussing continuously flowing waters). The four justices in the *Rapanos* dissent held that they would uphold Clean Water Act jurisdiction in any case that satisfied *either* Justice Kennedy's or Justice Scalia's tests. *Id.* at 807, 810, n.14. This meant that waters that satisfied either of those tests would have the votes of five or more justices to support jurisdiction. Despite the disagreement on specifics, even the narrowest provisions in Justice Scalia's opinion in *Rapanos* recognizes that in passing the Clean Water Act, Congress intended to cover a much broader set of waters than had earlier been the case or than was traditionally considered "navigable." *Id.* at 731. The Court remanded, for further review, the Corps' application of the Act to four wetlands "lying near ditches or man-made drains that eventually empty into traditional navigable waters." Neither *SWANCC* nor *Rapanos* invalidated any specific regulatory provision.

All of the Circuit Courts that have addressed the issue of Clean Water Act jurisdiction following *Rapanos* have applied Justice Kennedy's significant nexus analysis or have adopted an even broader application of the Clean Water Act's protections: that waters that meet *either* Justice Kennedy's or Justice Scalia's approach must be considered waters of the U.S., protected by the Clean Water Act. *U.S. v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009); *see also U.S. v. Cundiff*, 555 F.3d 200, 210 (6th Cir. 2009) and *U.S. v. Johnson*, 467 F.3d 56, 65 (1st Cir. 2006) (if either plurality or Justice Kennedy's test is met, there is a "water of the United States"); *U.S. v. Gerke*, 464 F.3d 723, 724 (7th Cir. 2006) (Court looks to "significant nexus" standard as precedent); *U.S. v. Robison*, 505 F.3d 1208, 1222 (11th Cir. 2007) (same); *N. Cal. River Watch v. City of Healdsburg*, 496 F.3d 993, 999-1000 (9th Cir. 2007) (same) (followed by *N. Cal. River Watch v. Wilcox*, 633 F.3d 766, 781 (9th Cir. 2011) where court described Justice Kennedy's concurrence as the "controlling rule of law"); *U.S. v. Lucas*, 516 F.3d 316, 327 (5th Cir. 2008) (same); *U.S. v. Donovan*, 661 F.3d 174, 182 (3d Cir. 2011) (same); *see also Precon Dev. Corp.*,

Inc. v. U.S. Army Corps of Engineers, 633 F.3d 278, 289-90 (4th Cir. 2011) (parties agree and court adopts Justice Kennedy significant nexus test, approving of Corps definition of “adjacent”) and *Upstate Forever v. Kinder Morgan Energy Partners, L.P.*, 887 F.3d 637, 649 n.10 (4th Cir. 2018) (characterizing Justice Kennedy’s *Rapanos* concurrence as “controlling”). Yet, irrationally and unlawfully, the Agencies here propose a rule that is based on Justice Scalia’s approach in order to follow an industry-motivated Executive Order signed by the newly inaugurated Trump administration. See 84 Fed. Reg. at 4154 (“This proposal is . . . intended to review and revise the definition of “waters of the United States” consistent with the Executive Order signed on February 28, 2017”); Executive Order 13778, 82 Fed. Reg. 12497 (March 3, 2017) (stating “the Administrator and the Assistant Secretary shall consider interpreting the term “navigable waters,” as defined in 33 U.S.C. 1362(7), in a manner consistent with the opinion of Justice Antonin Scalia in *Rapanos v. United States*, 547 U.S. 715 (2006).”). The Agencies’ new exclusive reliance on Justice Scalia’s narrow application of the Clean Water Act is contrary to all of these Circuit Courts of Appeals’ decisions that have interpreted and applied *Rapanos* since 2007.

Furthermore, the Agencies’ reliance on Justice Scalia’s opinion is contrary to the decision in *Marks v. United States*, 430 U.S. 188, 193 (1977). In *Marks v. United States*, the Supreme Court attempted to develop a doctrine for interpreting and implementing Supreme Court cases where a majority agreed only on the outcome of the case, but not on the grounds for the outcome. The *Marks* doctrine dictates that the holding of the Court, in those fractured circumstances, must be viewed as the narrowest position taken on the result of the case by concurring members of the Court. *Id.* This works fairly well in a situation where a subset of justices’ reasoning fits within a broader decision of other concurring members; the narrower subset should control. In *Rapanos*, however, there is no subset of reasoning fitting neatly within another, but rather a set of overlapping opinions in the nature of a Venn diagram which concurred in the result that the matter must be remanded for further examination of jurisdiction with an eye to narrowing the test that the Corps had used previously. Either Justice Kennedy’s or Justice Scalia’s approach would narrow the test the Corps had been using, meaning that to have the least far-reaching or least extreme result on the existing application of Clean Water Act jurisdiction, under the *Marks* doctrine, future courts find jurisdiction where either test is met. Alternatively, it is the opinion of the dissent that stitches the whole together, allowing a five or more justice majority to find jurisdiction if either test is satisfied. These approaches have been applied by a number of Circuit Courts to find jurisdiction if either test is met. The remaining courts have determined that Justice Kennedy’s significant nexus test is the narrowest holding in that it overlaps with Justice Scalia’s holding (that is, it remands the matter to the Corps on the least extreme change or “narrowest grounds”) and it is this test that the Agencies previously applied for the 2015 Clean Water Rule.

Therefore, under no application of *Marks* can Justice Scalia’s test alone be considered the narrowest grounds on which the Court ruled in *Rapanos*, because Justice Scalia’s test was the most extreme form of curtailment of jurisdiction under the Clean Water Act. This is consistent with the manner in which all of the Circuit Courts confronted with the question have addressed and implemented *Rapanos*. The *Marks* doctrine plainly stands for the principle that fractured decisions of the Court should not be read to have the furthest reaching or most extreme change in

the law or result, the matter before the Court. Yet that is the Agencies' argument here. The Agencies' sole reliance on Justice Scalia's opinion to significantly constrain and reduce Clean Water Act protections should be rejected as inconsistent with the overwhelming precedent from throughout the Circuit Courts of Appeal. It should also be rejected as inconsistent with the Agencies' adoption of a rule based on the significant nexus test just four years ago. This unsupported reinterpretation of case law is an arbitrary and capricious "[u]nexplained inconsistency' in agency policy." *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (internal citation omitted).

III. THE DIRTY WATER RULE IS CONTRARY TO THE SCIENCE AND THE RECORD BEFORE THE AGENCIES.

A. The Agencies Disregarded The Unrefuted Science Report And Irrationally Dictated A Rule Directly Contrary To The Science and Their Prior Policy.

The task of the Agencies in promulgating the 2015 Clean Water Rule, 80 Fed. Reg. 37,054 (June 29, 2015), was to demonstrate, through scientific evidence, which waters significantly influence traditionally navigable waters. They did so with an unprecedented review of the scientific literature with additional advice and comment of experts on topics from biology to hydrology to geology to oceanography to soil science, describing the many vital connections between tributaries, wetlands, and downstream waters. The report titled "Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence" (hereinafter the "Science Report") EPA-HQ-OW-0880-20858,¹¹ found extensive evidence that tributaries and wetlands play critical roles in maintaining the physical, chemical, and biological integrity of downstream waters. The Science Report was a state-of-the-art review and synthesis of the extensive scientific literature describing the numerous important connections between tributaries, adjacent waters, wetlands, and downstream waters. The Science Report synthesized the published, peer-reviewed scientific literature (*see, e.g.*, more than 70 pages of peer-reviewed literature references at end of Science Report) discussing the physical, chemical, and/or biological connectivity between various kinds of streams, wetlands, and other waters, and downstream water bodies. The final Science Report provides the scientific foundation for much of the final Clean Water Rule. 80 Fed. Reg. at 37,057, 37,065. The Agencies based the 2015

¹¹ Attached as Ex. F-1.

Clean Water Rule—the Rule the Agencies now seek to replace with this Dirty Water Rule—on the extensive evidence of the Science Report and its underpinnings.¹²

To justify the proposed replacement here of the 2015 Clean Water Rule (the Rule that is grounded in the Science Report), the Agencies must first disclose whether they intend to reverse the factual findings made in support of the 2015 Rule, and then provide a rationale for that choice. *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (“the requirement that an agency provide reasoned explanation for its action would ordinarily demand that it display awareness that it *is* changing position. An agency may not, for example, depart from a prior policy *sub silentio* or simply disregard rules that are still on the books.” (emphasis in original)). The public notice for the proposed rule does not satisfy this requirement.

The Agencies made extensive factual and legal findings in support of the Clean Water Rule, using what the Agencies found to be the “best available peer-reviewed science, public input, and the agencies’ technical expertise and experience in implementing the statute.” 80 Fed. Reg. at 37,055. The Agencies first affirmed their conclusion that the “significant nexus” standard is the appropriate test for determining which waters are “waters of the United States,” based upon consensus case law and extensive scientific analysis and input. *Id.* at 37,056. Then, because “[t]he relevant science on the relationship and downstream effects of waters has advanced considerably in recent years,” EPA’s Office of Research and Development prepared the Science Report and the Agencies used this analysis to “characterize the nature and strength of the chemical, physical, and biological connections between upstream and downstream waters,” and to develop a rule that would “greatly reduce[] the extent of waters subject to this individual review.” *Id.* at 37,057.

The Science Report contained five major conclusions which the Agencies set forth in support of the Clean Water Rule: (1) that all tributary streams “exert a strong influence on the chemical, physical, and biological integrity of downstream waters”; (2) “that wetlands and open waters in riparian areas and floodplains are chemically, physically, and biologically integrated with rivers via functions that improve downstream water quality”; (3) that “[w]etlands and open waters in non-floodplain landscape settings (‘non-floodplain wetlands’) [also] provide numerous functions that benefit downstream water integrity”; (4) that connectivity between tributary

¹² Enclosed with these comments as Exhibits F1-F11 are copies of several key scientific and technical documents that were part of the record for the 2015 Clean Water Rule, and which are relevant to the present rulemaking as well, but which were excluded from the docket at EPA-HQ-OW-2018-0149. Exhibits F1-F11 do not include copies of the few 2015 Clean Water Rule scientific and technical documents that are included in the docket at EPA-HQ-OW-2018-0149. Our comments here include the entirety of the scientific and technical record for the Clean Water Rule including the work of the Science Advisory Panel and all drafts and the final published Science Report (including the documents published in the docket at EPA-HQ-OW-2018-0149 and those excluded but attached here in Exhibits F1-F11), as well as all widely available publications incorporated in the 2015 rulemaking docket by EPA’s memorandum from Rose Kwok to the Water Docket (attached as Ex. F-10).

streams and wetlands and downstream jurisdictional waters “occurs along a gradient that can be described in terms of the frequency, duration, magnitude, timing, and rate of change of water, material, and biotic fluxes to downstream waters,” and that, while the connectivity of stream channels and riparian/floodplain wetlands to downstream waters is unequivocal, “[t]he connectivity and effects of non-floodplain wetlands and open waters are more variable and thus more difficult to address solely from evidence available in peer-reviewed studies” (emphasis added); and (5) that the “incremental effects of individual streams and wetlands are cumulative across entire watersheds, and therefore, must be evaluated in context with other streams and wetlands” in the same watershed. *Id.* at 37,063-64.

Based on these conclusions in the Science Report, the Agencies went on to make specific findings in support of their decision to categorically define certain waters as jurisdictional in the 2015 Rule, and to define additional separate categories of waters that should be subject to case-specific significant nexus analysis to make a jurisdictional determination. They “conclude[d] that it is appropriate to assess the effects of [similarly situated] waters in combination based on the similarity of the functions they provide to the downstream water and their location in the watershed,” *id.* at 37,065-66, and further found that the appropriate region for assessing “similarly situated” waters is “the watershed draining to the nearest traditional navigable water, interstate water, or the territorial sea.” *Id.* at 37,067. They made findings as to a list of specific ecological functions that provide a nexus between upstream tributaries, wetlands, and other surface waters and downstream jurisdictional waters. *Id.* at 37,067-68.

Building on that foundation, the Agencies concluded that all tributaries (as specifically defined in the 2015 Rule) and all “adjacent” wetlands and surface waters (as specifically defined in the 2015 Rule) have a significant nexus to downstream jurisdictional waters. *Id.* at 37,068-70. The Agencies then identified two “exclusive circumstances” in which, based on the scientific literature, the Agencies should undertake a case-specific analysis of significant nexus. *Id.* at 37,071. One category comprises five types of wetlands: Prairie potholes, Carolina and Delmarva bays, pocosins, western vernal pools in California, and Texas coastal prairie wetlands. *Id.* The second category comprises all waters located within certain specific distances from downstream jurisdictional waters.

When an agency spends years studying a topic and developing an extensive factual record to support a selected policy, it cannot simply reverse course without identifying flaws in that previous analysis. In a similar case regarding the Bureau of Land Management’s recent suspension of the methane “Waste Prevention Rule,” the U.S. District Court for the Northern District of California explained the type of “detailed justification” that is necessary to support this type of policy reversal. The court explained that the agency

must provide at least some basis – indeed, a “detailed justification” – to explain why it is changing course after its three years of study and deliberation resulting in the Waste Prevention Rule. New facts or evidence coming to light, considerations that BLM left out in its previous analysis, or some other concrete basis supported in the record – these are the types of “good reasons” that the law

seeks. Instead, it appears that BLM is simply “casually ignoring” all of its previous findings and arbitrarily changing course.

Sierra Club v. Zinke, 286 F. Supp. 3d 1054, 1068 (N.D. Cal. 2018) (“*Zinke*”) (internal citation omitted).

Here, the Agencies similarly “casually ignor[e]” their previous science-based findings and four years of study and deliberation that led to the passage of the 2015 Clean Water Rule. The Agencies point to no new scientific facts, no mistakes, and no considerations the Agencies neglected to include in their previous analysis. The Agencies only briefly reference the Science Report, acknowledging that EPA’s Scientific Advisory Board (“SAB”) “found that ‘[t]he literature review provides strong scientific support for the conclusion that ephemeral, intermittent, and perennial streams exert a strong influence on the character and functioning of downstream waters and that tributary streams are connected to downstream waters,’” 84 Fed Reg. at 4175-76, but then quickly dismissing these findings on the grounds that the SAB also recognized there is a hydrologic “gradient of connectivity” between tributaries, making ephemeral tributaries less likely to affect downstream waters. *Id.*; *see also id.* at 4187. This treatment of the science ignores the context of the SAB’s remarks regarding the gradient of connectivity, which was to explain that connectivity is not a binary, presence/absence concept, but rather is a multidimensional function of the magnitude, duration, and frequencies of three different types of connections: surface water, subsurface groundwater, and the movement of biological organisms.¹³ The Agencies’ unstated implication that ephemeral tributaries are less deserving of protections because they are less connected also ignores the SAB’s conclusions that even infrequent, small surface flows or subsurface flows from ephemeral tributaries can have important impacts on the biological and chemical integrity of downstream waters.¹⁴ The Agencies do not dispute this scientific fact. In fact, the Agencies’ economic analysis accompanying the proposed rule relies on the Science Report and a few of its sources for several sections of the economic analysis devoted to the importance of the ecosystem services provided by ephemeral streams. The economic analysis explains that ephemeral streams are important for replenishing groundwater for irrigation and drinking water supplies for communities in the arid western U.S.¹⁵ It also includes details regarding how the shallow groundwater in ephemeral stream channels supports dense corridors of biologically diverse species even when the streams are dry, including Endangered Species Act-listed species and species that depend on the streams’ microclimates and therefore cannot move to another habitat if their ephemeral stream home is

¹³ Letter to Gina McCarthy, SAB Review of the Draft EPA Report Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence at 53-54 (Oct. 17, 2014).

¹⁴ *Id.* at 34.

¹⁵ EPA and Dep’t of the Army, *Economic Analysis for the Proposed Revised Definition of “Waters of the United States”* at 195-96 (Dec. 14, 2018), https://www.epa.gov/sites/production/files/2018-12/documents/wotusproposedrule_ea_final_2018-12-14.pdf.

destroyed.¹⁶ Because the Agencies propose to remove Clean Water Act protections for ephemeral streams in spite of this reiteration of their import, it is clear the Agencies are simply ignoring their prior scientific findings without disputing their validity.

Finally, the Agencies also suggest that the Science Report's conclusions are unimportant because they are scientific, not legal. 84 Fed Reg. at 4175-76; *see also id.* at 4187. The Agencies even suggest they previously relied on scientific conclusions too extensively in developing the 2015 Rule. *Id.* at 4,197 and n. 34. This dismissal of science makes a mockery of the Clean Water Act's science-based objective to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). Moreover, the Agencies did in fact interpret the Clean Water Act and Supreme Court rulings alongside the Science Report in the 2015 Rule; therefore, the Agencies must now explain why that legal interpretation based in sound science was impermissible or unreasonable.

In sum, as in *Zinke*, the Agencies failed to provide any concrete support in the record that would justify their policy reversal without reversing their careful scientific analysis. The Agencies must substantively address their prior scientific findings, and cannot simply pretend they never happened or are not highly relevant to the Agencies' proposed action here. The Science Report established the connectivity of many waters of the United States, even those that appear on the surface to be "isolated" or "ephemeral," and their importance to the overall "biological, chemical, and physical integrity of the Nation's waters." The Science Report is thorough and based upon the best, well-established principles of hydrology, geology, biology, chemistry and climate. It was developed with the assistance and review of the best scientists and researchers in these fields in the nation. Yet the Agencies throw this aside in a rush to satisfy polluters and the states that want to cater to them.

B. The Agencies Ignored Relevant Scientific Developments Since The Science Report That Further Demonstrate The Dirty Water Rule Is Wholly Contrary To Science And Is Arbitrary and Capricious.

In addition to the Agencies' dismissal of the 2015 Science Report and accompanying years of scientific research in the proposed rule, the Agencies have also ignored the wealth of

¹⁶ *Id.*; *see also id.* at 183-184, 163-164 (describing adverse impacts to many species which rely on temporary, ephemeral waters, including specific threatened and endangered species).

relevant data, peer-reviewed scientific articles, and government reports published since 2015.¹⁷ In so doing, the Agencies ignored “an important aspect of the problem.” See *State v. U.S. Bur. Of Land Mgt.*, 2017 WL 4416409 at *11 (Oct. 4, 2017) (citing *Motor Vehicle Mfs. Ass’n v. State Farm Mut. Auto. Ins.*, 463 U.S. 29, 43 (1983)).

According to a 2017 peer-reviewed book entitled *Intermittent Rivers and Ephemeral Streams*, research into these non-perennial aquatic ecosystems has “burgeoned,” in part due to the threats to the extremely rich biodiversity represented in these waters and the increasing commonality of them due to climate change.¹⁸ These recent hydrology publications reinforce and strengthen our knowledge of the importance of ephemeral and intermittent streams, “isolated” wetlands, headwaters, groundwater, and fragile features like prairie potholes and vernal pools. They also reveal that in the face of increasing effects from climate change, more and more streams are going dry part of the year, wetlands are drying, and pollutant loads to waters are increasing. The studies reiterate that intermittent and ephemeral streams, as well as seasonal and “isolated” wetlands, also provide critical habitat for a diverse array of species, including endangered and threatened species. The Agencies’ proposal to entirely remove protections for ephemeral streams (and to some extent intermittent streams), “isolated” wetlands, and other smaller but critically important waters not only ignores these studies, but affirmatively takes the opposite policy approach to what the science compels, excluding enormous percentages of waters from Clean Water Act protection without even using available national geodatabases to quantify the extent of their proposed jurisdictional changes.

¹⁷ The *only* scientific document cited in the Dirty Water Rule is the Science Report, which is ironic given that the Dirty Water Rule ignores or acts contrary to the Science Report’s conclusions and recommendations. The Agencies do include a small number of scientific and technical articles in their “supporting documents” in the rulemaking docket – mostly economic studies, without any indication of how they were considered. While the titles of these articles and studies are listed in the docket, nineteen of the actual documents themselves are absent as of April 15, 2019, making it impossible for the public to consider these documents which are purportedly part of the record (list attached as Ex. K-1). The Agencies’ failure to put the documents on which they relied into the record violates notice-and-comment under the APA. See, e.g., *Am. Radio Relay League v. FCC*, 524 F.3d 227, 236-240 (D.C. Cir. 2008) (finding that under APA § 553, an agency may not cherry-pick documents on which it relies for public review and that it must allow the public to review the technical studies upon which it relied). The Clean Water Groups were able to obtain copies of these missing documents, and attach them here (attached as Ex. K-2 – K-20). Moreover, the few scientific articles that are included in the docket would support a policy approach and rule directly opposite to the one chosen by the Agencies. For example, the Agencies include an article entitled *Temporary Streams in Temperate Zones: Recognizing, Monitoring and Restoring Transitional Aquatic-Terrestrial Ecosystems*, which explains that temporary streams are home to rare and endemic species and can even host more biodiversity than perennial streams. Such scientific knowledge calls for *more* protection of temporary streams, not less.

¹⁸ *Intermittent Rivers and Ephemeral Streams: Ecology and Management*, Eds. Thibault Datry, Núria Bonada, and Andrew Boulton, Academic Press (2017).

Since 2015, numerous studies have been published, each one adding to the scientific evidence that smaller upstream waters are critical to the health of downstream waters. The following summaries include government reports, peer-reviewed hydrology studies, and related assessments that examine the state of our waters, predicted changes to waters due to climate change, connectivity between waters, or the critical ecological services provided by smaller and intermittent or ephemeral waters, all published between 2015 and 2019.¹⁹ The publications do not represent a comprehensive scientific literature review, but rather comprise a sampling of the kinds of readily-available studies the Agencies failed to search for and failed to consider, which the Clean Water Groups found through a few hours of searching.

- **Fourth National Climate Assessment²⁰**

The Fourth National Climate Assessment is a collection of scientific studies and assessments that summarizes the effects of climate change in the United States. With respect to water, the assessment outlines several ongoing adverse effects to water quantity and quality due to climate change, including increases in extreme and more intense storms, which in turn increases pollutant loads to surface waters and greater risk of algal blooms; greater risk of drought and increases in groundwater depletion rates in many areas due to higher temperatures, lack of precipitation, and expanded irrigation needs; decreases in snowmelt and streamflow in many areas; and increased flood risks due to either more extreme rains or sea level rise, or both. Agriculture and drinking water supplies rely on groundwater for more than 40% of their needs, yet aquifers in the U.S. have already been depleted over the last several decades and climate change is currently worsening these groundwater losses.

- **Marsh bird response to hydrologic alteration and restoration of wetlands in the boreal hardwood transition²¹**

This report summarizes the findings of a study of marsh bird use of boreal hardwood transition wetlands in Michigan, which provide significant breeding grounds for at-risk marsh birds.

- **Challenges, developments and perspectives in intermittent river ecology²²**

¹⁹ These scientific articles and reports are attached to this comment letter in Exhibits G-1 – G-31. Our comments here include all of the attached documents in Exhibits G-1 – G-31.

²⁰ U.S. Global Change Research Program, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*, Ch. 3, at 146-157 (attached as Ex. G-1).

²¹ Michael J. Monfils and R. Gregory Corace, *Marsh bird response to hydrologic alteration and restoration of wetlands in the boreal hardwood transition*, Michigan Natural Features Inventory (2018) (attached as Ex. G-2).

²² Thibault Datry et al., *Challenges, developments and perspectives in intermittent river ecology*, *Freshwater Biology*, 1171-1180 (2016) (attached as Ex. G-3).

This front matter article is an introduction to a special issue of *Freshwater Biology* which compiled thirteen articles focused on intermittent river ecology. The authors observe that "...more than half the channels comprising river networks globally cease to flow or dry periodically." Among other things, the articles note that climate change is increasing the prevalence of intermittent waters as more and more perennial waters begin to dry and become intermittent waters.

- **Regional climate change projections of streamflow characteristics in the Northeast and Midwest U.S.**²³

This article predicts future streamflow changes in the Northeast and Midwest due to climate change. Specifically, the authors predict increases in winter precipitation (with more rain than snow) and to a lesser extent summer precipitation. The authors also explain there will be more intense storm events, with various accompanying changes for streamflows in different parts of the region, including increases in both low flow days and peak flow days.

- **Landscape metrics as predictors of hydrologic connectivity between Coastal Plain forested wetlands and streams**²⁴

This article describes the seasonally changing nature of surface water connectivity of wetlands with nearby streams, using forested Delmarva bay wetlands as a case study.

- **Dissolved organic matter variations in coastal plain wetland watersheds: The integrated role of hydrological connectivity, land use, and seasonality**²⁵

This study examines the importance of transport of dissolved organic matter from "geographically isolated" wetlands in the Delmarva peninsula to perennial streams via temporary, seasonal, surface water connections between the wetlands and streams.

- **A comparison of biotic groups as dry-phase indicators of ecological quality in intermittent rivers and ephemeral streams**²⁶

²³ Eleonora M.C. Demaria et al., *Regional climate change projections of streamflow characteristics in the Northeast and Midwest U.S.*, *Journal of Hydrology: Regional Studies*, 309-323 (2016) (attached as Ex. G-4).

²⁴ Steven M. Epting et al., *Landscape metrics as predictors of hydrologic connectivity between Coastal Plain forested wetlands and streams*, *Hydrological Processes*, 516-532 (2017) (attached as Ex. G-5).

²⁵ Jacob D. Hosen et al., *Dissolved organic matter variations in coastal plain wetland watersheds: The integrated role of hydrological connectivity, land use, and seasonality*, *Hydrological Processes*, 1664-1681 (2018) (attached as Ex. G-6).

²⁶ Rachel Stubbington et al., *A comparison of biotic groups as dry-phase indicators of ecological quality in intermittent rivers and ephemeral streams*, *Ecological Indicators*, 165-174 (2019) (attached as Ex. G-7).

This study analyzed the extent of dry-phase biological organisms in intermittent and ephemeral streams, including diatoms, aquatic plants, and aquatic fauna present during dry phases of these streams, in order to assess the health of the streams.

- **Ecological research and management of intermittent rivers: and historical review and future directions**²⁷

This article summarizes major findings of scientific research on intermittent rivers and streams, including a “boom” in research demonstrating the important connections between these waters and downstream navigable waters in the U.S. after the Supreme Court’s *Rapanos* decision.

- **U.S. Environmental Protection Agency Report on the Environment, Stream Flows**²⁸

This report examines changes in stream flows in the U.S. from 1961–2016 at streams with U.S. Geological Survey stream gauge data throughout the country (which tend to be larger, perennial rivers and streams). The report finds that stream flows varied considerably since 1961, with wet and dry periods lasting for years at a time, and with more streams experiencing low flow volumes compared with a baseline of 1941–1960. EPA states that changes in flows can be caused by a number of factors including dams, water withdrawals and pumpings, land use changes, and climate and weather.

- **The National Rivers and Streams Assessment Fact Sheet**²⁹

This EPA fact sheet summarizes the conditions of rivers and streams in the U.S., including the fact that 46% of river and stream miles are in poor biological condition and that this measure has been worsening in recent years with a 9% decline since a 2004 assessment, due to excess nutrient pollution among other stressors.

- **Modeling the potential impacts of climate change on the water table level of selected forested wetlands in the southeastern United States**³⁰

²⁷ Catherine Leigh et al., *Ecological research and management of intermittent rivers: an historical review and future directions*, *Freshwater Biology*, 1181-1199 (2016) (attached as Ex. G-8).

²⁸ EPA, *Report on the Environment, Stream Flows* (2018) (attached as Ex. G-9).

²⁹ EPA, *The National Rivers and Streams Assessment 2008/2009 Fact Sheet* (2016) (attached as Ex. G-10).

³⁰ Jie Zhu et al., *Modeling the potential impacts of climate change on the water table level of selected forested wetlands in the southeastern United States*, *Hydrology and Earth System Sciences*, 1-17 (2017) (attached as Ex. G-11).

This article examines the impacts of climate change on the hydrology of five kinds of forested wetlands in the southeastern U.S., including cypress ponds/swamps, Carolina bays, pine flatwoods, drained pocosins, and natural bottomland hardwood ecosystems. The authors found that climate change will cause drying in all five types of forested wetlands in the southeastern U.S.

- **An Evaluation Of Agricultural Tile Drainage Exposure And Effects To Wetland Species And Habitat Within Madison Wetland Management District, South Dakota³¹**

This Fish and Wildlife Service report evaluates the effects agricultural tile drainage is having on the U.S. prairie pothole region, including wetland loss and pollution of wetlands. The study assessed the levels of nutrients, pesticides, and other pollutants in the wetlands, as well as biological diversity and abundance, at Service-managed prairie pothole sites in South Dakota. The study results indicate agricultural tile drains can discharge pollutants to the wetlands in amounts that are likely harming wildlife, including waterfowl reproduction. The study authors encourage stronger regulation of tile drainage in order to protect these wetlands which are critical for waterfowl, waterbird, and other species, including Endangered Species Act-listed species. The acreage of wetlands in the prairie pothole region has already declined by 61%, and wetland losses continue due to tile drainage.

- **Geographically Isolated Wetlands: Rethinking a Misnomer³²**

This article explains why the term “geographically isolated wetlands” is a scientifically inaccurate and confusing term, as wetlands surrounded by uplands are not isolated from other waters in a hydrological, chemical, or ecological sense.

- **Identification of Putative Geographically Isolated Wetlands of the Conterminous United States³³**

This study used mapping tools to identify geographically isolated wetlands in the U.S., and found more than 8.3 million putative geographically isolated wetlands, representing about 16% of freshwater wetlands in the conterminous U.S.

³¹ USFWS Region 6, *An Evaluation Of Agricultural Tile Drainage Exposure And Effects To Wetland Species And Habitat Within Madison Wetland Management District, South Dakota* (2018) (attached as Ex. G-12).

³² David Mushet et al., *Geographically Isolated Wetlands: Rethinking a Misnomer*, *Wetlands*, 423-431 (2015) (attached as Ex. G-13).

³³ Charles R. Lane and Ellen D’Amico, *Identification of Putative Geographically Isolated Wetlands of the Conterminous United States*, *Journal of the American Water Resources Association*, 705-722 (2016) (attached as Ex. G-14).

- **Geographically isolated wetlands are part of the hydrological landscape**³⁴

This paper focuses on the effects of geographically isolated wetlands on flows in downstream waters. The authors note that geographically isolated wetlands “perform lag, sink, and source functions that can influence the chemical, physical, and/or biological integrities of downgradient waters, especially when considered in aggregate.”

- **Department of Defense Strategic Environmental Research and Development Program Reports**³⁵

This collection of three Department of Defense reports analyze the functions of intermittent and ephemeral streams to improve management and restoration of them on southwestern Department of Defense lands, and concludes it is important to conserve ephemeral streams in order to protect ecological diversity.

- **Bidirectional stream-groundwater flow in response to ephemeral and intermittent streamflow and groundwater seasonality**³⁶

This article examines the connections between streams and groundwater and, among other conclusions, states that intermittent and ephemeral streams are important groundwater recharge and discharge areas.

- **Montana Prairie Wetlands and Intermittent/Ephemeral Streams: Hydrologic Needs Assessment for Healthy Watersheds**³⁷

³⁴ M.C. Rains et al., *Geographically isolated wetlands are part of the hydrological landscape*, Hydrological Processes, 153-160 (2016) (attached as Ex. G-15).

³⁵ David Cooper et al., *Watershed to Local Scale Characteristics and Function of Intermittent and Ephemeral Streams on Military Lands*, Department of Defense Strategic Environmental Research and Development Program (2015); Julian Olden and David Lytle, *Hydroecology of Intermittent and Ephemeral Streams: Will Landscape Connectivity Sustain Aquatic Organisms in a Changing Climate?*, Department of Defense Strategic Environmental Research and Development Program (2015); Juliet Stromberg et al., *Structure and Function of Ephemeral Streams in the Arid and Semiarid Southwest: Implications for Conservation and Management*, Department of Defense Strategic Environmental Research and Development Program (2015) (attached as Ex. G-16, parts 1, 2, and 3).

³⁶ Margaret A. Zimmer and Brian L. McGlynn, *Bidirectional stream-groundwater flow in response to ephemeral and intermittent streamflow and groundwater seasonality*, Hydrological Processes, 1-10 (2017) (attached as Ex. G-17).

³⁷ RTI International, *Montana Prairie Wetlands and Intermittent/Ephemeral Streams: Hydrologic Needs Assessment for Healthy Watersheds* (July 2015) (attached as Ex. G-18).

This study, prepared for EPA, tested how our alterations of prairie wetlands in Montana affect amphibians, and found that increases in human disturbance were correlated with decreases in amphibian diversity.

- **Delineation and Quantification of Wetland Depressions in the Prairie Pothole Region of North Dakota³⁸**

This article describes a new method using high resolution light detection and ranging (“LiDAR”) technology to quantify prairie pothole wetland depressions, including more advanced information about the depressions’ ability to store water. This improved method for measuring prairie potholes will assist with conservation efforts centered around their ecological and hydrological import, including for flood mitigation.

- **New mapping techniques to estimate the preferential loss of small wetlands of prairie landscapes³⁹**

This article presents a new method using LiDAR data and other techniques to improve the mapping of prairie potholes, which have historically been difficult to accurately map due to their small size and other factors. The authors note that accurate mapping is important for improving wetland policies, and prairie potholes provide critical ecosystem services just like more permanent and surface-connected wetlands do, including serving as groundwater sinks and sources, removing excess nutrient pollution, sequestering carbon, and providing floodwater control.

- **Midcontinent Prairie-Pothole Wetlands and Climate Change: An introduction to the Supplemental Issue⁴⁰**

This introductory article for a special edition of *Wetlands* magazine devoted to prairie potholes and climate change summarizes a collection of research on the topic. The author notes that the prairie pothole region is one of the largest wetland complexes in North America, although 60–65% of the basins were lost to agriculture drainage by the mid-1980s. Wetland losses continue in this region despite knowledge of the importance of this area as waterfowl breeding habitat and knowledge of the many other ecosystem services these wetlands provide. The multiple threats to prairie potholes include climate change.

³⁸ Qiusheng Wu and Charles R. Lane, *Delineation and Quantification of Wetland Depressions in the Prairie Pothole Region of North Dakota*, *Wetlands* (2016) (attached as Ex. G-19).

³⁹ J.N. Serran and I.F. Creed, *New mapping techniques to estimate the preferential loss of small wetlands of prairie landscapes*, *Hydrological Processes* (2015) (attached as Ex. G-20).

⁴⁰ David M. Mushet, *Midcontinent Prairie-Pothole Wetlands and Climate Change: an Introduction to the Supplemental Issue*, *Wetlands*, S223-S228 (2016) (attached as Ex. G-21).

- **Preparing for an uncertain future; migrating shorebird response to past climate fluctuations in the Prairie Potholes⁴¹**

This article uses past migratory shorebird data in the prairie pothole region to predict how shorebirds may react to future climate extremes in this region during migration. The article concludes that because migrating shorebirds have demonstrated a willingness to travel to different parts of the region to find their necessary habitat, one way we can mitigate the effects of climate change is to preserve a diverse array of wetlands throughout the entire prairie pothole region.

- **Interannual Water-level Fluctuations and the Vegetation of Prairie Potholes: Potential Impacts of Climate Change⁴²**

This article examines how small changes in water depths, such as those caused by climate change, can shift prairie pothole wetlands to different “classes,” or groups that are characterized by types of vegetation.

- **Abiotic habitat thresholds for salmonid over-summer survival in intermittent streams⁴³**

This study highlights the importance of intermittent stream habitat for Endangered Species Act-listed salmonids, and addresses factors that can limit the fishes’ survival in these intermittent waters. Specifically, the study finds that salmonid survival in intermittent waters is impacted by dissolved oxygen levels, the types and depths of pools left in dry times, and water temperature, among other things.

- **Clean Water Rule Spatial Analysis: A GIS-based scenario model for comparative analysis of the potential spatial extent of jurisdictional and non-jurisdictional wetlands⁴⁴**

This report models the extent of Clean Water Act jurisdiction under three differing scenarios, using GIS technology and nationally available geodatabases. The three scenarios are: most restrictive (protects wetlands directly adjacent to perennial waters only), very restrictive

⁴¹ Valerie Steen et al., *Preparing for an uncertain future: migrating shorebird response to past climate fluctuations in the Prairie Potholes*, Ecosphere (2018) (attached as Ex. G-22).

⁴² Arnold G. van der Valk and David M. Mushet, *Interannual Water-level Fluctuations and the Vegetation of Prairie Potholes: Potential Impacts of Climate Change*, Wetlands, 397-406 (2016) (attached as Ex. G-23).

⁴³ Cleo Woelfle-Erskine et al., *Abiotic habitat thresholds for salmonid over-summer survival in intermittent streams*, Ecosphere (2017) (attached as Ex. G-24).

⁴⁴ Roger Meyer and Andrew Robertson, *Clean Water Rule Spatial Analysis: A GIS-based scenario model for comparative analysis of the potential spatial extent of jurisdictional and non-jurisdictional wetlands*, St. Mary’s University of Minnesota (2019) (attached as Ex. G-25).

(protects wetlands directly adjacent to perennial and intermittent waters only), and less restrictive (protects wetlands directly adjacent to perennial, intermittent, or ephemeral waters, or ditched or channelized streams). The report includes modeling results for three watershed case study sites: Cottonwood River Watershed, MN; South Platte Headwaters Watershed, CO; and Cimarron River Watershed, NM. In the Cottonwood River Watershed, 36% of wetland acreage would become non-jurisdictional under the most restrictive scenario, which is a 125% increase in non-jurisdictional wetland acreage compared with the less restrictive scenario. Under the very restrictive scenario, 21.9% of wetland acreage would become non-jurisdictional. In the South Platte Headwaters Watershed, 54.5% of wetland acreage would become non-jurisdictional under the most restrictive scenario, which is a 1,774% increase in non-jurisdictional wetland acreage compared with the less restrictive scenario. Under the very restrictive scenario, 15.3% of wetland acreage would become non-jurisdictional. In the Cimarron River Watershed, 68.8% of wetland acreage would become non-jurisdictional under the most restrictive scenario, which is a 502% increase in non-jurisdictional wetland acreage compared with the less restrictive scenario. Under the very restrictive scenario, 17.7% of wetland acreage would become non-jurisdictional.

- **An ecohydrological stream type classification of intermittent and ephemeral streams in the southwestern United States⁴⁵**

This article presents an ecohydrological stream type classification tool for intermittent and ephemeral streams on arid and semi-arid Department of Defense lands in the southwestern U.S. Approximately 89% of the streams in this study of four military reservations had “permanent” flow for less than twelve days per year; as a result, the stream classifications were based not on flow permanence, but rather on the timing and magnitude of streamflow events, vegetation type, and geomorphology. The classification system is intended to be useful for Department of Defense land managers.

- **Characterizing the dynamics of surface water-groundwater interactions in intermittent and ephemeral streams using streambed thermal signatures⁴⁶**

This study uses temperature measurements to garner information about the interactions between surface water and groundwater during temporary flow events in intermittent and ephemeral streams.

⁴⁵ Lainie Levick et al., *An ecohydrological stream type classification of intermittent and ephemeral streams in the southwestern United States*, *Journal of Arid Environments*, 16-35 (2018) (attached as Ex. G-26).

⁴⁶ Gabriel C. Rau et al., *Characterizing the dynamics of surface water-groundwater interactions in intermittent and ephemeral streams using streambed thermal signatures*, *Advances in Water Resources* (2017) (attached as Ex. G-27).

- **Southwestern Intermittent and Ephemeral Stream Connectivity**⁴⁷

This article provides a summary of the various kinds of connectivity between ephemeral and intermittent streams and perennial or intermittent rivers. The paper summarizes scientific research on the evidence of connectivity between these waters and the factors affecting the connectivity in the southwestern U.S., including an in-depth case study of the San Pedro River Basin. The authors note that intermittent and ephemeral streams function in many of the same ways as perennial streams, and are biodiversity hotspots with abundant and diverse flora and fauna along their corridors, serving as biological connectors for migration and movement of wildlife and plant matter both during dry and wet phases. In addition to this biological and ecological connectivity, ephemeral and intermittent streams supply water and nutrients to larger waters, have long-distance sediment and chemical connections to perennial stream reaches, and connect to groundwater through water infiltration for groundwater recharging during wet times. These important functions and kinds of connectivity are especially critical in the southwestern U.S. where, according to recent data from the National Hydrography Dataset, “94%, 89%, 88%, and 79% of the streams in Arizona, Nevada, New Mexico, and Utah, respectively, are intermittent or ephemeral.”

- **Hydrologic Influences on Plant Community Structure in Vernal Pools of Northeastern California**⁴⁸

This study, based in northeastern California, quantified the roles that water depth and inundation time periods in vernal pools play with respect to plant distribution. This improved understanding of the relationships between water and plants in these seasonal wetlands is intended to promote management of the wetlands for diverse plant communities, including plants that are specially adapted to vernal pools.

- **Headwater Streams and Wetlands are Critical for Sustaining Fish, Fisheries, and Ecosystem Services**⁴⁹

This article collects scientific research and knowledge that demonstrates the ecological importance of headwater streams and wetlands, meaning portions of a river basin that contribute to downstream navigable waters – a category that comprises 79% of river length in the conterminous U.S. The authors explain why threatened and endangered fish and other aquatic species will become more imperiled if the proposed 2018/2019 definition of Waters of the U.S. is finalized. The authors summarize: “some examples of headwaters that would not meet Scalia’s definition and could lose protection under the new rule include the karst

⁴⁷ D.C. Goodrich et al., *Southwestern Intermittent and Ephemeral Stream Connectivity*, Journal of the American Water Resources Association, 1-23 (2018) (attached as Ex. G-28).

⁴⁸ Meredith C. Gosejohan et al., *Hydrologic Influences on Plant Community Structure in Vernal Pools of Northeastern California*, Wetlands (2017) (attached as Ex. G-29).

⁴⁹ Susan A.R. Colvin et al., *Headwater Streams and Wetlands are Critical for Sustaining Fish, Fisheries, and Ecosystem Services*, American Fisheries Society (2018) (attached as Ex. G-30).

features critically important to threatened and endangered cavefish (Figure 5), intermittent streams used by imperiled fish for spawning and early rearing (Figure 8), and intermittent side channels and floodplains that provide critical habitat for juvenile salmon.” The loss of fisheries and other ecosystem services would carry adverse economic and cultural consequences, as well as biological ones. The ecosystem services of headwaters are estimated to have a \$15.7 trillion/year value in the conterminous U.S. and Hawaii, and headwaters provide recreation, ecotourism, aesthetic, spiritual and socio-cultural value, including for many Native American tribes which have integral cultural and spiritual ties with salmon or other fish. In conclusion, the authors recommend that the Agencies conduct a “formal ecological and economic risk assessment” in order to quantify the expected effects of the proposed rule.

- **Mapping of Non-Perennial and Ephemeral Streams in the Santa Ana Region⁵⁰**

This report notes that ephemeral streams are common in southern California and that they significantly impact the quantity and quality of downstream waters, yet existing maps are insufficient to identify them. In modeling non-perennial streams in southern California, the authors noted that stream flow varies substantially over seasons within a single year and with climate changes over multiple years; as a result, “[s]tatic classes of flow duration (e.g., ‘perennial,’ ‘non-perennial’) are unlikely to characterize a stream accurately.”

C. The Agencies Wholly Disregarded The Effects Of Climate Change On Waters Of The U.S. And Have Therefore Failed To Ensure Full Protections In The Face Of Climate Change and Ignored an Important Aspect of the Problem.

The Agencies also entirely ignore the effects of climate change on waterways throughout the country in their proposed rule. The Agencies do not even acknowledge the existence of climate change in the proposed rule, much less apply the known effects to their policy analysis. The words “climate change” do not appear in the proposed rule, economic analysis, or resource and programmatic assessment. Yet, the effects of climate change will substantially affect the flow conditions, pollution levels, and temperatures of waters in the United States, which will in turn impact the extent of adverse ecological and economic effects of the proposed rule.

First, the Agencies’ reliance on a thirty-year rolling period to measure a “typical year” for purposes of classifying tributaries as perennial, intermittent, or ephemeral,⁵¹ will skew the regulation of tributaries under the Clean Water Act towards past conditions that are much different than the ones we are currently experiencing and will continue to experience due to the effects of climate change. Specifically, scientists predict increasing numbers of perennial

⁵⁰ Marcus Beck et al., *Mapping of Non-Perennial and Ephemeral Streams in the Santa Ana Region*, Southern California Coastal Water Research Project (Dec. 2017) (attached as Ex. G-31).

⁵¹ See, e.g., 84 Fed Reg. at 4219.

streams will become intermittent or ephemeral due to the effects of climate change,⁵² meaning more streams would lose protections under the Agencies' proposed rule as time passes. At the same time, in the northeastern and midwestern U.S., precipitation levels are projected to rise.⁵³ These predicted changes to average annual precipitation are not insignificant; therefore, a jurisdictional definition of tributaries that relies on past precipitation averages will inevitably not reflect the current, on the ground, circumstances. None of these highly relevant considerations regarding changes to precipitation and stream flow were considered in the Agencies' proposed rule.

Second, the Agencies failed to consider or address the additive adverse ecosystem effects caused by removing Clean Water Act protections for many waters at a time when those waters are already facing grave threats due to climate change. These threats include increases in pollution loads, higher water temperatures, more frequent algal blooms, greater groundwater depletion rates, more frequent droughts, increases in irrigation needs, and other consequences of climate change.⁵⁴ Nearly half of the river and stream miles in this country are already biologically impaired,⁵⁵ and the effects of climate change will exacerbate these impairments unless greater protections are implemented. In addition, the kinds of wetlands that are most at risk from the Agencies' proposed rule are also at increased risk from climate change. For example, all five types of forested wetlands in the southeastern U.S. are susceptible to drying due to climate change.⁵⁶ In addition, prairie potholes may experience changes in water depths due to climate change, with accompanying threats to habitat for waterfowl and migrating shorebirds.⁵⁷ However, instead of increasing protections due to the extra burdens of climate change, the Agencies irrationally here propose the opposite approach.

⁵² Thibault Datry et al., *Challenges, developments and perspectives in intermittent river ecology*, *Freshwater Biology*, 1171-1180 (2016) (attached as Ex. G-3).

⁵³ Eleonora M.C. Demaria et al., *Regional climate change projections of streamflow characteristics in the Northeast and Midwest U.S.*, *Journal of Hydrology: Regional Studies*, 309-323 (2016) (attached as Ex. G-4).

⁵⁴ U.S. Global Change Research Program, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment, Volume II*, Ch. 3, at 146-157 (attached as Ex. G-1).

⁵⁵ EPA, *National Water Quality Inventory: Report to Congress* (2017) (attached as Ex. E).

⁵⁶ Jie Zhu et al., *Modeling the potential impacts of climate change on the water table level of selected forested wetlands in the southeastern United States*, *Hydrology and Earth System Sciences*, 1-17 (2017) (attached as Ex. G-11).

⁵⁷ David M. Mushet, *Midcontinent Prairie-Pothole Wetlands and Climate Change: an Introduction to the Supplemental Issue*, *Wetlands*, S223-S228 (2016) (attached as Ex. G-21); Valerie Steen et al., *Preparing for an uncertain future: migrating shorebird response to past climate fluctuations in the Prairie Potholes*, *Ecosphere* (2018) (attached as Ex. G-22); Arnold G. van der Valk and David M. Mushet, *Interannual Water-level Fluctuations and the Vegetation of Prairie Potholes: Potential Impacts of Climate Change*, *Wetlands*, 397-406 (2016) (attached as Ex. G-23).

IV. SPECIFIC PROVISIONS OF THE DIRTY WATER RULE ARE CONTRARY TO THE CLEAN WATER ACT AND TO SCIENCE, ARE ARBITRARY AND CAPRICIOUS, AND ARE BAD POLICY.

This section of the comments will address specific provisions of the Dirty Water Rule and how each is contrary to law and/or the record. Each of these illustrate that, by rejecting significant nexus as the applicable measure of jurisdiction and by adopting the much narrower Justice Scalia test, the Dirty Water Rule is contrary to established law and science.

A. Human Alterations.

One comment applies almost across the board: the Agencies' repeated efforts to allow human alterations to waters (often alterations made with the permission of the Corps) will start a chain reaction of cutting these waters off from their status as waters of the U.S., which will have cascading effects of many connected waters losing all protections under the Clean Water Act. This effect, which cuts across multiple categories of waters in the Dirty Water Rule, is perhaps the most insidious, most cynical, and most contrary to the intent and purpose of the Clean Water Act. It will continue to drive down protections for waters, squeezing them out of the coverage of the Clean Water Act for decades to come.

For example, the Dirty Water Rule provides that wetlands that have been "cut off" from other waters by a road will lose Clean Water Act protection. Or, tributaries that might otherwise qualify as a water of the U.S. will lose that protected status if they are cut off by a human alteration such as a ditch or levee or dam that disrupts visible surface flows. In fact, under the Dirty Water Rule, levees or dams or similar impediments can cut any number of waters out of the Act by disrupting surface flows; even if flows plainly continue through groundwater or seepage or overtopping in floods, if those flows are not visible or frequent enough, the human alteration will have served to eliminate Clean Water Act protections for waters cut off by those alterations. This is unacceptable and contrary to the Clean Water Act and any interpretation of that Act by any court that has addressed the matter since its passage. The Clean Water Groups oppose this attempt at creeping elimination of waters from protections of the Clean Water Act through human alterations.

B. Test for Delineating Traditional Navigable Waters.

The Agencies briefly request comment on whether Appendix D to the *Rapanos* Guidance and other existing guidance regarding the scope of traditional navigable waters should be updated "to help improve clarity and predictability of the agencies' regulatory program." The Clean Water Groups would oppose any alteration, and certainly any narrowing, of the existing guidance and tests for determining whether a water is a traditional navigable water. As an initial matter, the proposed rule simply does not provide sufficient detail to allow members of the public to provide informed comments. Moreover, the existing guidance and tests have developed over many years in response to court rulings and advancements in the scientific

understanding of hydrology, and therefore revisions are not justified absent a specific proposal and explanation in a fully articulated proposed rulemaking. 84 Fed. Reg. at 4170-71.

C. Interstate Waters.

The Dirty Water Rule proposes to eliminate interstate waters from the list of waters that are categorically considered waters of the U.S., protected by the Clean Water Act. The Agencies propose to include such waters only if they meet the definitions provided elsewhere in the rule, (e.g., for tributaries), going out of their way to actually reinterpret longstanding law. 84 Fed. Reg. at 4171. There is no support for the Agencies' reinterpretation in order to eliminate protections for interstate waters and such elimination will do significant damage.

Overall, this reinterpretation will result in the lowest common denominator driving down protections for waterbodies that cross state lines or that form a border between states, with the less-protective states controlling the regulation and protections, or lack thereof, for those waters. This is a formula for state-to-state conflicts and further degradation of waters, favoring less protection overall, the apparent goal of the Dirty Water Rule. This drive to favor the least protective conditions, even where a water is shared with a potentially more-protective state, ignores important national and federal considerations and the stated intent and purpose of the Clean Water Act to move away from the conditions where states competed to allow more pollution and degradation in an attempt to curry favor with business and development. Congress intended the Clean Water Act to eliminate (or at least very sharply curtail) that kind of state competition and race to the bottom and plainly, throughout the Clean Water Act, provided that waters should always move toward protection and increased cleanliness, not less. The Dirty Water Rule turns that on its head, including by eliminating interstate waters as categorically protected.

D. Impoundments.

The Dirty Water Rule's treatment of impoundments fosters and advances the decrease in protections for waters under the Clean Water Act primarily through the "human alteration" method of cutting waters off from federal protections, as generally discussed above. The Dirty Water Rule does this several ways.

First, the Dirty Water Rule provides that an impoundment of a water of the U.S. will not change the water's jurisdictional status "unless jurisdiction has been affirmatively relinquished." 84 Fed. Reg. at 4172. There is no description in the proposed rule of what this means, but on its face, it violates the law. When Congress has instructed the Agencies to apply the Clean Water Act to waters of the U.S. and ensure that activities in those waters are regulated and controlled, an agency cannot simply "affirmatively relinquish" its jurisdiction and attendant obligations to apply and enforce the law as Congress intended. If a water is jurisdictional then it must remain jurisdictional and no "affirmative action" of the agency can change that. *See Callaway*, 392 F. Supp. at 686 (court held that the Corps was "without authority to amend or change the statutory definition of navigable waters," and had "acted unlawfully and in derogation of [its]

responsibilities under” the Act by defining “navigable waters” narrowly); *cf. MCI Telecomm. Corp. v. Am. Tel. & Tel. Co.*, 512 U.S. 218, 230-32 (1994) (ruling that an agency’s loosening of tariff filing requirements was an unlawful failure to exercise authority and implement regulatory requirements integral to the governing statute).⁵⁸ The Agencies’ obligation to protect these waters is a core legal requirement of the Clean Water Act, not merely a technical or factual determination. While the Agencies can adopt rules to provide details about how to determine which waters meet the significant-nexus standard, they lack authority to exclude from the Act’s reach waters that do meet that standard. *See Callaway*, 392 F. Supp. at 686. The Clean Water Act is a “tough law,” *NRDC v. Costle*, 568 F.2d at 1375, and the Agencies charged with implementing it must do so—they are not free to reduce their administrative burden, for example, by creating exemptions from the Act’s requirements, *id.* at 1374, 1377, 1379. An agency that “affirmatively relinquishes” jurisdiction over a water of the U.S. acts arbitrarily and capriciously, abuses its discretion, and acts *ultra vires* under the Clean Water Act.

Second, the Dirty Water Rule provides that discharge of dredged or fill material into a water of the U.S. then “transforms” that jurisdictional water into an “upland,” making it no longer jurisdictional. This is completely contrary to the Clean Water Act and again, is a blatant example of the “human alteration” off-ramp that will allow the Agencies to continue to strip Clean Water Act protections from the nation’s waters, even where those waters are jurisdictional. In no rational reading of Congress’ statements and actions in passing the Clean Water Act can the Agencies find authority to remove entire swatches of waters of the U.S. from protections with the issuance of a single, project-specific permit that has cascading effects.

Similarly, the Agencies’ request for comment on whether impoundments that “release water downstream only infrequently” or that make downstream flow “less than intermittent” should be cut off from Clean Water Act protections is simply a more egregious variation on the chipping away at jurisdictional waters through human alterations. 84 Fed. Reg. at 4173. The answer from the Clean Water Groups is no, these conditions in an impoundment do not and should not change the condition of the water to non-jurisdictional. Impoundment and/or human alteration of a jurisdictional water should never change the jurisdictional character of that water. To allow it to do so violates the Clean Water Act and the Agencies’ obligations under the Act.

E. Tributaries.

⁵⁸ Similarly, courts have required EPA to implement the full mandate of the Act. Time and again, courts have rejected EPA’s attempts to exempt certain categories of “point sources” from the Act’s permitting requirements. *See Nat’l Cotton Council of Am. v. EPA*, 553 F.3d 927, 940 (6th Cir. 2009); *Nw. Env’tl. Advocates v. EPA*, 537 F.3d 1006, 1012 (9th Cir. 2008); *N. Plains Res. Council v. Fidelity Expl. & Dev. Co.*, 325 F.3d 1155, 1164 & n.4 (9th Cir. 2003); *League of Wilderness Defs./Blue Mountains Biodiversity Project v. Forsgren*, 309 F.3d 1181, 1190 (9th Cir. 2002); *NRDC v. EPA*, 966 F.2d 1292, 1304-06 (9th Cir. 1992); *NRDC v. Costle*, 568 F.2d 1369, 1377 (D.C. Cir. 1977).

The Dirty Water Rule severely restricts the protections of tributaries under the Clean Water Act by imposing a definition of tributary that is divorced from science and from the obligation to protect and preserve the chemical, physical, and biological integrity of the nation's waters. It is further contrary to Justice Kennedy's decision in the *Rapanos* case, which itself narrowed the categories of waters to which the Clean Water Act applied.

The Dirty Water Rule restricts the definition of a tributary water to a river, stream, or "naturally occurring surface water channel" that contributes what amounts to visible surface flow, directly or indirectly through another tributary or jurisdictional water, on a perennial or intermittent (but not "ephemeral") basis to a traditional navigable water or territorial sea. 84 Fed. Reg. at 4155. The Clean Water Groups strongly oppose this severe narrowing of the definition and constrained focus on permanence of surface flows, which contradicts Congress' directive to protect all waters of the U.S. with the broadest possible interpretation of the term (*see supra* part I.A. of this letter), entirely ignores the statutory obligation to protect the chemical and biological integrity of the Nation's waters (33 U.S.C. § 1251(a)), and also violates the significant nexus test and accompanying science demonstrating the importance of ephemeral and more temporary streams to the health of downstream waters.

Tributaries serve as the lifeblood and conduits for all of our nation's waters and the health of those waters. Justice Kennedy, in formulating the "significant nexus" test for waters of the U.S.—a test that has been adopted by all of the Circuit Courts of Appeal that have addressed this question—has explained that the Corps was free under the Clean Water Act, to "identify categories of tributaries that, due to their volume of flow. . . their proximity to navigable waters, or other relevant considerations, are significant enough that wetlands adjacent to them are likely, in the majority of cases, to perform important functions for an aquatic system incorporating navigable waters." *Rapanos*, 547 U.S. at 780-81. Justice Kennedy also pointed out that ephemeral waterways, which may be dry much of the time, as well as wetlands without a surface connection to tributaries, can still meet the significant nexus standard. He described Justice Scalia's attempt to impose a continuous flow requirement as making little sense, because "torrents thundering at irregular intervals through otherwise dry channels," which could *significantly affect downstream waterways*, would not be covered. *Id.* at 769. The Agencies mischaracterize the *Rapanos* decision by asserting that the significant nexus standard was the opinion of a "single justice." *Id.* at 4196. In fact, the four justices in the dissent in *Rapanos* stated that they would agree with Justice Kennedy and find Clean Water Act jurisdiction where there was a significant nexus between the water in question and a water of the U.S. *Rapanos*, 547 U.S. at 810 (Stevens, J., dissenting). While it is correct that the standard was articulated in Justice Kennedy's opinion, five justices of the Supreme Court agreed that jurisdiction was proper with a significant nexus.

The Agencies have now irrationally and arbitrarily abandoned their prior use of the significant nexus standard, based on the science of the connectivity of waters. In applying and implementing Justice Kennedy's decision (as well as that of the Circuit Courts) as part of development of the 2015 Clean Water Rule, the Agencies engaged in a searching and thorough examination of various relevant scientific disciplines drawing from the decades of clean water

work at the Agencies, as well as a significant body of published research from outside the Agencies, and by employing experts from all relevant fields, including hydrology, stream and wetland science, geology, biology, chemistry, and climate, culminating in the Science Report. The Science Report found ***unequivocal and consensus evidence that all tributaries***, including perennial, intermittent, and ephemeral streams, “exert a strong influence on the integrity of downstream waters,” at ES-2, and that all tributaries have a significant nexus to traditional navigable waters, interstate waters, and the territorial seas.

The Science Report demonstrates that tributaries, and waters adjacent to tributaries and/or jurisdictional waters, play fundamental roles in determining both the course a river takes and its contents. Tributaries supply initial flow (from snowmelt collecting or channeling area precipitation, or from springs or upwellings), as well as the materials that form the river’s bed and banks, such as sediment, and the materials that fill it, such as water, nutrients, and organisms. *See, e.g.*, Science Report at 3-47 tbl.3-1, 4-40 tbl.4-3. In some cases, they do this by filtering or settling out, or delaying the delivery of, other materials like contaminants or floodwaters. *Id.* at 3-47 tbl.3-1, 4-40 tbl.4-3. Tributaries can also serve as nurseries or spawning areas during certain times of the year for species that then migrate downstream later in their life stages, for example, as part of migrating salmon lifecycles on both coasts. *See, e.g., id.* at ES-5, ES-13, 1-9, 2-40, and 2-44.

One reason tributaries are so important to downstream waters is that, to a large degree, tributaries determine the characters of the water downstream—physically, chemically, and biologically. *Id.* at 3-45 to 3-46. A watershed is like a funnel: tributaries cover a broader expanse than rivers do, and they collect water and other materials across that broad area and deliver it toward a concentrated point downstream. *Id.* at 3-5. In the arid and semiarid Southwest, where the majority of tributaries are seasonally dry, *id.* at 2-29, flows from ephemeral tributaries are still a “major driver” of flows in downstream rivers, even despite their “ephemeral” nature (which simply means that they do not have *visible* surface water at all times. Visibility, however, is never considered a sole determinative factor in whether a water body is a water body and/or whether it has “flow”). *Id.* at B-59. Ephemeral channels supply substantial amounts of surface water to rivers during infrequent, but very influential, flood events. *Id.* For instance, during a high-intensity storm in New Mexico that dropped up to one-quarter of the area’s annual rainfall over the course of two days, flood flows from the Rio Puerco, an ephemeral tributary to the Rio Grande River, accounted for 76% of the flood flow downstream in the Rio Grande. *Id.* at 3-7 to 3-8; Vivoni et al., *Analysis of a monsoon flood event in an ephemeral tributary and its downstream hydrologic effects*, Water Resources Research (2006). Those flows plainly physically affect downstream waters, but also play critical roles in replenishing sediments or nutrients or building aquatic habitat.



Fig. 1: Floodwaters in the Rio Puerco, an ephemeral tributary. Source: Vivoni 2006.

Even when water in ephemeral tributaries sinks into the ground before reaching downstream rivers, it plays a critical role in replenishing shallow groundwater flows. These flows, in turn, are a vital source of surface water in the downstream rivers through springs or base flow. *Id.* at B-59, 5-8 (ephemeral tributaries supply roughly half of the San Pedro River's "baseflow"), B-39 (most perennial and intermittent rivers in the Southwest are groundwater dependent). As noted by the SAB and the independent comments of panel experts on the 2015 Clean Water Rule, shallow groundwater is a vital connection between waterbodies and serves important physical and biological functions for rivers. *See, e.g., id.* at ES-2 to ES-3, ES-8 to ES-9, 2-11 (incl. Fig. 2-5), 2-34, 4-11, 4-14, 4-22 to 4-23 and 4-28, 5-2.

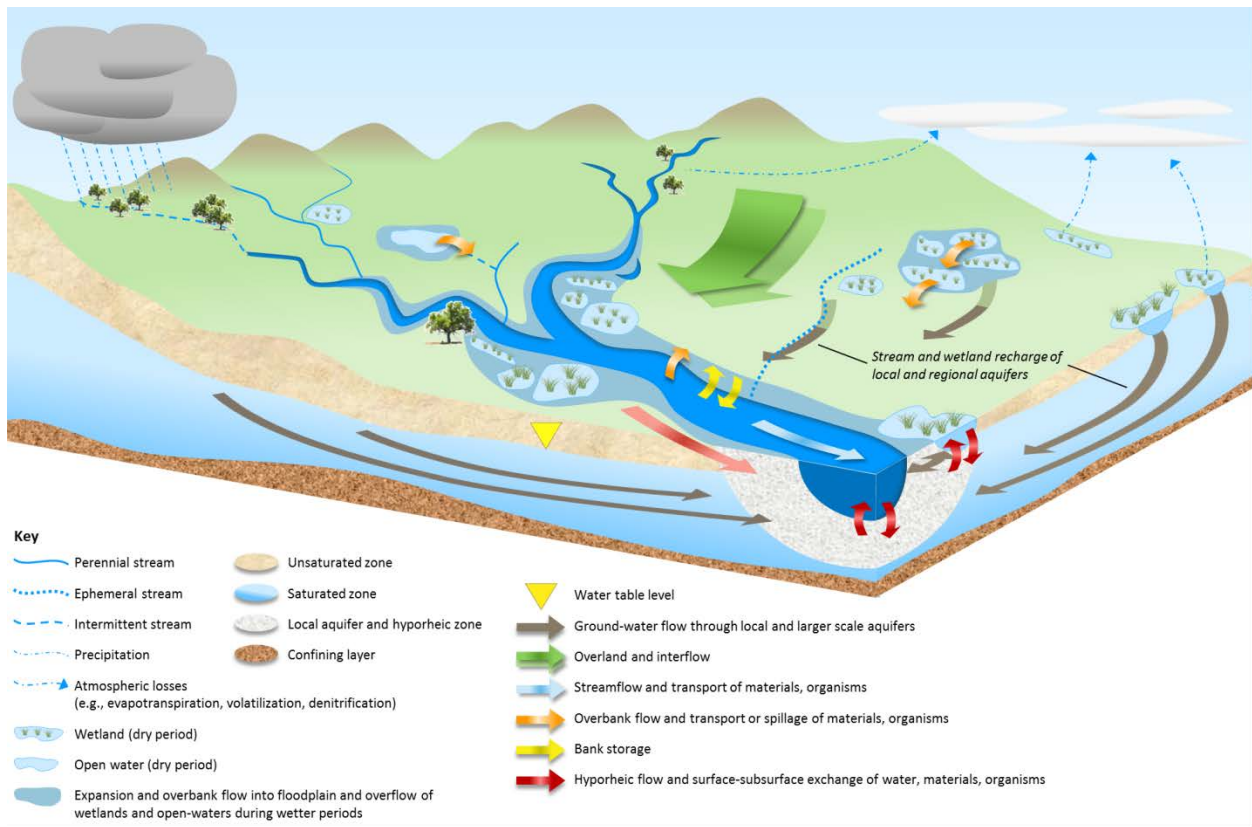


Fig. 2: Illustration of subsurface exchanges of water between a river and its floodplain wetlands (*i.e.*, wetlands in the light blue band bordering the river). Source: Science Report at 1-5 fig.1-1A.

Tributaries also have a major influence on the chemical composition of downstream waters. *Id.* at 3-46, 6-1 to 6-2. Tributaries supply a large proportion of the water in rivers, and that water carries chemicals—good and bad. *Id.* at 3-22. For example, in the Southwest, organic material that is important for biological productivity accumulates in ephemeral channels during dry periods and is carried downstream in great quantities when those channels fill with water. *See id.* at 3-29, B-48 (in the San Pedro River, dissolved organic carbon doubled or tripled during storm events from a flush of terrestrial organic matter and nutrients). Tributaries also affect the chemical makeup of downstream waters by contributing, removing, transforming, or delaying the delivery of harmful chemicals discharged upstream. *Id.* at 3-47 tbl.3-1.

Tributaries are essential to living organisms downstream, whether in perennial, intermittent, or ephemeral streams. *Id.* at 3-46, 3-38, 6-3. In the Southwest, fish may not travel ephemeral channels to a large degree, but water flowing down those channels has a significant influence on fish downstream. Native fish are adapted to the variable flows that ephemeral tributaries provide, and these adaptations allow them to outcompete invasive species. *Id.* at B-38, B-58. Many western rivers are fed significantly by snowmelt from tributaries high in the watershed, and the large snowmelt-fed flows in tributaries leading to rivers like the Columbia

provide the means for salmon to travel to and from spawning areas to the ocean. *Id.* at 2-40, 3-1, 3-41, 6-3 (noting salmonids' reliance on headwater streams); EPA, About EPA's Work in the Columbia River Basin, <https://www.epa.gov/columbiariver/about-epas-work-columbia-river-basin> (noting the headwaters of the Columbia are fed by snowmelt and spring waters).

Finally, to understand the significance of connections between waters, one must consider the combined effect across the watershed and over time. *Id.* at 6-10. The illustration below shows the same river during wet and dry periods. If you look only at connections between the river and its visibly adjacent wetlands during the dry period, you would underestimate the chemical, physical, and biological significance of those connections overall on waters of the U.S. As the Science Report concluded, the effects of tributaries and adjacent wetlands on downstream waters are cumulative, and the connections between those waters must be analyzed together over time and must be protected as a whole under the Clean Water Act in order to effectuate its purpose and intent and the direction of Congress. *Id.* at 6-10.

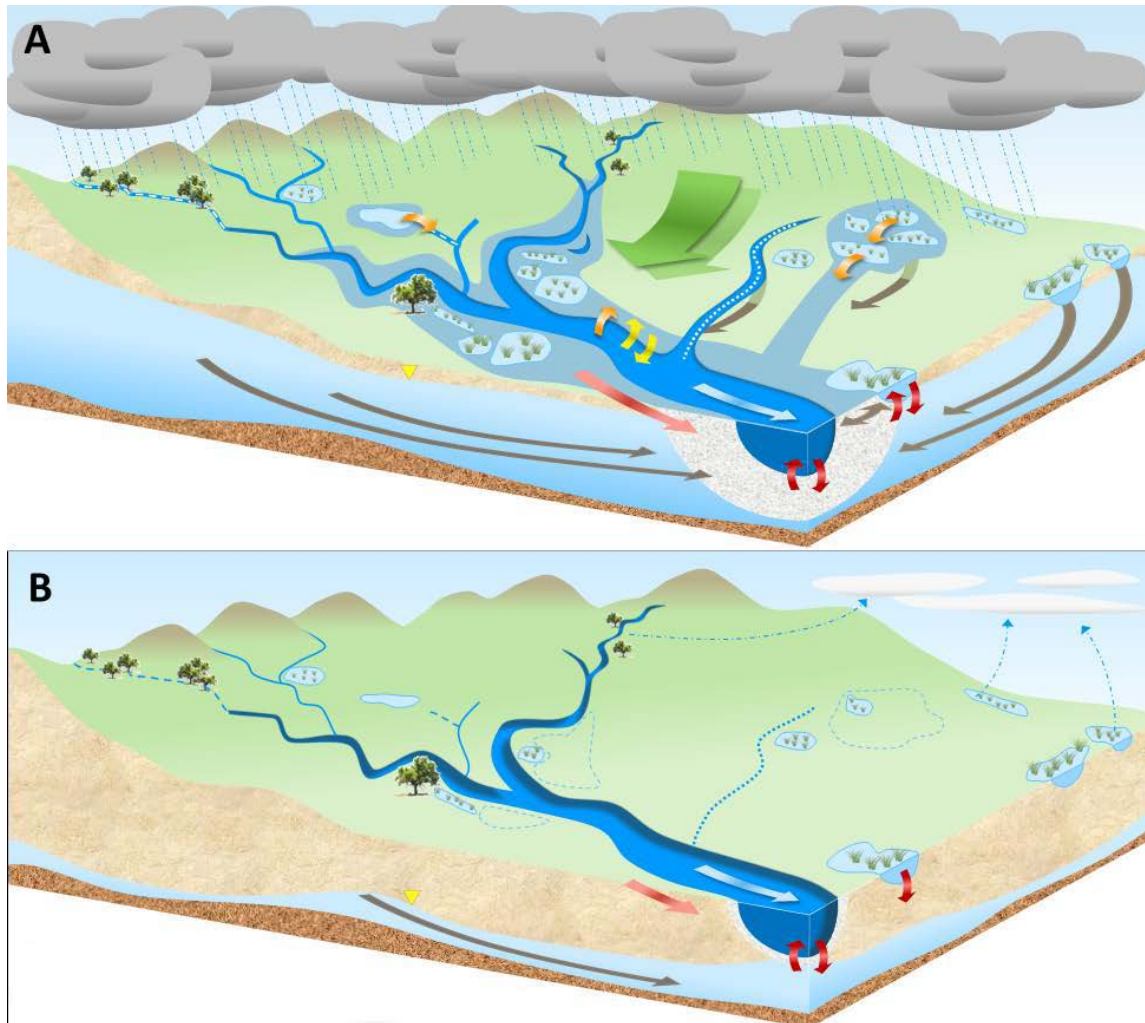


Fig. 3: A river system during wet and dry periods. Source: Science Report 1-7 fig.1-2.

The Dirty Water Rule also sows significant confusion and uncertainty about which tributaries are protected. For example, it qualifies that perennial or intermittent flow means those conditions are met in a “typical year.” *Id.* The Dirty Water Rule provides that “typical year” means “within the normal range of precipitation over a rolling thirty-year period for a particular geographic area.” *Id.* at 4204. The Dirty Water Rule does not define “normal range” for determining precipitation normalcy, and it does not define the scope or type of range for determining a “particular geographic area.” Customarily, scientists and statisticians do not use the word “normal” to identify something that must be defined. Customarily, these experts will use median, mean, or even average, or, most precisely, will define a particular percentile within a precise period of time (*e.g.*, occurring within the 90th percentile of precipitation events over a rolling thirty-year period). With the unclear and unscientific definition provided in the Dirty Water Rule, it appears that any precipitation falling within the thirty-year period can be defined as normal, because it occurred within that period. If a level of precipitation does not occur in that rolling thirty-year period then, seemingly, it cannot be considered “normal” for that period. The proposed rule seems to assume, but does not address, whether thirty-year precipitation is even available for all individual sites. This substantial uncertainty about the meaning of a typical year, and the enormous range of possible levels of precipitation that could be considered typical, demonstrate the unworkability and arbitrariness of this standard.⁵⁹

The Dirty Water Rule’s definition of “ephemeral” as meaning “surface water flowing or pooling only in direct response to precipitation (*e.g.*, rain or snow fall)” is also contrary to science and results in contorted reasoning and arbitrary results. 84 Fed. Reg. at 4204. Rain and snow are in fact part of the hydrologic cycle that produces waters of the U.S. (*see* Figure 3 on the preceding page which plainly shows the impact of precipitation within a watershed). The Dirty Water Rule defines “snowpack” as “layers of snow that accumulate over extended periods of time in certain geographic regions and high altitudes.” 84 Fed. Reg. at 4204. There is no attempt in the Dirty Water Rule to identify when snow actually becomes snow pack—whether it is a month, a year, or multiple years. Presumably, a winter in the Midwest results in snowpack even in a low snow year. The Dirty Water Rule does not state when in the hydrologic cycles rain or snow becomes stream flow and snowmelt. In order to gain protections, the proposed rule appears to require rain or snow to soak into the ground first, at which point it is no longer visible and not protected, but then come to the surface in a spring or groundwater fed stream—and if the stream flows often enough or visibly enough, it is protected. These confusing and contorted requirements further highlight the fact that the proposed rule has no grounding in hydrological science.

⁵⁹ In addition, as explained in *supra* part III.C of this letter, the Agencies fail to address the fact that increasing numbers of waters will become ephemeral as climate change continues to reduce many stream flows.

The Dirty Water Rule's treatment of tributaries also utilizes the human alteration scheme to excise and, over time decrease, the number of otherwise jurisdictional waters from Clean Water Act protections. While a tributary will not lose jurisdictional status if it flows through an impoundment or ditch or culvert or a natural break such as a boulder field or debris pile, the break must continue to convey intermittent or perennial flow from the tributary to another jurisdictional water at the downstream end of the break. If, however, the human or natural alteration causes the water to recede from visible flow (*e.g.*, to flow into groundwater for a period of time or become more diffuse in, *e.g.*, a wetland), then the Dirty Water Rule appears to dictate that the entirety of the tributary will lose Clean Water Act protection from the area of the break to its source. 84 Fed. Reg. at 4174. This suggests that the Corps or EPA can grant a permit for an alteration to a stream, which can then make the entirety of the water flowing to the alteration, and/or from the alteration, non-jurisdictional. This approach is completely contrary to the law and nakedly serves as a vehicle for the Agencies and the Dirty Water Rule proponents to cut as many waters as possible, now and into the future, out of the protections that Congress intended for all waters of the U.S.

Finally, the Agencies request comment on some additional items that are not part of the Agencies' current proposed Dirty Water Rule. In this section of the proposed rule the Agencies seek comment on whether both intermittent and ephemeral streams should be wholly excluded from the definition of Waters of the U.S., and only perennial streams should be protected. 84 Fed. Reg. at 4177. As discussed in further detail in *infra* section V of this letter, ephemeral and intermittent streams represent approximately 60% of the nation's streams, and more than 80% or 90% of streams in some arid western states. The proposal to eliminate protections for ephemeral streams will already hold catastrophic impacts for the health of our waters, but increasing those losses to include the majority of streams in this country would quicken and deepen these adverse impacts to our water quality. The Clean Water Groups strongly oppose any further narrowing of the definition of tributary to only perennial streams as contrary to case law, the Clean Water Act, and the extensive scientific record. The Clean Water Groups also strongly urge the Agencies to return ephemeral streams to the definition of tributaries based on the extensive scientific record and the law, as explained in the above discussion of the effects that even ephemeral streams have on the chemical, physical, and biological integrity of the nation's waters. And because neither the law nor the science supports allowing any "break," physically or in surface flow, whether natural or human-caused, to result in a waterbody losing jurisdictional status and the protections of the Clean Water Act, the Clean Water Groups oppose any decision to allow breaks to eliminate protections.

F. Ditches.

The Agencies have solicited comment on whether ditches that are "constructed in upland" should be non-jurisdictional regardless of flow. 84 Fed. Reg. at 4182. That is, even if the ditch otherwise meets all the requirements for being defined as a tributary (*e.g.*, it has perennial flow to a water of the U.S.), if it is "constructed in upland" it will not receive Clean Water Act protections. The Clean Water Groups oppose this additional exclusion of waters from protection. If a ditch, regardless of where it was excavated in the first instance, has perennial or

intermittent flow such that it meets the proposed definition of tributary (a definition that itself is so narrow and constrained that it does not meet the requirements of law and is not based in science), then that ditch is certainly having a significant influence on the chemical, physical, and biological integrity of waters of the U.S. and it must be protected as a jurisdictional water under the Clean Water Act.

The Clean Water Groups also oppose the new proposed exclusion of ditches that are ephemeral and that are relocated tributaries or constructed out of tributaries. *Id.* at 4179. The Agencies again here propose to allow individuals to destroy Clean Water Act protections for a natural stream by altering or relocating it, provided the newly created “ditch” only has ephemeral flows after the alterations. As we explained in *supra* section IV.E of this letter, these natural ephemeral streams provide critical connections to downstream waters and must be protected under the mandates of the Clean Water Act.

G. Wetlands.

The Dirty Water Rule proposes that only wetlands that “abut” (physically touch on at least one side) a water of the U.S. or that have a “direct hydrologic surface connection” to a water of the U.S. in a “typical year” may be considered protected by the Clean Water Act. 84 Fed. Reg. at 4184. This constrained application of the Clean Water Act to wetlands is wholly divorced from the science and will result in important wetland resources losing protections.

Wetlands naturally absorb flood waters, filter pollutants, and recharge groundwater reserves, as well as provide habitat for fish, amphibians, insects, birds, and mammals. Because they attract such a diverse array of species and provide many kinds of food, EPA has elsewhere called wetlands “biological supermarkets.”⁶⁰ Wetlands also are connected to other waters of the U.S. in a variety of ways. The Science Report found clear evidence that wetlands and open waters in floodplains are “highly connected” to tributaries and rivers “through surface water, shallow groundwater, and biological connectivity.” Science Report at ES-2, and 4-1 *et seq.*, especially 4-39. Relying on these findings, the Agencies previously concluded that all waters adjacent to foundational waters, impoundments, and tributaries have a significant nexus to foundational waters.

The connections between wetlands and other waters may not always be visibly obvious. For example, northern boreal patterned peatlands have been shown to have flow characteristics which are visible on the surface of the peatlands (even if the water flow itself is not always visible), and these peatlands are crucial to flood control, water quality and the chemical, physical and biological integrity of waters of the U.S.⁶¹ Moreover, floods, even if infrequent, have significant, lasting, and beneficial impacts because they allow rivers and wetlands to exchange

⁶⁰ EPA, Why Are Wetlands Important?, <https://www.epa.gov/wetlands/why-are-wetlands-important>.

⁶¹ Minnesota Department of Natural Resources, Minnesota Scientific and Natural Areas Patterned Peatlands, <https://www.dnr.state.mn.us/snas/peatlands.html>.

water and other materials, in both directions. Science Report at 4-1, 4-39. For example, sediment released from wetlands during a flood can help shape a river's channel and therefore affect its physical integrity. *Id.* at 4-39. Floodplain wetlands also reduce floods by storing water that overflows from rivers or that may flow from the landscape into a river (thereby helping to control and slow flooding downstream). *Id.* at 4-1, 6-4. Wetlands can effectively act like a large sponge on the landscape in times of flood. The subsurface or flood-stage flows connecting floodplain wetlands to rivers also convey chemicals. *Id.* at 4-11. One of the most important functions of floodplain wetlands is to intercept contaminants, such as excess fertilizer and pesticides from agricultural operations, by filtering them through the roots of wetland plants. The plants absorb the contaminants and prevent them from reaching the river. *Id.* at 4-11, 4-14.

Even when there is no surface-water connection between a river and a neighboring wetland, shallow groundwater flows may provide a connection. *Id.* at 4-39. Tributaries and rivers are not "pipes" that simply carry water from one place to another in discrete containers. *Id.* at 2-21. They are porous, and water from a river's channel regularly enters the shallow subsurface, where it may mix with other subsurface water (including water from neighboring wetlands) before returning to the channel or even to other surface waters. *Id.* at 2-12, 4-7. Floodplains are frequently composed of alluvium—a combination of silt, sand, or other matter deposited over time—that tends to be "highly permeable" and particularly well suited to conveying shallow groundwater flows. *Id.* at 2-12; *see* fig.2 (above). These shallow subsurface flows can connect rivers to floodplain wetlands during both high-flow and low-flow periods. *Id.* at 2-12, 4-7; *see* fig.2. Although the word "floodplain" may give the impression that these connections occur primarily during times of flooding, in fact, many important connections between rivers and floodplain wetlands persist at other times as well. *Id.* at 4-39. The Agencies misrepresent the scientific record when they suggest that a river is connected to the wetlands in the 100-year floodplain only once every hundred years. *See, e.g.,* 84 Fed. Reg. at 4188.

Justice Kennedy noted that wetlands separated by land from another waterway can be vital to the waterway, for if such a wetland is destroyed, "floodwater, impurities, or runoff that would have been stored or contained in the wetlands" could instead "flow out to major waterways." *Rapanos*, 547 U.S. at 775. The very absence of a hydrological connection could thus make protection of the wetland critical. *Id.* Justice Kennedy acknowledged that isolated wetlands may be protected by the Act, singly or in combination with similarly situated wetlands, as they can significantly affect other covered waters "more readily understood as 'navigable,'" and the Corps may properly determine that proximity, volume of flow (annually or on average), or other relevant considerations may form the foundation for protecting a wetland under the Act. *Id.* at 780. The Science Report similarly found that wetlands and open waters located outside of floodplains also provide numerous functions, such as storage of floodwater, that benefit downstream water integrity. *Id.* at ES-3, 4-20, 4-38.

In spite of the extensive evidence in the record regarding the connectivity of wetlands, the Dirty Water Rule further narrows the definition of a connected wetland by excluding some events that would and do result in visible surface connections between a wetland and a water of the U.S. For example, the Dirty Water Rule provides that hydrologic connections through

“directional sheet flow” during storm events or a “mere hydrologic connection” where a wetland lies in the 100-year floodplain, “flooding, on average, once every 100 years,” will not satisfy the definition of an adjacent wetland. 84 Fed. Reg. at 4186, 4188. The Clean Water Groups oppose the categorical rejection of sheet flow and floodplain connections to wetlands from the protections of the Clean Water Act.

First, if “sheet flow” (whatever that means) during a rain storm event connects a wetland to a water of the U.S., then that connection will substantially influence part of the ecology of that water of the U.S. Connections during rain storm events and in a floodplain are part of the normal cycles for wetlands such as Carolina or Delmarva bays, for example, or for pothole wetland regions or floodplains with wetlands that do not appear visibly connected to a river. Again, the Dirty Water Rule’s exclusions in this regard are not based on any science regarding hydrology, river and wetland systems, or aquatic biology.

Second, the manner in which the Dirty Water Rule references or describes the 100-year floodplain is misleading, at times simply incorrect, and always disingenuous. As the Agencies well know, references such as a “100-year flood” or “100-year floodplain” are not a reference to frequency of flooding. Rather, these are statistical references. A “100-year flood” can happen three or four years in a row, or twice in ten years, or twice in thirty years. The “100” measure, instead, is a reference to the probability of a flood of a particular magnitude in any given year. Therefore, the 100-year flood or the 100-year floodplain means that the specific geographic extent of the floodplain has a statistical 100:1 chance of being inundated in *any* given year. A smaller sized floodplain could have a 50:1 chance, for example, of being inundated in any given year (the so-called “50-year flood”). Further, these references cannot be divorced from the effects of climate change, something the Agencies have made no attempt to consider or factor into decisions regarding the Dirty Water Rule (*see supra* part III.C. of this letter). With climate change, as amply demonstrated by Hurricane Harvey and Houston, the 100-year floodplain is changing and in many instances may be becoming a 50- or 25-year floodplain. The only legally and scientifically supportable approach to defining wetlands that are protected by the Clean Water Act must include all wetlands within a floodplain (at least to the 100-year floodplain) and all wetlands that are connected to a water of the U.S. by “sheet flow during storm events.”

Finally, as with other parts of the Dirty Water Rule, the Agencies propose that human alterations such as dikes, barriers, or other structures that cut off direct, visible surface flows between a wetland and a water of the U.S. will serve to then eliminate Clean Water Act protections for the wetland that would otherwise be jurisdictional. 84 Fed. Reg. 4184, 4188. This will be the case even if there is a demonstrated chemical, physical, and/or biological impact from the wetland to the water of the U.S. through a hydrological connection that does not meet the narrow definitions of connected waters within the Dirty Water Rule. Again, this results in a purposeful chipping away of waters that will be protected under the Clean Water Act. Moreover, the arbitrariness and scientific inaccuracy of this proposal is illustrated by a comparison of the 2015 rule language with the language in the Dirty Water Rule. Without any supporting science or citations, the Dirty Water Rule states: “Wetlands separated from other ‘waters of the United States’ by upland or by dikes, barriers, or similar structures would not be adjacent and would not

be jurisdictional wetlands under the proposed rule, unless there is a direct hydrologic surface connection between the wetland and those waters through or over such structures during a typical year. *This is because upland or dikes, barriers, or similar structures typically block most surface water flow.*" 84 Fed. Reg. at 4188 (emphasis added). This language stands in stark contrast to very similar language in the 2015 Clean Water Rule, which reached the exact opposite conclusion, explaining: "Such waters continue to have a hydrologic connection to downstream waters. *This is because constructed dikes or barriers, natural river berms, beach dunes, and the like typically do not block all water flow.*" 80 Fed. Reg. at 37,084 (emphasis added). It appears that the Agencies simply took the same concept and switched out the conclusion by ignoring the science. This is arbitrary and capricious. Moreover, the Agencies seek comment on whether they should remove protections for wetlands separated from other waters by dikes or other barriers, "even if they have a direct hydrologic surface connection in a typical year to an otherwise jurisdictional water." 84 Fed. Reg. at 4189. The Clean Water Groups strongly oppose such an expanded and unlawful view of human alterations that would ignore even visible direct surface water connections.

H. Groundwater.

The Agencies wholly exclude groundwater from protection under the Dirty Water Rule, regardless of whether the water has a significant nexus to a water of the United States. 84 Fed. Reg. at 4190. In doing so, the Agencies adopt an approach contrary to the record, science, the purpose and intent of the Clean Water Act, and case law.

First, as several courts have noted, legislative history only addresses the unremarkable proposition with which all courts have so far agreed—that the Clean Water Act would not regulate "isolated/nontributary groundwater" which has no effect on surface water." *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001) (citing *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994)). But the Agencies take this concept much further than the Clean Water Act or case law dictates or allows, exposing waters of the U.S. to contamination or degradation through groundwater. The Agencies have again voluntarily refused to exercise their statutory authority and obligations to protect groundwater that is in significant nexus with waters of the U.S.

Second, the Agencies are well aware of groundwater's importance to the integrity of the nation's waters, and the record is replete with evidence demonstrating that groundwater may in many cases be critical to preserving water quality in down-gradient navigable waters. *See, e.g.*, Science Advisory Board (SAB) Consideration of the Adequacy of the Scientific and Technical Basis of the EPA's Proposed Rule titled "Definition of Waters of the United States under the Clean Water Act" at 3, EPA-HQ-OW-2011-0880-7531 (Sept. 30, 2014) ("groundwater connections, particularly via shallow flow paths in unconfined aquifers, can be critical in supporting the hydrology and biogeochemical functions of wetlands and other waters"). The record provides no scientific basis for treating groundwater differently than tributaries, wetlands, and other surface waters that may significantly affect the chemical, physical, and biological

integrity of navigable waters. *Id.* (noting that the groundwater exclusion “do[es] not have scientific justification”).

I. Waste Treatment Exemption.

The so-called waste treatment exemption, which allows waters of the U.S. that have been used for waste treatment systems to be excluded from any further protections of the Clean Water Act, is unlawful. Although an exclusion for waste treatment systems was originally promulgated in 1980, the 2019 proposed Dirty Water Rule expands it in a manner far more sweeping than the original, rendering permanent an interpretation of the exclusion that was originally intended to be temporary. In 1980, EPA limited the exclusion to “manmade bodies of water” that “neither were originally created in waters of the United States (such as a disposal area in wetlands) nor resulted from the impoundment of waters of the United States.” 45 Fed. Reg. 33,290, 33,424 (May 19, 1980). When industry objected, obviously desirous of using the Nation’s waters for free waste disposal, EPA suspended the language limiting the exclusion to manmade systems, without opportunity for public comment, but explaining that the *suspension was temporary* and that EPA would “promptly” amend the rule or “terminate the suspension.” 45 Fed. Reg. 48,620, 48,620 (July 21, 1980) (emphasis added). It never did, and the Agencies now propose to treat the suspension of the limiting language as a settled matter, refusing even to take comment on their action. 84 Fed. Reg. at 4190 (stating that “[w]aste treatment systems have been excluded from this definition since 1979, and they would continue to be excluded under this proposal...”); *id.* at 4192 (“when an applicant receives a permit to impound a water of the United States in order to construct a waste treatment system (as excluded under (b)(11)), the agencies are affirmatively relinquishing jurisdiction over the resulting waste treatment system as long as it is used for this permitted purpose, consistent with longstanding practice.”); *see also id.* at 4194 (stating that “the agencies propose to not change the longstanding approach to implementing the waste treatment exclusion,”) and *id.* at 4195 (soliciting comment only on “whether greater clarity is needed by including in the rule text that the exclusion only applies to ‘lawfully constructed waste treatment systems.’”).

The Agencies have also affirmed an interpretation of the exclusion that authorizes new impoundments of natural waters, such as streams and wetlands, so that they can be pressed into service as industrial waste dumps. *Id.* at 4190. In the Dirty Water Rule, the Agencies propose a definition for waste treatment systems for the first time, but continue the improper exclusion of those waters from protection under the Clean Water Act. *Id.* at 4205. It is now fully apparent that the act of “suspending” the original limiting language in the Waste Treatment System Exclusion is nothing more than a subterfuge; the Agencies have abandoned all pretense that the suspension is temporary, or that they intend to correct the problem through rulemaking.

Congress spoke clearly: the Clean Water Act would apply to “the waters of the United States,” 33 U.S.C. § 1362(7), regardless of how those waters were used. *See supra* pp. 6-7. The law contains no exceptions to that rule, much less for natural water bodies artificially converted into repositories for industrial waste. Indeed, that is the very practice Congress meant for the Act to end. *See S. Rep. No. 92-414 at 7* (“The use of any river, lake, stream or ocean as a waste

treatment system is unacceptable.”). The Waste Treatment System Exclusion violates the plain language of the Act. Nowhere does the Act empower the Agencies simply to remove waters of the United States from the Act’s protections. *Cf. Nat’l Ass’n of Mfrs. v. Dep’t of Labor*, 159 F.3d 597, 600 (D.C. Cir. 1998) (“There is, of course, no such ‘except’ clause in the statute [at issue in that case], and we are without authority to insert one.”); *NRDC v. Costle*, 568 F.2d at 1377 (invalidating a rule on the basis that, under the Clean Water Act, EPA lacked discretion to exempt entire categories of point sources from certain permitting requirements).

Even assuming for the sake of argument that Congress actually intended to delegate to the Agencies the discretion to allow the Nation’s waters to be used as waste dumps – though it did not – the Agencies have failed to exercise that discretion in a reasoned and consistent manner, have failed to explain their interpretation of the Waste Treatment System Exclusion, and have changed what was originally adopted as a temporary measure into a permanent exclusion without explanation. Their latest action on the exclusion is thus arbitrary and capricious. *See Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016). Permanently adopting the Waste Treatment System Exclusion, and now adding a definition, without the language limiting it to manmade systems, is arbitrary and capricious in two ways. First, the exclusion flies in the face of the Agencies’ own statements in the Rule that impoundments of waters of the United States emphatically remain waters of the United States, based on their significant nexus to foundational waters. The Agencies provide no explanation—scientific, technical, or otherwise—for their decision to treat so-called “waste treatment systems” differently from other impoundments of waters of the United States. Second, EPA has never explained the shift from its 1980 position that only manmade waste treatment systems should be excluded from the definition of “waters of the United States,” to its present position permanently extending the exclusion to systems created in natural waters. When EPA promulgated the exclusion in 1980, it explained that the Act “was not intended to license dischargers to freely use waters of the United States as waste treatment systems,” 45 Fed. Reg. at 33,298, and that the exclusion was limited to manmade waters “to ensure that dischargers did not escape treatment requirements by impounding waters of the United States and claiming the impoundment was a waste treatment system, or by discharging wastes into wetlands.” 45 Fed. Reg. at 48,620. Then, when EPA suspended the language limiting the exclusion to manmade systems, the agency said it was responding to complaints that the limitation would otherwise cover “existing waste treatment systems . . . which had been in existence for many years.”⁶² *Id.* (emphasis added). The Agencies’ failure to explain their decision to convert a temporary, narrow suspension to a permanent, wholesale exclusion makes their action arbitrary.

⁶² For some time following the temporary suspension, the exclusion was not interpreted to authorize newly created waste impoundments in natural waters. *See W. Va. Coal Ass’n v. Reilly*, 728 F. Supp. 1276, 1289-90 (S.D. W. Va. 1989) (deferring to EPA’s interpretation that treatment ponds were regulated “impoundments,” not excluded “waste treatment systems”). Over time, however, the Agencies adopted a new interpretation that allowed newly created waste impoundments in natural waters. *See Ohio Valley Env’tl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177, 211-16 (4th Cir. 2009) (upholding the Agencies’ interpretation in the context of a permit challenge).

Also missing is any explanation of why the proposed Waste Treatment System Exclusion is necessary or appropriate, assuming for the sake of argument that it could comply with the Clean Water Act. The fact that the Agencies have always done it this way is not an explanation. As explained above, the only time this issue was ever actually subject to notice and comment (in 1980), the Agencies came to the opposite conclusion. If some sort of lagoon or pond is needed as a waste treatment system, there is no reason such a system cannot be constructed outside of natural waters. If natural waters are prevalent and difficult to avoid in the area, it is possible to use diversions and liners constructed of clean fill material to create a wholly human-made feature segregated from natural waters of the U.S. It is simply not necessary to use waters of the U.S. as waste treatment systems, and the proposed rule offers no explanation to the contrary.

Even if the Agencies were to find it necessary to locate waste treatment systems in waters of the U.S. in some circumstances, and again assuming for the sake of argument that it is lawful to do so, this option ought to be used only as a last resort. If the rule is going to permit such an option, the rule should make clear that every effort must be made to avoid waters of the U.S., including the use of human-made systems, diversions, and liners. The Army Corps or state agencies with delegated 404 authority should grant the needed permits for a waste treatment system in waters of the U.S. only if all other alternatives are exhausted.

The Agencies' action is also procedurally defective, insofar as it makes the exclusion permanent, as though the exclusion is already legitimately in place, without adhering to legally required procedures. By codifying the suspension and affirming an interpretation of the exclusion that covers newly created waste impoundments in natural waters, the Agencies propose to make the suspension a permanent part of the regulations.

Converting the temporary suspension to a permanent one and now adding a definition is an important substantive change to the waste treatment system exclusion itself, which requires the agencies to provide the public with an opportunity to comment on the underlying exclusion—not just the new definition. The Administrative Procedure Act's notice-and-comment requirements apply to amendments and repeals of rules. 5 U.S.C. § 553 (setting forth notice-and-comment requirements for rule making); *id.* § 551(5) (defining rule making to include amendment or repeal of a rule). Courts have, in other contexts, found that even temporary suspensions or delays in implementation of duly promulgated rules are substantive changes, subject to notice-and-comment requirements. *See, e.g., NRDC v. Abraham*, 355 F.3d 179, 204-06 (2d Cir. 2004); *Env'tl. Def. Fund, Inc. v. Gorsuch*, 713 F.2d 802, 816-17 (D.C. Cir. 1983) (holding that agency action that effectively suspended implementation of duly promulgated standards for waste management facilities was subject to notice-and-comment requirements, where the “substance of the decision was exemption of a whole class from prescribed obligations required by law for the protection of the public”). Even where courts have allowed agencies to promulgate temporary or interim measures without notice and comment, that permission has rested on the understanding that the agency will promptly issue permanent rules, informed by notice and comment. *See, e.g., Mid-Tex Elec. Co-op., Inc. v. FERC*, 822 F.2d 1123, 1132 (D.C.

Cir. 1987); *Nat'l Fed'n of Fed. Emps. v. Devine*, 671 F.2d 607, 613 (D.C. Cir. 1982) (“The validity of the interim regulation . . . is conditioned on expeditious conduct of notice and comment procedures in good faith.”).

In short, the waste treatment system exclusion is unlawful; but in any case, the Agencies must provide a full explanation for its decision to make permanent the exclusion, and to apply it explicitly to new systems built in waters of the United States, in addition to notice and comment on the proposed new definition.

V. THE AGENCIES IRRATIONALLY FAILED TO QUANTIFY THE PREDICTED REDUCTIONS IN CWA PROTECTION.

The Agencies repeatedly admit that “fewer waters would be subject to the CWA under the proposed rule than are subject to regulation under the 2015 Rule or pre-2015 practice”⁶³ and that they are “narrowing the scope of CWA regulatory jurisdiction over waters,”⁶⁴ yet they irrationally claim they are unable to quantify this reduced jurisdiction, stating that they “are not aware of any means to quantify changes in CWA jurisdiction with any precision.”⁶⁵ However, a Freedom of Information Act-obtained slideshow prepared by the Agencies addresses the likely quantitative effects of excluding ephemeral streams and potentially intermittent streams, as well as wetlands that do not directly touch a water of the U.S. The slideshow contains an analysis based on National Hydrography Dataset and National Wetlands Inventory data, and reveals that at least 51% of wetlands will be excluded under the proposed rule and at least 18% of streams will be excluded as ephemeral (with an additional 52% of streams excluded as intermittent if the Agencies choose to exclude intermittent streams in the final rule).⁶⁶ In their public Resource and Programmatic Assessment for the proposed rule, the Agencies stated that due to limitations in these same databases, the rule’s “potential effects are described qualitatively and are not quantified.”⁶⁷ The Agencies cannot rationally claim they are unable to quantify the effects of the proposed rule using available national databases when the Agencies themselves performed a quantitative analysis outside of the public record. Moreover, it is highly irresponsible and arbitrary and capricious to propose a policy reversal with sweeping impacts for the health of our waters without even bothering to assess the impacts of the change.

The Agencies are well aware that the majority of streams in the country are ephemeral or intermittent. In EPA’s 2018 rulemaking docket for the Agencies’ proposed repeal of the 2015 Clean Water Rule, the Agencies included an EPA slide that calls ephemeral and intermittent streams the “workhorses of the watershed,” and shows that, nationwide, 59% of stream miles are

⁶³ 84 Fed. Reg. at 4202.

⁶⁴ *Id.* at 4201.

⁶⁵ *Id.* at 4200.

⁶⁶ EPA and Army Corps of Engineers, 2017 e-mails and PowerPoint presentation obtained via Freedom of Information Act (attached as Ex. H).

⁶⁷ EPA and Dep’t of the Army, *Resource and Programmatic Assessment for the Proposed Revised Definition of “Waters of the United States”* at 10.

either ephemeral or intermittent.⁶⁸ They have also observed, without quantification, that “[b]ecause ephemeral streams represent a larger percent of waters in the arid West, any change in jurisdiction related to ephemeral features may be greater there than in other portions of the country.”⁶⁹ In fact, widely available National Hydrology Dataset data reveals that “94%, 89%, 88%, and 79% of the streams in Arizona, Nevada, New Mexico, and Utah, respectively, are intermittent or ephemeral.”⁷⁰ In order to quantify the projected effects on wetlands, scientists at the St. Mary’s University of Minnesota used GIS technology and widely available national datasets to model the likely jurisdictional reductions under scenarios in which only wetlands adjacent to perennial streams are protected, or only wetlands adjacent to perennial and intermittent streams are protected.⁷¹ In one case study watershed, the Cimarron River Watershed in New Mexico, 68.8% of wetland acreage would become non-jurisdictional if only wetlands adjacent to perennial streams are protected, and 17.7% of wetland acreage would become non-jurisdictional if only wetlands adjacent to perennial or intermittent streams are protected.⁷² The Agencies performed no similar modeling, despite having access to the same underlying data. However, the Agencies did provide a few simple case study summaries of hydrography data in their economic analysis. The case study for two watersheds in the Rio Grande River Basin revealed that 85-91% of stream miles are ephemeral, and 34-62% of wetland acres are not abutting waters of the U.S. in those watersheds.⁷³ These startling figures underscore the need for comprehensive, nationwide modeling.

Finally, the Agencies failed to conduct the type of jurisdictional analysis they conducted only a few years before when proposing the 2015 Clean Water Rule, in which they reviewed 200 randomly selected approved jurisdictional determinations in order to predict jurisdictional changes under the 2015 Rule.⁷⁴ The Agencies did not explain why they declined to perform a similar analysis for this proposed rule.

VI. THE AGENCIES FAILED TO PERFORM THE ANALYSIS REQUIRED BY EXECUTIVE ORDER 12898.

⁶⁸ EPA, Materials Shared at Outreach Meetings for Docket EPA-HQ-OW-2017-0203 at 332 (attached as Ex. I).

⁶⁹ EPA and Dep’t of the Army, *Resource and Programmatic Assessment for the Proposed Revised Definition of “Waters of the United States”* at 11.

⁷⁰ D.C. Goodrich et al., *Southwestern Intermittent and Ephemeral Stream Connectivity*, Journal of the American Water Resources Association, 1-23 (2018) (attached as Ex. G-28).

⁷¹ Roger Meyer and Andrew Robertson, *Clean Water Rule Spatial Analysis: A GIS-based scenario model for comparative analysis of the potential spatial extent of jurisdictional and non-jurisdictional wetlands*, St. Mary’s University of Minnesota (2019) (attached as Ex. G-25).

⁷² *Id.* at 26.

⁷³ EPA and Dep’t of the Army, *Economic Analysis for the Proposed Revised Definition of “Waters of the United States”* at 189-90.

⁷⁴ 2015 Analysis of Jurisdictional Determinations for Economic Analysis and Rule (attached as Ex. F-11).

By their own admission, the Agencies ignore and fail to apply the requirements of Executive Order 12,898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, 59 Fed. Reg. 7629 (Feb. 11, 1994). *See* 84 Fed. Reg. at 4203. The Agencies dismiss their environmental justice obligations based on the bare assertion that “there is no significant evidence of disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples.” *Id.*⁷⁵ Yet the Agencies’ own analysis in support of the proposed rule admits that the expected increases in water pollution caused by the rule will, among other things, increase sediment concentrations in waters, leading to increased needs for dredging of reservoirs and drinking water costs.⁷⁶

Readily-available information and studies demonstrate that this increase will have exactly the type of disproportionate effects the Executive Order aims to prevent. In particular, drinking water and related water services are already disproportionately costly for lower-income consumers and people of color, particularly those who live in rural communities—thus, the adverse environmental effects of the rule will produce increased costs that fall disproportionately on already-overburdened communities. Accordingly, finalizing the proposed rule without identifying and addressing its serious environmental justice implications, as the Agencies propose to do here, contravenes Executive Order 12,898 and the Agencies’ policy, and is arbitrary and capricious.

A. Environmental Justice Requirements Are Applicable To The Proposed Rule.

Executive Order 12,898 makes “each Federal agency,” including the EPA and the Corps, responsible for “identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” 59 Fed. Reg. at 7629, § 1-101 (Feb. 16, 1994).

Beyond that, EPA’s own environmental justice plan “envision[s] an EPA that integrates environmental justice into everything” it does. EPA, *EJ 2020 Action Agenda, The U.S. EPA’s Environmental Justice Strategic Plan for 2016-2020* at iii (Oct. 27, 2016) (attached as Ex. J-1). To accomplish this vision, EPA sets forth eight different priority areas, the first of which is “rulemaking.” *Id.* Specifically, EPA aims to “[i]nstitutionalize environmental justice in

⁷⁵ Neither did the Agencies apply the Executive Order in their proposals to repeal the 2015 Clean Water Rule and recodify the preexisting regime. *See* Definition of “Waters of the United States”—Recodification of Pre-Existing Rules, 82 Fed. Reg. 34,899, 34,904 (July 27, 2017); Definition of “Waters of the United States”—Recodification of Preexisting Rule, 83 Fed. Reg. 32,227, 32,252 (July 12, 2018) (both claiming that the “proposed rule maintains the legal status quo. The agencies therefore believe that this action does not have disproportionately high and adverse human health or environmental effects on minority, low-income populations, and/or indigenous peoples.”).

⁷⁶ EPA and Dep’t of the Army, *Economic Analysis for the Proposed Revised Definition of “Waters of the United States”* at 136-37.

rulemaking,” including performance of “rigorous assessments of environmental justice analyses in rules,” in order to “deepen environmental justice practice within EPA programs to improve the health and environment of overburdened communities.” *Id.* Recognizing that “[r]ulemaking is an important function used by the EPA to protect human health and the environment for all communities,” EPA devotes the second chapter of the plan to “Rulemaking,” and through this chapter, aims to “ensure environmental justice is appropriately analyzed, considered, and addressed in EPA rules with potential environmental justice concerns, to the extent practicable and supported by relevant information and law.” *Id.* at 13. Thus, EPA has regularly and purposefully focused on the need for environmental justice assessments of its rulemaking.

EPA has provided guidance to its rule-writers containing direction on how to incorporate environmental justice into the rulemaking process, noting that “it is critical that EPA rule-writers consider environmental justice (EJ) when developing a regulation.” EPA, *Guidance on Considering Environmental Justice During the Development of Regulatory Actions* at 1 (May 2015) (attached as Ex. J-2) (“EPA EJ Guidance”). The Guidance defines an “environmental justice concern” as including “the actual or potential lack of fair treatment or meaningful involvement of minority populations, low-income populations, tribes, and indigenous peoples in the development ... of environmental ... regulations.” *Id.* at 9. This can arise not only when a regulation would “[c]reate new disproportionate impacts,” but also when it would “exacerbate existing disproportionate impacts.” *Id.* at 10. The assessment can include qualitative or quantitative elements. *Id.* And the Guidance directs rule-writers to begin the assessment by “first understand[ing] what an action is accomplishing and why it is necessary.” *Id.*

Both the EPA and the Corps also have an obligation pursuant to Executive Order 13,175 to consult with tribes when they formulate policies that have tribal implications, as is the case with this proposed rule. Executive Order 13,175, Consultation and Coordination With Indian Tribal Governments, 65 Fed. Reg. 67,249, 67,250 (Nov. 6, 2000) (requiring that “[e]ach agency shall have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications”). The Corps also has made specific commitments to indigenous peoples through its U.S. Army Corps of Engineers Tribal Policy Principles,⁷⁷ which grow in part from the Executive Order 13,175, and the Presidential Memorandum on Tribal Consultation (Nov. 5, 2009) (attached as Ex. J-3) (noting that “[h]istory has shown that failure to include the voices of tribal officials in formulating policy affecting their communities has all too often led to undesirable and, at times, devastating and tragic results.”).

While the records in the proposed rulemaking docket indicate that the Agencies conducted some informal discussions with tribal leaders,⁷⁸ there is no indication that the Agencies disclosed the issue about increased sedimentation increasing the costs of drinking water treatment, or many other specific predicted impacts which would affect tribes. *See* EPA

⁷⁷ Corps, Tribal Nations, <https://www.usace.army.mil/Missions/Civil-Works/Tribal-Nations/> (last visited April 9, 2019).

⁷⁸ EPA, Materials Shared at Outreach Meetings for Docket EPA-HQ-OW-2017-0203 at 145, 156, 285-86 (attached as Ex. J-4).

and Dep't of the Army, *Summary Report of Tribal Consultation and Engagement for the Proposed Rule: Revised Definition of "Waters of the United States,"* and attachments, EPA-HQ-OW-2018-0149-0094. The Agencies therefore failed to provide the requisite opportunity for "meaningful and timely input" by tribal leaders. Executive Order 13,175, Sec. 5.

The proposed rule is likely to result in both the "lack of fair treatment" and a lack of "meaningful involvement of minority populations, low-income populations, tribes, and indigenous peoples." EPA EJ Guidance at 10-12. For example, the complete absence of a meaningful environmental justice analysis means that environmental justice communities have not been sufficiently alerted by the Agencies to the likely disproportionate effects of increased drinking water treatment costs that will flow from the proposed dramatic narrowing of Clean Water Act jurisdiction. Thus, by failing to "identify" the disproportionate effects of the proposed rule, as required by Executive Order 12,898, the Agencies have missed a significant opportunity to gather additional relevant evidence from the communities that will be most deeply affected by these increased costs. Moreover, the Agencies have failed to "address" these anticipated disproportionate effects at all as required by Executive Order 12,898, much less in a meaningful way that prevents unfair treatment of already overburdened water consumers.

B. The Proposed Rule Has Disproportionately High Environmental Effects On Minority Populations, Low-Income Populations, And Tribal Populations.

EPA is already aware of the issues surrounding drinking water affordability and disproportionate burdens of drinking water infrastructure and treatment costs on low-income communities and communities of color. A recent report affirmed that "[l]ow-income users' water bills account for a larger share of total low-income household expenditures than higher income households." National Academy of Public Administration, *Developing a New Framework for Community Affordability of Clean Water Services* at 38 (Oct. 2017) (attached as Ex. J-5). This is why EPA has provided information and guidance to states and municipalities, utilities, and permit writers, to help ensure that the people they serve have access to affordable drinking water, and to ensure that they are not disproportionately burdened with the costs of drinking water collection, treatment, and distribution infrastructure.⁷⁹ EPA's policy states that "[f]ederal... policies[] and actions should... promote affordable neighborhoods," among other things.⁸⁰

⁷⁹ See, e.g., EPA, *Tools for Financing Water Infrastructure* (March 2007), <https://www.epa.gov/sites/production/files/2016-01/documents/waterinfra2007.pdf>; EPA, *Sustainable Water Infrastructure, Financing Water Infrastructure*, <https://www.epa.gov/sustainable-water-infrastructure/financing-water-infrastructure> (last updated March 20, 2017).

⁸⁰ EPA, *EPA's Clean Water and Drinking Water Infrastructure Sustainability Policy* (Oct. 4, 2010), <https://www.epa.gov/sustainable-water-infrastructure/clean-water-and-drinking-water-infrastructure-sustainability-policy>.

Readily-available public information confirms that a rule that causes increased drinking water treatment costs will disproportionately burden minority populations, low-income populations, and/or indigenous peoples.

Low-income households already pay higher water bills in relation to income.
According to the United States Conference of Mayors:

A serious concern for local government is the disproportionate financial impact on households at or below the poverty level, or with low, moderate and fixed income at the lower end of the income distribution because user fees command a greater percentage of their annual incomes. This disparate financial impact is regressive. Current public water cost allocation schemes that rely on uniform user class pricing place a tremendous financial burden on the lower median income households in a community. The financial burden is both substantial, and sometimes, widespread in a community

The United States Conference of Mayors, *Growth in Local Government Spending on Public Water and Wastewater – But How Much Progress Can American Households Afford?* at 11 (April 2013) (attached as Ex. J-6). Additional research by a University of Wisconsin-Milwaukee researcher exposed “the regressive character of water tariffs, since at lower levels of income we find much higher percentages of water costs over income.” Oriol Miroso, *Water affordability in the United States: An Initial Exploration and an Agenda for Research*, *Sociological Imagination*. Vol. 51. Iss. 2. at 2 (Dec. 2015) (attached as Ex. J-7).

Drinking water affordability is in crisis. One national assessment found “[a]nalytical results [that] highlight high-risk and at-risk households for water poverty or unaffordable water services.” Elizabeth A. Mack and Sarah Wrase, *A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States*, *PLOS One* (Jan. 11, 2017) (attached as Ex. J-8). The authors noted that “[m]any of these households are clustered in pockets of water poverty within counties, which is a concern for individual utility providers servicing a large proportion of customers with a financial inability to pay for water services.” A 2016 study found that “one-third of customers in the lowest 20th percentile income level have had months where they could not pay all their utility bills on time and are three times more likely to have their service disconnected.” U.S. Government Accountability Office, *Water Infrastructure: Information on Selected Midsize and Large Cities with Declining Populations*, at 13 (GAO-16-785) (Sept. 2016) (attached as Ex. J-8). Some analysts consider this a threat to human rights. See, e.g., Georgetown Law Human Rights Institute Fact-Finding Practicum, *Tapped Out: Threats to the Human Right to Water in the Urban United States* (April 2013) (attached as Ex. J-9).

Drinking water rates are characterized by racial disparities. One set of researchers’ findings “indicate that higher reported cost of water and sewer was associated most strongly with minority racial status.” Rachel Butts and Stephen Gasteyer, *More cost per drop: Water rates*,

structural inequality, and race in the United States—The case of Michigan (attached as Ex. J-10). The researchers believe the effect can be explained by “post-industrial divestment and subsequent depopulation of particular urban areas,” an effect that has fallen more severely on people of color. *Id.* Another study focused on Boston and mapped data about water shutoffs along with data on racial diversity across the city, finding the two factors are closely related. Kimberly Foltz-Diaz et al., Massachusetts Global Action, *The Color of Water: A Report on the Human Right to Water in the City of Boston* (July 2014) (attached as Ex. J-11). An in-depth investigation by the Chicago Tribune found similar effects in Chicago, helping explain why black and poor suburbs pay higher water rates, and why overall water rates in the metropolis are surging. Ted Gregory et al., “Same Lake, Unequal Rates; Why our water rates are surging – and why black and poor suburbs pay more,” *Chicago Tribune* (Oct. 25, 2017) (attached as Ex. J-12).

As noted above, EPA’s *Guidance on Considering Environmental Justice During the Development of Regulatory Actions* recognizes that environmental justice concerns can arise when the environmental effects of an agency action exacerbate an existing disproportionate impact for communities covered by Executive Order 12,898. The Agencies concede that their proposed rule will cause increased sedimentation and resulting increased costs of drinking water treatment, which will in turn exacerbate an environmental justice problem that is already at crisis proportions. For this and other reasons, the Agencies must therefore complete their environmental justice responsibilities before finalizing the proposed rule.

VII. THE AGENCIES FAILED TO COMPLY WITH THE ENDANGERED SPECIES ACT.

Section 7 of the Endangered Species Act (“ESA”), requires each federal agency to consult with USFWS and with National Marine Fisheries Service (“NMFS”) as to any action authorized, funded, or carried out by the agency to ensure that such action is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of a listed species critical habitat. 16 U.S.C. § 1536(a)(2). Further, for actions subject to consultation, the agency shall not make any irreversible or irretrievable commitment of resources with respect to the proposed agency action which has the effect of foreclosing measures necessary to ensure no jeopardy to listed species or destruction or adverse modification of critical habitat. *Id.* § 1536(d).

Here, the Agencies have failed to consult with the USFWS and NMFS regarding the Dirty Water Rule to ensure that the rule will not jeopardize endangered or threatened species nor destroy or adversely modify critical habitat. Given that the Dirty Water Rule will result in innumerable streams and wetlands (and possibly lakes, ponds, impoundments, ditches, etc.) to lose Clean Water Act protection from pollution, degradation and/or destruction, the potential for jeopardy to species and habitat is significant, indeed harm is likely. Numerous listed species of fish live and spawn in small headwaters of western streams and rivers, many of them in the desert in rivers and streams that are fed by so-called ephemeral desert washes. Many listed amphibian species spawn and/or live in ephemeral wetlands or streams such as vernal pools. Many listed bird species use desert washes, and many migratory waterfowl rely heavily on what will be considered “isolated” wetlands under this rule, during migration and/or for breeding and

feeding. And of course, all of these species live downstream of waters that the Dirty Water Rule will now fail to protect from pollution, degradation, or destruction with attendant negative effects downstream to all waters (because waters are connected in more ways than just visibly and perennially).

A review of recent hydrology publications reveals several examples illustrating the importance of ephemeral streams and other smaller water bodies for endangered and threatened species. For example, streams that are fragmented into pools during times of low flow provide critical habitat for endangered and threatened salmonids in the Pacific Northwest.⁸¹ Seasonal vernal pools provide unique habitat for plants that are specially adapted to vernal pool wetlands.⁸² Prairie potholes are a well-known prolific breeding ground for waterfowl, provide crucial migratory habitat for many shorebirds, and are generally hotspots for wildlife (at one prairie pothole district in South Dakota, at least a dozen threatened or endangered species are either known or possibly occur).⁸³ Karst water features and intermittent streams throughout the country are also known to be essential for fish like threatened and endangered cavefish, as well as many kinds of threatened salmon, trout, darters, minnows, suckers, and other fishes.⁸⁴ All of these waters are at risk of losing protections under the proposed rule, destroying vital habitats for innumerable species. The Agencies' own economic analysis predicts a "decline in wildlife habitat quantity and quality," "[w]ater quality degradation [that] may adversely affect species habitat," and "loss of wildlife and habitats" from more frequent and larger oil spills, among other things.⁸⁵ The economic analysis also elsewhere observes that various threatened and endangered species rely on ephemeral streams and pools, including the Pecos sunflower, streamside salamander, red salamanders, and Strecker's chorus frog.⁸⁶ In spite of these acknowledged impacts, the Agencies have puzzlingly taken no steps to analyze the extent and nature of these predicted effects. For species protected under the Endangered Species Act, the Agencies must consult with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service ("NMFS") under § 7 of the Endangered Species Act to determine whether the proposed removals

⁸¹ Woelfle-Erskine et al., *Abiotic habitat thresholds for salmonid over-summer survival in intermittent streams*, *Ecosphere* (2017) (attached as Ex. G-24).

⁸² Gosejohan et al., *Hydrologic Influences on Plant Community Structure in Vernal Pools of Northeastern California*, *Wetlands* (2017) (attached as Ex. G-29).

⁸³ Steen et al., *Preparing for an uncertain future; migrating shorebird response to past climate fluctuations in the Prairie Potholes*, *Ecosphere* (2018) (attached as Ex. G-22); David M. Mushet, *Midcontinent Prairie-Pothole Wetlands and Climate Change: An introduction to the Supplemental Issue*, *Wetlands* (2016) (attached as Ex. G-21); U.S. Fish and Wildlife Service Region 6, *An Evaluation Of Agricultural Tile Drainage Exposure And Effects To Wetland Species And Habitat Within Madison Wetland Management District, South Dakota* at 6 (2018) (attached as Ex. G-12).

⁸⁴ Colvin et al., *Headwater Streams and Wetlands Are Critical for Sustaining Fish, Fisheries, and Ecosystem Services*, *American Fisheries Society* (2018) (attached as Ex. G-30).

⁸⁵ U.S. Environmental Protection Agency and Department of the Army, *Economic Analysis for the Proposed Revised Definition of "Waters of the United States"* at 136-37 (Dec. 11, 2018).

⁸⁶ *Id.* at 195-96, 164, 184.

of CWA protections for waters and the accompanying increases in pollution and filling of wetlands will adversely affect these species or their designated critical habitats.

Further, the Agencies have access to additional resources that reveal ranges and critical aquatic habitats for many federally listed species. For example, the U.S. Fish and Wildlife Service includes an active list of listed species on its website.⁸⁷ The list includes many fish species, shellfish species, amphibians, corals, birds, and aquatic insects that rely on water. The list also includes information on the species' historical and current range, and if critical habitat has been designated, that too is available. A GIS exercise would allow the Agencies to understand where waters will be stripped of Clean Water Act protections that overlap with range and habitat of the listed species. A graduate student could perform this analysis in a week. The Agencies could contact Professor Steve Roady at Duke University for assistance with this habitat analysis, for example. From that information, the Agencies could then determine which listed species depend on waters that may be adversely affected by the Dirty Water Rule, initiate consultation, and seek a biological opinion from USFWS and NMFS.

These are just a handful of examples of the extensive and potentially seriously damaging results on federally listed species and their habitat from the Dirty Water Rule necessitating consultation under Section 7 of the ESA. The Agencies made no attempt to comply with the ESA, yet they are committing resources to the finalization and implementation of the Dirty Water Rule. The Agencies are in violation of Section 7 of the ESA.

VIII. THE AGENCIES FAILED TO COMPLY WITH THE NATIONAL ENVIRONMENTAL POLICY ACT.

Finally, the Agencies utterly failed to comply with the requirements of the National Environmental Policy Act ("NEPA"). NEPA requires all federal agencies to prepare an environmental impact statement ("EIS") for any "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C.A. § 4332(C). In fulfillment of its policy that "each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment," 42 U.S.C.A. § 4331(c), "NEPA 'establishes 'action-forcing' procedures that require agencies to take a 'hard look' at environmental consequences.'" *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 623 F.3d 633, 642 (9th Cir. 2010) (internal citations omitted). NEPA also requires federal agencies to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources." 42 U.S.C.A. § 4332(E).

⁸⁷ USFWS, Environmental Conservation Online System, <https://ecos.fws.gov/ecp0/reports/ad-hoc-species-report?kingdom=V&kingdom=I&status=E&status=T&status=EmE&status=EmT&status=EXPE&status=EXPN&status=SAE&status=SAT&fcrithab=on&fstatus=on&fspecrule=on&finvpop=on&fgroup=on&header>Listed+Animals>.

Section 511(c) of the Clean Water Act creates a limited exemption which characterizes the actions of the Administrator of the EPA as not “major Federal action[s] significantly affecting the quality of the human environment within the meaning of the National Environmental Policy Act of 1969,” 33 U.S.C.A. § 511(c), and thus not subject to the NEPA requirement to prepare an EIS. However, this exemption does not apply to other provisions and requirements of NEPA – all provisions other than the requirements for major federal actions significantly affecting the environment in § 4332(C), nor does it apply to the Corps or to the actions of the EPA when it is providing financial assistance for the construction of publicly owned treatment works or permitting new sources of discharges of pollutants under § 402 of the Clean Water Act. *See* 33 U.S.C.A. § 511(c). The Agencies’ actions here are not fully exempt from NEPA. As a result, the Agencies have violated NEPA by failing to take any steps to consider the environmental impacts of their proposed rule or alternatives to the action.

CONCLUSION

We urge the Agencies to withdraw the current proposal because it is unsupported, contrary to science, and contrary to law. There is no legitimate need for this proposed rule, and the Agencies offered only irrational explanations for the Dirty Water Rule, in violation of the APA. The proposed rule’s provisions directly contradict the mandates of the text of the Clean Water Act, its legislative history, federal case law, and settled science, all of which dictate broad protections for all of the Nation’s waters. The Agencies cannot explain why they propose to reverse decades of clean water protections when the record irrefutably points to a need for increased, not decreased, protections of our waters as they continue to degrade each year. This policy reversal is contrary to the CWA and is arbitrary and capricious under the APA.

Moreover, the Agencies unlawfully failed to analyze the impacts of the Dirty Water Rule. The proposed rule would introduce many new exclusions and methods of removing protections via human alterations, gutting protections for huge percentages of waters. Yet, the Agencies failed to even roughly quantify the impacts of their proposal. Nor did they attempt to analyze the impacts on environmental justice communities that will disproportionately bear the adverse effects associated with more polluted water. The Agencies also failed to comply with their obligations under the ESA to analyze the impacts to threatened and endangered species. Finally, the Agencies did not consider the broader environmental impacts of their proposal, or alternatives to the proposal, under NEPA. Silence does not destroy the Agencies’ legal obligations to analyze the many effects of their sweeping proposal. Their failure to perform critical analyses is not only irresponsible, but violates the APA, executive orders, and the ESA.

Any questions regarding these comments may be directed to Jennifer Chavez at (202) 667-4500, Janette Brimmer at (206) 343-7340, or Anna Sewell at (202) 797-5233.

Sincerely,

U.S. Env'tl. Prot. Agency
EPA Docket Center, Office of Water
April 15, 2019
Page 58

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