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By Email and First Class Mail

Dr. Thomas Armitage
Designated Federal Officer (DFO)
EPA Science Advisory Board (1400R)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460
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RE: Written Statement for Science Advisory Board (“SAB”) Public Teleconference on Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act

Dear Dr. Armitage,

Harvard Law School’s Emmett Environmental Law and Policy Clinic (the “Clinic”) respectfully submits the following comments on behalf of the National Parks Conservation Association (“NPCA”) regarding the SAB’s draft commentary on the U.S. Environmental Protection Agency’s (“EPA”) and U.S. Army Corps of Engineers’ (“USACE”) (together, the “Agencies”) proposed Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154 (Feb. 14, 2019) (the “Proposal”). NPCA represents over 1.3 million supporters and members as “the voice of America’s National Parks.” It has been a leading independent, nonpartisan voice on natural resources issues since 1919. The Clinic is a legal clinic at Harvard Law School that works on a variety of local, national, and international projects covering the spectrum of environmental law and policy issues under the direction of Clinical Professor Wendy B. Jacobs.

We support the draft commentary’s conclusion that “aspects of the proposed rule are in conflict with established science” and that “the existing WOTUS rule [was] developed based on the established science.”¹ In particular, we agree with the draft commentary that established science supports the protection of ephemeral waters such as “the arroyos of the Southwest United States” and of “adjacent wetlands that do not abut or have a direct hydrologic surface connection to otherwise jurisdictional waters.”² We have attached as an exhibit to this letter a copy of the

¹ SAB, *Draft Commentary on the Proposed Rule Defining the Scope of Waters Federally Regulated Under the Clean Water Act* 1 (Oct. 16, 2019), [https://yosemite.epa.gov/sab/sabproduct.nsf/WebBOARD/5939AF1252DDA4DFB852584E10053D472/\\$File/WOTUS+SAB+Draft+Commentary_10_16_19_.pdf](https://yosemite.epa.gov/sab/sabproduct.nsf/WebBOARD/5939AF1252DDA4DFB852584E10053D472/$File/WOTUS+SAB+Draft+Commentary_10_16_19_.pdf).

² *Id.* at 2, 3.

comment letter that we submitted last year on the Proposal, which offers additional support for these conclusions in the draft commentary.

We write separately here to indicate several additional ways in which the Proposal is inconsistent with established science. Specifically:

1. The Proposal lacks an adequate analysis of the number of waters that will lose protection if it is finalized.

The Proposal, if finalized, would protect significantly fewer waters than covered under either the 1986 or 2015 regulations. In particular, the proposed definition would remove protections for wetlands unless they abut or have a direct hydrologic surface connection with other jurisdictional waters and eliminate protections for all ephemeral streams. The net result of these changes will be a significant decrease in the waters that receive protection under the Clean Water Act (“CWA”).

Nevertheless, the Proposal asserts that the Agencies “are not aware of any map or dataset that accurately or with any precision portrays the scope of CWA jurisdiction at any point in the history of this complex regulatory program.”³ This statement belies, however, briefing materials prepared in September 2017 for then-EPA Administrator Scott Pruitt and then-Acting Assistant Secretary of the Army (Civil Works) Douglas Lamont, which indicate that the Agencies were at least aware of the approximate percentages of streams and wetlands that would lose protection.⁴ According to those materials, the Proposal would preclude CWA protection from 18 percent of streams and 51 percent of wetlands.⁵ These numbers track the information in the Proposal’s Resource and Programmatic Assessment, which provides that at least 18 percent of streams in the United States would not be considered “waters of the United States” if the Proposal is finalized.⁶ The potential removal of protection for ephemeral streams is even more dramatic in the arid west, where “13 percent of streams (by stream length) are mapped as perennial, 48 percent are mapped as intermittent, and 39 percent are mapped as ephemeral.”⁷ Many, if not most, of these ephemeral streams and wetlands would have been considered jurisdictional under the 2015 Rule because of the significant nexus of these waters to downstream water quality.⁸

³ 84 Fed. Reg. at 4200.

⁴ Ariel Wittenberg and Kevin Bogardus, *EPA Falsely Claims “No Data” on Waters in WOTUS Rule*, E&E NEWS (Dec. 11, 2018), <https://www.eenews.net/stories/1060109323>.

⁵ Indeed, these materials note that the available dataset likely results “in an underestimation of the number of ephemeral streams throughout the country.” E-mail and Attachments from Stacey M. Jenson, HQ USACE Regulatory Program Manager, to John Gooden, EPA Director of the Office of Wetlands, Oceans and Watersheds (Sept. 5, 2017, 1:00 PM), available at https://www.eenews.net/assets/2018/12/11/document_gw_05.pdf.

⁶ EPA & U.S. DEP’T OF THE ARMY, RESOURCE AND PROGRAMMATIC ASSESSMENT FOR THE PROPOSED REVISED DEFINITION OF “WATERS OF THE UNITED STATES” 38 (Dec. 11, 2018).

⁷ *Id.*

⁸ See Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,054, 37,060 (June 29, 2015) (“In the rule, the agencies determine that tributaries, as defined (‘covered tributaries’), and ‘adjacent waters’, as defined (‘covered adjacent waters’), have a significant nexus to downstream traditional navigable waters, interstate waters, and the territorial seas and therefore are ‘waters of the United States.’”).

2. The Proposal lacks analysis of the environmental and public health consequences of the loss of protection for ephemeral streams and non-adjacent wetlands.

The loss of protection for a large (but unanalyzed) number of streams and wetlands will presumably result in severe environmental and public health impacts. Yet the Proposal fails to determine, analyze, or even qualitatively describe the magnitude of these types of impacts.

3. The Proposal introduces an ambiguous “typical year” concept.

The Proposal introduces a new “typical year” concept, which plays a central role in two of the distinctions drawn in the Proposal. First, it draws the line between intermittent and ephemeral streams based on whether a tributary flows “continuously during certain times of a typical year.”⁹ Second, it defines adjacency for wetlands based on whether they “abut or have a direct hydrological surface connection to other” jurisdictional waters “in a typical year.”¹⁰

The Proposal defines a “typical year” as “within the normal range of precipitation over a rolling 30-year period for a particular geographic area.”¹¹ Yet it does not define the scope of “a particular geographic area.” Nor does it clearly delineate the data sources on which the Agencies would rely in making these determinations.

4. The Proposal incorporates an unclear definition of “snowpack” that could lead to inconsistent jurisdictional determinations.

The Proposal would treat streams as jurisdictional intermittent streams if they flow “when snowpack melts.”¹² By contrast, streams that flow “only in direct response to precipitation” would be considered ephemeral and therefore not jurisdictional.¹³

The use of snowpack as a jurisdictional dividing line and the proposed definition for snowpack would increase regulatory uncertainty. First, the definition of snowpack—“layers of snow that accumulate over extended periods of time in certain geographic regions and high altitudes (*e.g.*, in northern climes and mountainous regions)”—is vague.¹⁴ The Agencies do not define “extended periods of time,” so it is uncertain what will distinguish snowpack from other accumulations of snow.¹⁵ For instance, it is unclear whether a stream fed by melting snow that accumulated over a period of weeks would qualify as “intermittent” or if it would instead be an “ephemeral” stream that flows only “in direct response to precipitation.”

⁹ 84 Fed. Reg. at 4173. Further complicating this distinction, the Agencies “are not proposing a specific duration (*e.g.*, the number days, weeks, or months) of surface flow that constitutes intermittent flow.” *Id.*

¹⁰ *Id.* at 4155.

¹¹ *Id.* at 4178.

¹² *Id.* at 4173.

¹³ *Id.*

¹⁴ *Id.* at 4173.

¹⁵ *Id.*

Moreover, the use of 30-year rolling data for accumulation type (*i.e.*, snowpack, snow fall, or rain) in a “typical year” to distinguish between jurisdictional intermittent and non-jurisdictional ephemeral streams also creates the risk that long-term droughts will change the status of individual streams between intermittent and ephemeral from year to year. As the Fourth National Climate Assessment recently found, “[v]ariable precipitation and rising temperature are intensifying droughts, increasing heavy downpours, and reducing snowpack.”¹⁶ Also, “[i]ncreasing air temperatures have substantially reduced the fraction of winter precipitation falling as snow, particularly over the western United States.”¹⁷ For example, the Sierra Nevada range in California “has seen far less snow accumulation in recent years.”¹⁸ Under the Proposal, it is unclear if streams in the Sierra Nevada would change from jurisdictional to non-jurisdictional based on annually resetting baselines from rolling 30-year snowpack averages.

5. The Proposal mischaracterizes the SAB’s previous commentary on the 2015 WOTUS Rule.

The Proposal misleadingly cherry-picks and reframes quotes from the SAB’s comments on a draft of the 2015 Connectivity Report to create the false impression that the 2015 Rule was not supported by the scientific record. The Agencies argue that the Proposal is based on the SAB’s recommendation in that letter that EPA recognize that connectivity of waters and wetlands exists along a “gradient” rather than as a binary characteristic (connected or not connected).¹⁹ But while the SAB recommended an emphasis on a gradient of connectivity to improve the technical aspects of the Connectivity Report, the SAB also emphasized that “relatively low levels of connectivity can be meaningful in terms of impacts on the chemical, physical, and biological integrity of downstream waters.”²⁰

The Proposal also misleadingly quotes from the SAB letter to imply that the SAB downplayed the connectivity of certain waters and wetlands. In particular, the Proposal asserts that, “[w]hile the SAB stated that ‘at sufficiently large spatial and temporal scales, all waters and wetlands are connected,’ it found that ‘[m]ore important are the degree of connection (*e.g.*, frequency, magnitude, timing, duration) and the extent to which those connections affect the chemical, physical, and biological integrity of downstream waters.’”²¹ But in its proper context the quoted portion of the SAB letter relates to a technical discussion of the definition and use of the term “geographically isolated wetlands” in the Connectivity Report. Rather than dismissing the importance of these wetlands, the SAB recommended that the “EPA should draw upon the

¹⁶ U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II, at 152 (2018).

¹⁷ *Id.*

¹⁸ *World of Change: Snowpack in the Sierra Nevada*, NASA EARTH OBSERVATORY, <https://earthobservatory.nasa.gov/world-of-change/SierraNevada> (last visited Jan. 10, 2020).

¹⁹ 84 Fed. Reg. at 4176.

²⁰ Letter from Dr. David T. Allen, SAB Chair, and Dr. Amanda D. Rodewald, Chair SAB Panel for the Review of the EPA Water Body Connectivity Report, to Gina McCarthy, EPA Administrator, *SAB Review of the Draft EPA Report Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*, at 2 (Oct. 17, 2014) [hereinafter, “2014 SAB Review Letter”].

²¹ 84 Fed. Reg. at 4176.

literature to carefully define ‘geographically isolated wetlands’ and explain that the term does not imply functional isolation.”²² The Agencies properly interpreted the SAB recommendations in 2015 by observing that the

SAB noted that although water bodies differ in degree of connectivity that affects the extent of influence they exert on downstream waters (i.e., they exist on a “connectivity gradient”), the available science supports the conclusion that the types of water bodies identified as “waters of the United States” in the proposed rule exert strong influence on the chemical, physical, and biological integrity of downstream waters.²³

The Proposal does not explain why the Agencies are departing from this understanding of the SAB’s recommendation or offer valid reasons for an alternative interpretation.

We request that the SAB amend its draft commentary to address these additional shortcomings and flaws of the Proposal. Thank you for considering these comments and raising these issues with EPA.

Sincerely,

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²² 2014 SAB Review Letter, *supra* note 20, at 18.

²³ EPA & U.S. DEP’T OF THE ARMY, TECHNICAL SUPPORT DOCUMENT FOR THE CLEAN WATER RULE: DEFINITION OF WATERS OF THE UNITED STATES 61 (May 27, 2015).

EXHIBIT



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April 12, 2019

By Electronic Submission to www.regulations.gov

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Docket ID No. EPA-HQ-OW-2018-0149

Re: COMMENTS ON PROPOSED RULE: REVISED DEFINITION OF “WATERS OF THE UNITED STATES,” 84 FED. REG. 4154 (FEB. 14, 2019)

Harvard Law School’s Emmett Environmental Law and Policy Clinic (“the Clinic”) respectfully submits the following comments on behalf of the National Parks Conservation Association (“NPCA”) regarding the proposed Revised Definition of “Waters of the United States,” 84 Fed. Reg. 4154 (Feb. 14, 2019) (“the Proposal”). NPCA represents over 1.3 million supporters and members as “the voice of America’s National Parks.”¹ It has been a leading independent, nonpartisan voice on natural resources issues since 1919. The Clinic is a legal clinic at Harvard Law School that works on a variety of local, national, and international projects covering the spectrum of environmental law and policy issues under the direction of Clinical Professor Wendy B. Jacobs.

Every year, hundreds of millions of people visit America’s national parks. Many of these parks depend on waters that run through them. These waters provide crucial habitat for fish and wildlife, offer recreational opportunities for visitors, and—in many cases—are central to the parks’ unique character and value. Such water-dependent parks are found across the country—from the shorelines of Acadia National Park in Maine, to the Colorado River running through Grand Canyon National Park and Glen Canyon National Recreation Area, and from the Buffalo National River in Arkansas to the Rio Grande National Wild & Scenic River in Big Bend National Park. Although these waters are protected by statute² and National Park Service (“NPS”) regulations³ within park boundaries, many of them originate outside of the parks or are

¹ *Our Story*, NAT’L PARKS CONSERVATION ASS’N, <https://www.npca.org/about/our-story> (last visited Apr. 12, 2019).

² See 54 U.S.C. § 100751 (authorizing regulation “concerning boating and other activities on or relating to water located within System units, including water subject to the jurisdiction of the United States”).

³ See 36 C.F.R. § 1.2(a) (National Park Service regulations “apply to all persons entering, using, visiting, or otherwise within . . . [w]aters subject to the jurisdiction of the United States located within the boundaries of the National Park System.”).

otherwise substantially affected by waters outside of the parks, including tributaries and wetlands.⁴ Thus the protection of water quality and fish and wildlife habitat in national parks depends on the protection of upstream wetlands and intermittent and ephemeral streams.

The Proposal would remove Clean Water Act (“CWA”) protections for wetlands and ephemeral streams that impact water quality in national parks. NPCA urges the Environmental Protection Agency (“EPA”) and the U.S. Army Corps of Engineers (the “Army Corps”) (collectively, “the Agencies”) to withdraw the Proposal to ensure adequate protection for the clean water upon which many national parks depend.

As this letter will explain in more detail below, the Proposal is legally and scientifically unjustified and may have catastrophic consequences for water quality across the country. In particular:

- The Proposal will significantly reduce the number of waters protected under the CWA by eliminating protections for ephemeral streams and for wetlands that do not have a continuous surface connection to covered waters.
- As a result, the Proposal will result in significant ecological and economic harm by, among other things, damaging recreation and fish and wildlife habitat in national parks.
- The Proposal is arbitrary and capricious because the Agencies fail to explain their departure from the scientific evidence underlying the 2015 Rule.
- The Proposal will create uncertainty and increase the administrative burden for permitting agencies and regulated entities by introducing several new and poorly defined terms to delineate the scope of jurisdiction.
- The Proposal is inconsistent with Congress’s purpose in enacting the CWA, which was to restore and maintain the chemical, physical, and biological integrity of the nation’s waters. It also mischaracterizes Supreme Court authority and is based on a misunderstanding of the breadth of the Agencies’ authority under the Commerce Clause.
- The Agencies are violating the Endangered Species Act and National Environmental Policy Act by not conducting the analyses required under those statutes.

Congress enacted the Clean Water Act in 1972 “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”⁵ For the past four decades, the Agencies’ regulations have protected the waters, including tributaries and wetlands, that have a significant impact on national parks. But this Proposal does not. The NPCA urges the Agencies to withdraw the Proposal to ensure protections for waters in national parks.

I. The Proposal Would Significantly Reduce the Scope of CWA Protections

The Proposal, if finalized, would protect significantly fewer waters than covered under either the 1986 or 2015 regulations. In particular, the proposed definition would remove protections for

⁴ Cf. *Sturgeon v. Frost*, No. 17-949, slip op. at 8 (U.S. Mar. 26, 2019) (noting that outside of Alaska the Secretary of the Interior “acting through the Director of the Park Service, has broad authority under the National Park Service Organic Act (Organic Act), 39 Stat. 535, to administer both lands and waters within all system units in the country”) (citing 54 U.S.C. §§ 100751, 100501, & 100102).

⁵ 33 U.S.C. § 1251(a).

wetlands unless they abut or have a direct hydrologic surface connection with other jurisdictional waters,⁶ and would also remove protections for all ephemeral streams.⁷

A. The Proposal Would Dramatically Revise the Definition of “Waters of the United States”

Two of the CWA’s most important protections, the prevention of unpermitted discharges from point sources⁸ and the prevention of unpermitted disposal of dredge and fill material,⁹ apply only to “navigable waters,” which are defined in the Act as “waters of the United States.”¹⁰ Therefore, whether a feature is within the “waters of the United States” determines whether it receives federal pollution control protection.

At the moment, all states are covered by either the 1986 or 2015 versions of the regulations.¹¹ Both of these regulations protect significantly more waters than would be covered under the Proposal. Under the 2015 Rule, all tributaries (defined “as waters that are characterized by the presence of physical indicators of flow—bed and banks and ordinary high water mark—and that contribute flow directly or indirectly to a traditional navigable water, an interstate water, or the territorial seas”) are jurisdictional.¹² The 2015 Rule also covers wetlands that are located “within 100 feet of the ordinary high water mark of” a jurisdictional water, “within the 100-year floodplain of a [jurisdictional water] and not more than 1,500 feet from the ordinary high water mark of” such jurisdictional water, or “within 1,500 feet of the high tide line of” a traditional navigable water, the sea, or a Great Lake.¹³ The 2015 Rule also covers all interstate waters, including interstate wetlands.¹⁴

The 1986 regulations cover all interstate waters, including wetlands, and all waters that were currently used, previously used, or could potentially be used in interstate commerce.¹⁵ These regulations also cover impoundments of those waters and all waters “the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate

⁶ 84 Fed. Reg. at 4184.

⁷ *Id.* at 4173–74.

⁸ *See* 33 U.S.C. § 1311.

⁹ *See* 33 U.S.C. § 1345.

¹⁰ *See* 33 U.S.C. § 1362(7).

¹¹ At the time of publication of the Proposal, the 2015 Rule was in force in twenty-two states and the rest of the country was covered by the 1986 regulations because the 2015 Rule had been stayed in litigation. *See* 84 Fed. Reg. 4154, 4162 (Feb. 14, 2019).

¹² Clean Water Rule: Definition of “Waters of the United States,” 80 Fed. Reg. 37,054, 37,058 (June 29, 2015) [hereinafter “2015 Rule”]; *see* 33 C.F.R. § 328.3(c)(3).

¹³ 33 C.F.R. § 328.3(c)(2).

¹⁴ *Id.* § 328.3(a)(2).

¹⁵ 33 C.F.R. § 328.3(a)(3) (2011).

commerce.”¹⁶ In addition, the 1986 regulations cover tributaries of the preceding categories of waters, and wetlands adjacent to any of those waters, tributaries, or the territorial seas.¹⁷

The Proposal defines “waters of the United States” to include:

- [t]raditional navigable waters, including the territorial seas;
- tributaries of such waters; certain ditches;
- certain lakes and ponds; impoundments of otherwise jurisdictional waters; and
- wetlands adjacent to other jurisdictional waters.¹⁸

The proposed definition explicitly excludes ephemeral streams, all non-adjacent wetlands, and interstate waters that are not otherwise covered. This change, if finalized, would dramatically reduce the number of waters protected under the CWA.

The Proposal defines “ephemeral” streams to be “surface water flowing or pooling only in direct response to precipitation, such as rain or snow fall.”¹⁹ Ephemeral streams would not be considered jurisdictional in the Proposal. “Ephemeral streams” are defined in contrast to “intermittent” and “perennial” streams, which would be jurisdictional under the Proposal. The Proposal defines “intermittent” streams as “surface water flowing continuously during certain times of a typical year, not merely in direct response to precipitation, but when the groundwater table is elevated, for example, or when snowpack melts”²⁰ and “perennial” streams as “surface water flowing continuously year-round during a typical year.”²¹ Ephemeral streams with the “the presence of the physical indicators of a bed and banks and an ordinary high water mark” are jurisdictional under the 2015 Rule,²² and ephemeral streams that are tributaries of other jurisdictional waters (except for wetlands or the territorial seas) are jurisdictional under the 1986 regulations.²³ By excluding ephemeral streams, the Proposal by definition covers fewer tributaries than are protected under the 1986 and 2015 regulations.

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ 84 Fed. Reg. at 4170.

¹⁹ *Id.* at 4173.

²⁰ *Id.*

²¹ *Id.*

²² 33 C.F.R. § 328.3(c)(3).

²³ 33 C.F.R. § 328.3(a)(3) (2011).

The Proposal defines “adjacent wetlands”²⁴ as those “wetlands that abut or have a direct hydrological surface connection to other ‘waters of the United States’ in a typical year.”²⁵ Any wetlands that do not meet this proposed definition are not “waters of the United States” under the Proposal. For the sake of clarity and consistency, this comment will use the term “non-adjacent wetlands” to describe wetlands that are not protected under the Proposal. The 2015 Rule defines wetland adjacency based on hydrological factors including the 100-year floodplain or distance from the high-water mark of another jurisdictional water,²⁶ and the 1986 regulations defines “adjacent” to mean “bordering, contiguous, or neighboring.”²⁷ The Proposal covers fewer wetlands by definition by eliminating the use of these hydrological factors and departs from prior agency practice by eliminating the term “neighboring.”²⁸

Finally, the Proposal would eliminate “interstate waters” as a separate category of jurisdictional waters. It justifies this exclusion because of a concern that it is a “relic” from an earlier piece of legislation.²⁹ To be considered jurisdictional in the Proposal, an interstate water would have to meet the definition of another category.

B. These Changes Would Eliminate Protection for Many Waters That Have Been Considered Jurisdictional Under Either the 1986 or 2015 Regulations

The net result of these changes will be a significant decrease in the waters that receive protection under the CWA. Although the Agencies assert that they cannot quantify the impact of the Proposal, data from the Proposal’s supporting documents and other agency sources demonstrate that the Proposal would dramatically decrease the scope of jurisdictional waters.

The Proposal asserts that the Agencies “are not aware of any map or dataset that accurately or with any precision portrays the scope of CWA jurisdiction at any point in the history of this complex regulatory program.”³⁰ This statement is contradicted, however, by briefing materials prepared in September 2017 for then-EPA Administrator Scott Pruitt and then-Acting Assistant Secretary of the Army (Civil Works) Douglas Lamont, which indicate that the Agencies were aware of the percentages of streams and wetlands that would lose protection.³¹ According to

²⁴ The Proposal defines “wetlands” more generally as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” *Id.* at 4184. This definition of wetlands has been used by the EPA since 1980, 45 Fed. Reg. 62,732, 62,747 (Sept. 19, 1980), and by the Army Corps since at least 1982, 47 Fed. Reg. 31,794, 31,810 (July 22, 1982).

²⁵ 84 Fed. Reg. at 4155.

²⁶ 33 C.F.R. § 328.3(c)(1)-(2).

²⁷ 33 C.F.R. § 328.3(c) (2011).

²⁸ *See* 84 Fed. Reg. at 4187 (“[T]he agencies are proposing not to include the terms ‘bordering, contiguous, or neighboring.’”).

²⁹ *Id.* at 4171.

³⁰ *Id.* at 4200.

³¹ Ariel Wittenberg and Kevin Bogardus, *EPA falsely claims ‘no data’ on waters in WOTUS rule*, E&E NEWS, Dec. 11, 2018, <https://www.eenews.net/stories/1060109323>.

those materials, the Proposal would preclude CWA protection from 18% of streams and 51% of wetlands.³² These numbers track the information in the Proposal’s Resource and Programmatic Assessment, which also acknowledges that these estimates may underrepresent the percent of streams nationwide that are ephemeral and would therefore be outside CWA protection under the Proposal. According to that document, “30 percent of streams are mapped as perennial, 52 percent are mapped as intermittent, and 18 percent are mapped as ephemeral. *However, the actual percentage of ephemeral streams across the country is likely higher than 18 percent* since many are not mapped or are mapped as intermittent.”³³ Based on these data, at least 18% of streams in the United States would not be considered “waters of the United States” if the Proposal is finalized. The potential removal of protection is even more dramatic in the arid west, where “13 percent of streams (by stream length) are mapped as perennial, 48 percent are mapped as intermittent, and 39 percent are mapped as ephemeral.”³⁴ Many, if not most, of these ephemeral streams and wetlands would have been considered jurisdictional under the 2015 Rule because of the significant nexus of these waters to downstream water quality.³⁵

If the final rule also eliminates protections for intermittent streams, the result will be an even greater reduction in CWA protections. The Proposal seeks “comment on whether the definition of ‘tributary’ should be limited to perennial waters only.”³⁶ If jurisdiction were limited only to perennial streams, at least 70% of streams nationwide would lack CWA protection. In the arid West, that number would be at least 87%.

C. It is Arbitrary and Capricious for the Proposal to Ignore the Consequences of its Implementation

Given that the Agencies had access to these data about the numbers of ephemeral streams and non-adjacent wetlands that would lose protection if the Proposal were implemented, it would be irrational for them to finalize the Proposal without analyzing the consequences. A central principle of administrative law is that an agency “*must examine the relevant data* and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”³⁷ However, according to the Proposal, the Agencies “are not aware of any means to quantify changes in CWA jurisdiction with any precision that may or may not occur as

³² E-mail and attachments from Stacey M. Jenson, HQUSACE Regulatory Program Manager, to John Gooden, EPA, (Sept. 5, 2017, 1:00 PM), available at https://www.eenews.net/assets/2018/12/11/document_gw_05.pdf.

³³ EPA & DEPARTMENT OF THE ARMY, RESOURCE AND PROGRAMMATIC ASSESSMENT FOR THE PROPOSED REVISED DEFINITION OF “WATERS OF THE UNITED STATES” 38 (Dec. 11, 2018) (emphasis added) [hereinafter Resource and Programmatic Assessment].

³⁴ *Id.*

³⁵ See 80 Fed. Reg. at 37,060 (“In the rule, the agencies determine that tributaries, as defined (‘covered tributaries’), and ‘adjacent waters’, as defined (‘covered adjacent waters’), have a significant nexus to downstream traditional navigable waters, interstate waters, and the territorial seas and therefore are ‘waters of the United States.’”).

³⁶ 84 Fed. Reg. at 4177.

³⁷ *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2125 (2016) (quoting *Motor Vehicle Mfrs. Ass’n of United States, Inc. v. State Farm Mut. Automobile Ins. Co.*, 463 U.S. 29, 43 (1983) (internal quotation marks omitted) (emphasis added)).

a result of this proposed rule.”³⁸ Because of this failure to analyze the data and implications of their Proposal, the Agencies “failed to provide even that minimal level of analysis, [and their] action is arbitrary and capricious.”³⁹

The Agencies argue as “a preliminary matter” that the available data did not allow them to analyze the jurisdictional scope of the CWA with “precision.”⁴⁰ In other words, the Agencies imply that the impact of the Proposal is necessarily uncertain because they lack precise data. However, uncertainty in the data does not provide reasonable grounds to ignore the data completely. As the Supreme Court has explained, it is not “sufficient for an agency to merely recite the terms ‘substantial uncertainty’ as a justification for its actions. The agency must explain the evidence that is available, and must offer a ‘rational connection between the facts found and the choice made.’”⁴¹ Similarly, the Agencies cannot ignore relevant data merely because it does not exist at a certain level of precision.

Even if the Agencies did not have access to these data, it would be irrational to propose such a sweeping change in CWA jurisdiction without even attempting to consider the on-the-ground implications. “Normally, an agency rule would be arbitrary and capricious if the agency has . . . entirely failed to consider an important aspect of the problem.”⁴² For a regulation that would determine the scope of federal protection of waters, the determination of which waters would continue to receive such protection and which would no longer receive protection is undoubtedly an important aspect of the problem.

Similarly, the Agencies also propose to eliminate the category of “interstate waters” despite asserting that they were “not aware of any database that identifies the jurisdictional status of interstate waters based solely on the fact that they cross state lines or any other resource that would identify these waters and therefore lack the analytical ability to perform a comparative analysis with precision.”⁴³ Proposing to eliminate this category without any attempt to determine what impact it will have on the scope of protected waters is arbitrary and capricious.

A basic tenet of administrative law is that “administrative agencies are required to engage in reasoned decisionmaking.”⁴⁴ Based on this principle, it “follows that agency action is lawful only if it rests ‘on a consideration of the relevant factors.’”⁴⁵ The number of waters that will receive protection is a centrally important factor in this rulemaking. The Proposal’s failure to determine the impact of excluding ephemeral streams, non-adjacent wetlands, and certain interstate waters on water quality is arbitrary and capricious.

³⁸ 84 Fed. Reg. at 4200.

³⁹ *Encino Motorcars*, 136 S. Ct. at 2125.

⁴⁰ 84 Fed. Reg. at 4200.

⁴¹ *State Farm*, 463 U.S. at 52 (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)).

⁴² *Id.* at 43.

⁴³ 84 Fed. Reg. at 4172.

⁴⁴ *Michigan v. EPA*, 135 S. Ct. 2699, 2706 (2015) (internal quotations and citations omitted).

⁴⁵ *Id.* (quoting *State Farm*, 463 U.S. at 43).

II. The Proposal is Inconsistent with the Scientific and Technical Analysis Underlying the 2015 Rule, and the Agencies Do Not Adequately Explain Their Departure from This Analysis

The Proposal does not provide a reasoned explanation for its disregard of the science underlying the 2015 Clean Water Rule and fails to explain why the Proposal departs from historic practice and agency interpretation of the CWA. The Proposal’s distinction between intermittent and ephemeral streams would also increase regulatory uncertainty, contrary to the Agencies’ claims.

A. The Proposal Fails to Explain the Agencies’ Departure from the Science and Legal Interpretations Underlying the 2015 Clean Water Rule

The Proposal fails to provide a reasoned explanation for its disregard of scientific facts underlying the 2015 Rule, including scientific information in the 2015 Connectivity Report⁴⁶ and 2015 Technical Support Document.⁴⁷ Therefore, the proposal does not satisfy the test in *FCC v. Fox Television*⁴⁸ that requires agencies to provide “a reasoned explanation . . . for disregarding facts and circumstances that underlay . . . the prior policy.”⁴⁹

Although agencies may change policies, they must “provide a more detailed justification than what would suffice for a new policy created on a blank slate . . . when, for example, its new policy rests upon factual findings that contradict those which underlay its prior policy.”⁵⁰ In that circumstance, it “would be arbitrary or capricious to ignore such matters.”⁵¹ It also “follows that an unexplained inconsistency in agency policy is a reason for holding an interpretation to be an arbitrary and capricious change from agency practice.”⁵² The Proposal contradicts the factual findings underlying the 2015 Rule without explaining this inconsistency.

The 2015 Rule was based upon extensive scientific and technical analyses. These analyses concluded that ephemeral streams and all wetlands within 100 feet of the ordinary high water mark or within the floodplain (up to a maximum of 1500 feet) of a covered water (including many wetlands that would not be classified as “adjacent” under the Proposal’s definition) played important roles in regulating the chemical, physical, and biological integrity of traditionally navigable waters.⁵³ The Agencies thus concluded that the “evidence *unequivocally demonstrates* that the stream channels and riparian/floodplain wetlands or open waters that together form river

⁴⁶ EPA, CONNECTIVITY OF STREAMS & WETLANDS TO DOWNSTREAM WATERS: A REVIEW & SYNTHESIS OF SCIENTIFIC EVIDENCE (2015) [hereinafter “Connectivity Report”].

⁴⁷ EPA & U.S. DEPT. OF THE ARMY, TECHNICAL SUPPORT DOCUMENT FOR THE CLEAN WATER RULE: DEFINITION OF WATERS OF THE UNITED STATES 9 (May 27, 2015) [hereinafter “2015 Technical Support Document”].

⁴⁸ 556 U.S. 502 (2009).

⁴⁹ *Id.* at 516.

⁵⁰ *Id.* at 515.

⁵¹ *Id.*

⁵² *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016) (alterations, internal quotations, and internal citations omitted).

⁵³ 80 Fed. Reg. at 37,085.

networks are *clearly connected to downstream waters in ways that profoundly influence downstream water integrity.*⁵⁴ Regarding ephemeral streams in particular, the Agencies found that “the evidence for connectivity and downstream effects of ephemeral streams was strong and compelling, particularly in context with the large body of evidence supporting the physical connectivity and cumulative effects of channelized flows that form and maintain stream networks.”⁵⁵ For wetlands, the agencies found that the “cumulative influence of many individual wetlands within watersheds can strongly affect the spatial scale, magnitude, frequency, and duration of hydrologic, biological and chemical fluxes or transfers of water and materials to downstream waters.”⁵⁶ A synthesis of over 1,200 peer-reviewed scientific publications created the foundation for these conclusions.⁵⁷

In the Proposal, the Agencies acknowledge that their prior scientific 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.”⁵⁸ But the Agencies fail to explain why they are not following these scientific findings. Although the Proposal states that it is “informed by the science,”⁵⁹ it does not include a new review of the scientific literature. Nor does it rebut the scientific conclusions underlying the 2015 Rule. In fact, at times it is quite explicit in rejecting this scientific analysis as the basis for determining jurisdiction, stating that under the “proposed definition, ecological connections alone would not provide a basis for including physically isolated wetlands within the phrase ‘the waters of the United States.’”⁶⁰

Instead, the Proposal emphasizes a statement from EPA’s Science Advisory Board (“SAB”) that described the Connectivity Report as “a science, not policy, document.”⁶¹ The implication appears to be that the report’s conclusions are therefore irrelevant to the rulemaking. Yet the Agencies did not treat the scientific evidence in the Connectivity Report as irrelevant in 2015. Instead, in the preamble to the 2015 Rule, the Agencies stated that the Connectivity Report “provides much of the technical basis for” the rule.⁶² They explained that the report’s scientific “conclusions play[ed] a *critical role in informing the agencies’ interpretation of the CWA’s scope.*”⁶³ The Agencies concluded that the significance of the scientific evidence was unambiguous:

⁵⁴ 2015 Technical Support Document, *supra* note 47, at 104 (emphasis added).

⁵⁵ *Id.* at 105.

⁵⁶ *Id.* at 112.

⁵⁷ *See* Connectivity Report, *supra* note 46, at ES-2.

⁵⁸ 84 Fed. Reg. at 4175–76 (quoting Letter to Gina McCarthy, October 17, 2014, SAB Review of the Draft EPA Report Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence 3, available at <https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100RO1Y.txt> [hereinafter “SAB Letter”]).

⁵⁹ *Id.* at 4175.

⁶⁰ *Id.* at 4185.

⁶¹ *Id.* at 4176 (quoting SAB letter, *supra* note 58, at 2).

⁶² 80 Fed. Reg. at 37,057 (June 29, 2015).

⁶³ *Id.* (emphasis added).

[t]he scientific literature, including the [Connectivity Report], *consistently supports the conclusion* that covered adjacent waters provide similar functions and work together to maintain the chemical, physical, and biological integrity of the downstream traditional navigable waters, interstate waters, and the territorial seas because of their *hydrological and ecological connections* to, and interactions with, those waters.⁶⁴

Given the centrality of the factual findings in the Connectivity Report to the 2015 Rule, the Agencies cannot simply ignore them now. “An agency cannot simply disregard contrary or inconvenient factual determinations that it made in the past, any more than it can ignore inconvenient facts when it writes on a blank slate.”⁶⁵ By ignoring facts that the Agencies previously considered to play a “critical role in informing the agencies’ interpretation,” the Proposal is arbitrary and capricious.

The Agencies also developed a Technical Support Document for the 2015 Rule. The Proposal acknowledges that the “agencies’ prior legal position with respect to interstate waters was included in a Technical Support Document prepared in support of the 2015 Rule.”⁶⁶ In the 2015 Rule,

the agencies interpret[ed] the scope of “waters of the United States” protected under the CWA based on the information and conclusions in the Science Report [i.e., the 2015 Connectivity Report], other relevant scientific literature, *the Technical Support Document that provides additional legal and scientific discussion for issues raised in this rule*, the relevant Supreme Court decisions, the agencies’ technical expertise and experience, and the objectives and requirements of the CWA.⁶⁷

Rather than providing a reasoned explanation for disregarding the facts underlying their earlier policy, the Agencies instead rely on the argument that “science cannot be used to draw the line between Federal and State waters, as those are legal distinctions.”⁶⁸

To the extent that the Proposal addresses this scientific evidence at all, it misleadingly cherry-picks and reframes quotes from the EPA SAB’s comments on the draft of the 2015 Connectivity Report. The Agencies argue that the Proposal is based on the SAB’s recommendation that EPA recognize that connectivity of waters and wetlands exists along a “gradient” rather than as a binary characteristic (connected or not connected).⁶⁹ But while the SAB recommended an emphasis on a gradient of connectivity to improve the technical aspects of the Connectivity Report, the SAB also emphasized that “relatively low levels of connectivity can be meaningful in

⁶⁴ *Id.* at 37,069.

⁶⁵ *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 537 (2009).

⁶⁶ 84 Fed Reg. at 4171.

⁶⁷ 80 Fed. Reg. at 37,065 (emphasis added).

⁶⁸ 84 Fed Reg. at 4176.

⁶⁹ *Id.*

terms of impacts on the chemical, physical, and biological integrity of downstream waters.”⁷⁰ The Proposal never acknowledges, let alone analyzes, either the degree of connectivity of ephemeral streams or non-adjacent wetlands to traditionally navigable waters or the impacts of removing protections from those waters on the chemical, physical, and biological integrity of downstream waters.

The Proposal also misleadingly quotes from the SAB letter to imply that the SAB downplayed the connectivity of certain waters and wetlands. In particular, the Proposal asserts that, “[w]hile the SAB stated that ‘at sufficiently large spatial and temporal scales, all waters and wetlands are connected,’ it found that ‘[m]ore important are the degree of connection (*e.g.*, frequency, magnitude, timing, duration) and the extent to which those connections affect the chemical, physical, and biological integrity of downstream waters.”⁷¹ But in its proper context the quoted portion of the SAB letter relates to a technical discussion of the definition and use of the term “geographically isolated wetlands” in the Connectivity Report. Rather than dismissing the importance of these wetlands, the SAB recommended that the “EPA should draw upon the literature to carefully define ‘geographically isolated wetlands’ and explain that the term does not imply functional isolation.”⁷² The Agencies properly interpreted the SAB recommendations in 2015 by observing that the

SAB noted that although water bodies differ in degree of connectivity that affects the extent of influence they exert on downstream waters (*i.e.*, they exist on a “connectivity gradient”), the available science supports the conclusion that the types of water bodies identified as “waters of the United States” in the proposed rule exert strong influence on the chemical, physical, and biological integrity of downstream waters.⁷³

The Proposal does not explain why the Agencies are departing from this understanding of the SAB’s recommendation or offer valid reasons for an alternative interpretation.

The Agencies’ prior interpretation of the CWA’s statutory goals relied on an extensive review of caselaw and the scientific literature.⁷⁴ In the 2015 Technical Support Document, the Agencies wrote:

Justice Kennedy concluded, based on “a full reading of the dictionary definition” of “waters,” that “*the Corps can reasonably interpret the Act to cover the paths of such impermanent streams.*” [547 U.S.] at 770 (emphasis added). Most fundamentally, the scientific literature demonstrates that tributaries, as a category and as the agencies propose to define them, play a

⁷⁰ SAB Letter *supra* note 58, at 2.

⁷¹ 84 Fed Reg. at 4176 (quoting SAB Letter, *supra* note 58, at 17).

⁷² SAB Letter, *supra* note 58, at 18.

⁷³ 2015 Technical Support Document, *supra* note 47, at 61.

⁷⁴ *See id.* at 69 (“With the rule, the agencies interpret the scope of the ‘waters of the United States’ for the CWA in light of the goals, objectives, and policies of the statute, the Supreme Court case law, the relevant and available science, and the agencies’ technical expertise and experience.”).

critical role in the integrity of aquatic systems comprising traditional navigable waters and interstate waters, and therefore are “waters of the United States” within the meaning of the Clean Water Act.⁷⁵

Regarding tributaries such as ephemeral streams, the Agencies previously concluded that “[p]rotection of tributaries under the CWA is critically important because they serve many important functions which directly influence the integrity of downstream waters.”⁷⁶ For wetlands, the Agencies remarked that the “scientific literature supports that wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically connected to downstream traditional navigable waters, interstate waters, or the territorial seas and significantly affect the integrity of such waters.”⁷⁷ Previously, the Agencies concluded that scientific evidence indicated that wetlands that were not “abutting” other waters could impact the integrity of those waters.⁷⁸ According to this scientific information, “neighboring waters within the floodplain are typically not directly abutting [other jurisdictional] waters, but *science still demonstrates* that they individually or cumulatively have a *significant impact on the chemical, physical, and biological integrity of traditional navigable waters*, interstate waters, and the territorial seas due to their location within the floodplain.”⁷⁹ The Agencies depart from these factual underpinnings of the 2015 Rule without providing a reasonable explanation to do so. This is both contrary to the CWA’s purpose and insufficient to meet the standard of *FCC v. Fox Television*.⁸⁰

B. The Proposed Distinctions Between Intermittent and Ephemeral Streams and Between Adjacent and Non-Adjacent Wetlands Will Increase Regulatory Uncertainty

Lacking any scientific basis for the distinctions that it draws, the Proposal instead relies on the claim that these changes will “provide clear and predictable jurisdictional boundaries to guide the agencies and the regulated community”⁸¹ and improve “administrative efficiency.”⁸² However, the Proposal’s unclear and complicated test for distinguishing between jurisdictional and non-jurisdictional streams and wetlands introduce their own sources of uncertainty. These

⁷⁵ *Id.* at 55–56.

⁷⁶ *Id.* at 233; *see also id.* at 271 (“The agencies have concluded that all tributaries as defined in the rule, including those that are intermittent and ephemeral, when considered individually or in combination with other tributaries in the same point of entry watershed, have a significant effect on the chemical, physical, and biological integrity of downstream traditional navigable waters, interstate waters, and territorial seas.”).

⁷⁷ *Id.* at 279.

⁷⁸ *Id.* at 299 (“Unlike bordering or contiguous waters, neighboring waters within the floodplain are typically not directly abutting (a)(1) through (a)(5) waters, but science still demonstrates that they individually or cumulatively have a significant impact on the chemical, physical, and biological integrity of traditional navigable waters, interstate waters, and the territorial seas due to their location within the floodplain.”).

⁷⁹ *Id.*

⁸⁰ *FCC v. Fox Television Stations, Inc.*, 556 U.S. at 516 (“a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy”).

⁸¹ 84 Fed Reg. at 4174.

⁸² *Id.* at 4176.

sources include the “typical year” concept, the definition of “snowpack,” the treatment of manmade barriers in wetlands, and the definition of “abut.”

1. The “Typical Year” Concept is Ambiguous and Creates New Regulatory Burdens

A major source of regulatory uncertainty is the new “typical year” concept, which plays a central role in two of the distinctions drawn in the Proposal. First, the Proposal draws the line between intermittent and ephemeral streams based on whether a tributary flows “continuously during certain times of a typical year.”⁸³ Second, the Proposal defines adjacency for wetlands based on whether they “abut or have a direct hydrological surface connection to other” jurisdictional waters “in a typical year.”⁸⁴

The Proposal defines a “typical year” as “within the normal range of precipitation over a rolling 30-year period for a particular geographic area.”⁸⁵ Yet it does not define what “a particular geographic area” is. This imprecision opens the possibility that the standard will be applied differently across various Army Corps districts. The Proposal solicits comment on what scale of United States Geological Survey (“USGS”) watershed should be used, but it does not provide an analysis of what the implications would be of choosing one level or another.⁸⁶ No matter which scale is used, the decision will make the determination of whether a tributary is classified as intermittent or ephemeral a complex and data-heavy exercise, increasing regulatory uncertainty and the burden on both regulated entities and agency staff.

At one point, the Agencies also indicate that the National Oceanographic and Atmospheric Administration (“NOAA”) considers a year typical “when the observed rainfall from the previous three months falls within the 30th and 70th percentiles established by a 30-year rainfall average generated at NOAA weather stations.”⁸⁷ But the Proposal indicates that there are “[o]ther potential data sources for obtaining relevant information to determine typical year.”⁸⁸ The Proposal further states that “[o]ften multiple data points and multiple sources of information could be used to determine flow regime.”⁸⁹ The use of multiple data points also creates a new potential for data gaps. Of particular concern is the fact that the National Hydrography Dataset does not have flow permanence information for ditches or canals.⁹⁰ The Proposal would determine whether or not a ditch “severs jurisdiction” based on whether or not it carries a perennial, intermittent, or ephemeral flow, but the data necessary for that analysis may not be

⁸³ *Id.* at 4173. Further complicating this distinction, the Agencies “are not proposing a specific duration (*e.g.*, the number days, weeks, or months) of surface flow that constitutes intermittent flow.” *Id.*

⁸⁴ *Id.* at 4155.

⁸⁵ *Id.* at 4178.

⁸⁶ *Id.* at 4178–79.

⁸⁷ *Id.* at 4177.

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ Resource and Programmatic Assessment, *supra* note 33, at 26.

available.⁹¹ If agency staff and regulated entities need to rely on an uncertain number of data points and sources of information to determine if a tributary is intermittent or ephemeral, the Proposal will increase, and not decrease, regulatory uncertainty and administrative burden.

The “typical year” concept also introduces uncertainty in the jurisdictional status of wetlands. Wetlands are covered under the Proposal only if they have a “direct hydrologic surface connection” to other covered waters in a typical year. The Proposal explains that this means there is either “inundation from a jurisdictional water to a wetland” or “perennial or intermittent flow between a wetland and a jurisdictional water” in a typical year.⁹² Making the “typical year” analysis part of the process for wetlands jurisdictional determinations imports the same kind of uncertainty and administrative burden described above into this context. In fact, the analysis of the jurisdictional status of a wetland will require an agency or regulated party to determine not only if a wetland is connected to another water during a typical year but also what flow that water receives in a typical year, doubling the burden. The Proposal does not indicate what source of data will be used to determine which wetlands are within the area that floods during a “typical year.” Nor is it clear that such mapping exists. Therefore, the burden on each regulated party or administering agency will likely be higher to perform this analysis.

2. The Definition of “Snowpack” is Unclear and Could Lead to Inconsistent Jurisdictional Determinations, Particularly as the Climate Changes

Another provision in the Proposal that would increase regulatory uncertainty is that it would treat streams as jurisdictional intermittent streams if they flow “when snowpack melts.”⁹³ By contrast, streams that flow “only in direct response to precipitation” would be considered ephemeral and therefore not covered.⁹⁴ The proposal defines “snowpack” as “layers of snow that accumulate over extended periods of time in certain geographic regions and high altitudes (e.g., in northern climates and mountainous regions).”⁹⁵ This dividing line differs from how snowpack is treated for stream type in the National Hydrography Dataset, which would classify snowmelt as ephemeral.⁹⁶

The use of snowpack as a jurisdictional dividing line and the proposed definition for snowpack would increase regulatory uncertainty in several ways. First, the definition of snowpack—“layers of snow that accumulate over extended periods of time in certain geographic regions and high altitudes (e.g., in northern climates and mountainous regions)”⁹⁷—is unclear. The Proposal states that the “agencies intend to distinguish flow resulting from snow fall from sustained flow

⁹¹ 84 Fed. Reg. at 4173–74.

⁹² *Id.* at 4184.

⁹³ *Id.* at 4173.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Resource and Programmatic Assessment, *supra* note 33, at 26.

⁹⁷ 84 Fed. Reg. at 4173.

resulting from melting snowpack,” but the Agencies do not explain how to do so in practice.⁹⁸ The Agencies do not define “extended periods of time,” so it is unclear what will distinguish snowpack from other accumulations of snow.⁹⁹ For instance, it is unclear if a stream fed by melting snow that accumulated over a period of weeks would qualify as “intermittent” or if it would instead be an “ephemeral” stream that flows only “in direct response to precipitation.” Protection of these types of streams, which often have high flows that make significant impacts on downstream water quality, is important to achieve the CWA’s purposes. Second, by using the water source as a jurisdictional dividing line, the Proposal will increase the burden on regulated parties. This information may not be readily available to regulated parties and may involve the survey of areas far from a potential permit application to determine if a stream is jurisdictional.

Third, the use of 30-year rolling data for accumulation type (*i.e.*, snowpack, snow fall, or rain) in a “typical year” to distinguish between jurisdictional intermittent and non-jurisdictional ephemeral streams also creates the risk that long-term droughts caused by climate change will change the status of individual streams between intermittent and ephemeral from year to year. As the Fourth National Climate Assessment recently found, “[v]ariable precipitation and rising temperature are intensifying droughts, increasing heavy downpours, and reducing snowpack.”¹⁰⁰ Also, “[i]ncreasing air temperatures have substantially reduced the fraction of winter precipitation falling as snow, particularly over the western United States.”¹⁰¹ For example, the Sierra Nevada range in California “has seen far less snow accumulation in recent years.”¹⁰² Under the Proposal, it is unclear if streams in the Sierra Nevada would change from jurisdictional to non-jurisdictional based on annually resetting baselines from rolling 30-year snowpack averages.

The changes in precipitation patterns caused by climate change that the government has identified, including reduced snowpack and shift in precipitation in type from snow to rain, could make the jurisdictional status of individual streams inherently unstable. A stream that is considered a jurisdictional intermittent stream in year one of a ten-year period may be considered a non-jurisdictional ephemeral stream in year ten because of a change in the rolling average caused by long-term drought. If the drought subsequently ends, the stream might return to jurisdictional status by year twenty. Although individual jurisdictional determinations would rely on historical data, the Agencies do not analyze whether drought caused by climate change could alter the jurisdictional status of streams in the future. In fact, the Agencies do not discuss climate change at all in the Proposal. The arbitrary distinction between intermittent and ephemeral streams would threaten future water quality, particularly in the western United States, and create an unstable system in which the scope of CWA protections could expand and contract over the years.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ U.S. GLOBAL CHANGE RESEARCH PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT, VOLUME II 152 (2018).

¹⁰¹ *Id.*

¹⁰² *World of Change: Snowpack in the Sierra Nevada*, NASA EARTH OBSERVATORY, <https://earthobservatory.nasa.gov/world-of-change/SierraNevada>.

3. The Proposal's Treatment of Manmade Barriers for Wetlands and Definition of "Abut" Will Also Produce Regulatory Uncertainty

Another way the Proposal reduces clarity is in its complicated treatment of manmade barriers for wetlands. The Proposal would not cover a wetland separated from a jurisdictional water by a manmade barrier.¹⁰³ This approach diverges, without explanation from prior agency practice.¹⁰⁴ It also creates a new requirement for an administratively burdensome case-by-case analysis that increases regulatory uncertainty because those wetlands would not be jurisdictional "unless there is a direct hydrologic surface connection between the wetland and those waters *through or over such structures during a typical year.*"¹⁰⁵ Under the Proposal, each wetland separated from another water by a manmade barrier will have to undergo a new analysis to determine if the barrier would be overtopped by a flood during a "typical year." Furthermore, although how wetlands connect to other waters would determine if they are jurisdictional, the Agencies do not indicate what testing procedures or standards will be used to determine if waters would overtop, seep through, undermine, or breach those barriers. In addition, and most disturbingly, this aspect of the Proposal creates incentives for individuals to construct barriers between wetlands and jurisdictional waters and thereby sever jurisdiction.

Finally, the Proposal's definition of "abut" to define an adjacent wetland also introduces uncertainty.¹⁰⁶ The Proposal derives the definition from the *Webster's II, New Riverside University Dictionary*.¹⁰⁷ This choice is problematic for at least two reasons. First, the Agencies do not make any case as to why the use of a single dictionary is a more appropriate method to interpret this complex statute than the extensive scientific materials used in the 2015 Rule. Second, the Agencies made an arbitrary choice about which dictionary's definitions to use. As the Supreme Court recently recognized, "words generally should be interpreted as taking their ordinary meaning at the time Congress enacted the statute."¹⁰⁸ Therefore, a dictionary reflecting English usage at the time the CWA was enacted in 1972 would be a more appropriate choice. In *Rapanos*, Justices Scalia and Kennedy both relied on *Webster's New International Dictionary (2d ed.)*, published in 1954, in an effort to interpret the text of the statute.¹⁰⁹ The Proposal however, refers to *Webster's II New Riverside University Dictionary*, which was published in

¹⁰³ 84 Fed Reg. at 4184.

¹⁰⁴ See *Rapanos v. United States*, 547 U.S. 715, 724 (2006) (plurality) (describing regulations that "specifically provides that '[w]etlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands''") (quoting 33 C.F.R. § 328.3(c)).

¹⁰⁵ 84 Fed Reg. at 4188 (emphasis added).

¹⁰⁶ See *id.* at 4163 ("The proposed definition of 'adjacent wetlands,' which includes the term 'abut,' also captures the common understanding of that term, meaning 'touching.' See *Webster's II, New Riverside University Dictionary* (1994) (defining 'abut' to mean 'to touch at one end or side of something'").

¹⁰⁷ See 84 Fed. Reg. at 4163 (defining "policy" and "objective"); *id.* at 4166 (defining "abut"); *id.* at 4187 (defining "touching").

¹⁰⁸ *New Prime, Inc. v. Olieria*, 139 S. Ct. 532, 539 (2019) (alterations, internal quotations, and citations omitted).

¹⁰⁹ See, e.g., *Rapanos*, 547 U.S. at 732–33 (Scalia, J.); *id.* at 739 (Scalia, J.); *id.* at 770 (Kennedy, J.).

1994.¹¹⁰ The Agencies do not explain why this dictionary is relevant to the interpretation of statutory language enacted more than two decades earlier.

Experts in hydrology have noted that these complexities in the Proposal will not reduce regulatory uncertainty or decrease the administrative burden on the Agencies. One former member of the EPA's Science Advisory Board commented that "I don't see how you can claim this rule clears up uncertainty the way it was written."¹¹¹ According to one hydrologist, the Proposal's focus on the source of water in a stream will require "installation of equipment in a streambed for weeks or months at a time. Using that approach, he said, different consultants or experts might still disagree on how many days a stream has to flow after rainfall to prove it is also being fed by groundwater."¹¹²

C. The Scientific Evidence Demonstrates that Intermittent Streams Exert a Strong Influence on Downstream Water Quality

Intermittent streams also have a strong influence on downstream water quality. Although intermittent streams are jurisdictional under the Proposal, the Agencies are seeking "comment on whether the definition of 'tributary' should be limited to perennial waters only."¹¹³ If the Agencies adopted a rule that did not cover intermittent streams or ephemeral streams, it would remove CWA protection from an estimated 70% of all streams.¹¹⁴ The scientific foundation for including intermittent streams is at least as strong as for ephemeral streams. A final rule that did not cover intermittent streams would be arbitrary and capricious.

In an earlier review of scientific information, the Agencies concluded that the "body of literature documenting connectivity and downstream effects was most abundant for perennial and intermittent streams."¹¹⁵ For example, "Delmarva bays inundate seasonally and connect hydrologically to other bays and to stream networks via intermittent stream channels,"¹¹⁶ fish "can move into headwater streams, including intermittent streams, to avoid high flows downstream,"¹¹⁷ and in one study, "20% of the precipitation that fell on the wetland complex flowed out through an intermittent stream into downstream waters."¹¹⁸ Based on this information, the Agencies concluded that

¹¹⁰ See 84 Fed. Reg. at 4163 (quoting WEBSTER'S II, NEW RIVERSIDE UNIVERSITY DICTIONARY (1994)); *id.* at 4166 (same); *id.* at 4187 (same).

¹¹¹ Ariel Wittenberg, *Trump's WOTUS: Clear as mud, scientists say*, E&E NEWS, Feb. 18, 2019, <https://www.eenews.net/stories/1060121251>.

¹¹² *Id.*

¹¹³ 84 Fed. Reg. at 4177.

¹¹⁴ See Resource and Programmatic Assessment, *supra* note 33, at 38.

¹¹⁵ Connectivity Report, *supra* note 46, at ES-7.

¹¹⁶ *Id.* at 5-2.

¹¹⁷ *Id.* at 3-42.

¹¹⁸ *Id.* at 6-8.

All tributary streams, including perennial, intermittent, and ephemeral streams, are chemically, physically, and biologically connected to downstream rivers via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported.¹¹⁹

The same scientific arguments regarding ephemeral streams raised above apply with at least equal force to intermittent streams. A final rule that excluded intermittent streams from CWA jurisdiction would be arbitrary and capricious because the Agencies would have to “offer[] an explanation for its decision that runs counter to the evidence before the agency[] or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.”¹²⁰

III. The Proposal is Based on a Mischaracterization of Supreme Court Precedent, Contrary to Congressional Intent, and not Necessary to Comply with Constitutional Limits

The Proposal justifies its failure to reflect the scientific record compiled by the Agencies in 2015 by asserting that its narrower view of CWA jurisdiction is legally compelled. The legal analysis underlying this assertion, however, is fatally flawed. First, the Agencies improperly ignore the direction in Justice Kennedy’s controlling opinion in *Rapanos* that the “required nexus [between wetlands and other jurisdictional waters] must be assessed in terms of the statute’s goals and purposes[, and] Congress enacted the law to ‘restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.’”¹²¹ The Agencies err by failing to follow that direction by instead relying on Justice Scalia’s plurality opinion and mischaracterizing the relationship between the Scalia and Kennedy opinions. Second, the Proposal is inconsistent with Congress’s purpose in enacting the CWA, which was “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹²² The Agencies previously described this as “Congress’ foundational goal for the CWA.”¹²³ Congress described the CWA’s goal of “integrity of the Nation’s waters” in explicitly scientific terms—“chemical, physical, and biological integrity.”¹²⁴ The Proposal’s disregard of scientific analysis is contrary to this congressional direction. Third, constitutional concerns do not justify the Proposal because Congress intended to use the full extent of its Commerce Clause authority when enacting the CWA. The assertion of jurisdiction over ephemeral streams and non-adjacent wetlands that have a significant nexus with traditionally navigable waters is constitutional under the Supreme Court’s *Lopez* test.

¹¹⁹ 80 Fed. Reg. at 37,063.

¹²⁰ *State Farm*, 463 U.S. at 43.

¹²¹ *Rapanos v. United States*, 547 U.S. 715, 779 (2006) (Kennedy, J., concurring in the judgment).

¹²² 33 U.S.C. § 1251(a).

¹²³ 2015 Technical Support Document, *supra* note 47, at 9.

¹²⁴ 33 U.S.C. § 1251(a).

A. The Proposal Relies on a Mischaracterization of Both the Weight and Meaning of Justice Kennedy’s Opinion in *Rapanos*

The most recent Supreme Court case on the jurisdictional reach of “waters of the United States” is *Rapanos*. The Supreme Court split 4-1-4 on this decision. Writing for four justices, Justice Scalia’s plurality opinion would have defined “waters of the United States” to limit jurisdictional streams to those with a “relatively permanent flow” and jurisdictional wetlands or other adjacent waters with a “continuous surface connection” to another covered water.¹²⁵ Justice Kennedy’s concurring opinion rejected both of these factors. First, Justice Kennedy indicated that Congress had not drawn “a line to exclude irregular waterways” such as ephemeral streams—“Quite the opposite.”¹²⁶ Second, Justice Kennedy wrote that the 1986 regulations’ approach to wetlands adjacency drew “support from the structure of the Act, while the plurality’s surface-water-connection requirement does not.”¹²⁷

Justice Kennedy’s concurring opinion in *Rapanos* focused on whether there is a “significant nexus” between wetlands or other “nonnavigable waters” and traditionally navigable waters.¹²⁸ Furthermore, Justice Kennedy rightly grounded these interpretations on the fact that the CWA is “concerned with downstream water quality.”¹²⁹ The Proposal, however, abandons Justice Kennedy’s significant nexus framework.¹³⁰ The Agencies instead follow an approach that was explicitly rejected by five Justices in *Rapanos* and “read[] nonexistent requirements into the Act.”¹³¹

1. The Proposal Relies on Justice Scalia’s Plurality Opinion Rather Than Justice Kennedy’s Significant Nexus Test

Even though the Proposal repeatedly emphasizes that it is based on law rather than science, it is inconsistent with Supreme Court precedent. As indicated above, the Proposal ignores the “significant nexus” test and relies on aspects of the plurality opinion in *Rapanos* that Justice Kennedy specifically rejected. However, every circuit court that has considered the issue has concluded that waters satisfying Justice Kennedy’s significant nexus test are within the CWA

¹²⁵ *Rapanos*, 547 U.S. at 757 (plurality opinion).

¹²⁶ *Rapanos*, 547 U.S. at 770 (Kennedy, J., concurring in the judgment).

¹²⁷ *Id.* at 774.

¹²⁸ *Id.* at 769; *see also id.* at 780 (“Accordingly, wetlands possesses the requisite nexus, and thus come within the statutory phrase ‘navigable waters,’ if the 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 767 (“Taken together these cases establish that in some instances, as exemplified by *Riverside Bayview*, the connection between a nonnavigable water or wetland and a navigable water may be so close, or potentially so close, that the Corps may deem the water or wetland a ‘navigable water’ under the Act. In other instances, as exemplified by SWANCC, there may be little or no connection. Absent a significant nexus, jurisdiction under the Act is lacking.”).

¹²⁹ *Id.* at 779.

¹³⁰ *See* 84 Fed. Reg. at 4170 (“The agencies propose to eliminate the case-by-case application of Justice Kennedy’s significant nexus test . . .”).

¹³¹ *Rapanos*, 547 U.S. at 778 (Kennedy, J., concurring in the judgment).

jurisdiction, and none has found the plurality opinion alone to be controlling. Moreover, as the Agencies previously recognized, the significant nexus test does not derive only from Justice Kennedy's opinion, but is "informed by the ecological and hydrological connection the Supreme Court noted in *Riverside Bayview*, established by the Supreme Court in *SWANCC*, and refined in Justice Kennedy's opinion in *Rapanos*."¹³²

The Agencies misapprehend the significance of the split decision in *Rapanos*. The Proposal indicates that they "do not think that the opinion of a single justice in a complex case should be the primary determinant of federal jurisdiction over potentially large swaths of aquatic resources, particularly an approach that relies on potentially subjective case-by-case application that reduces regulatory certainty for the regulated community and hinders straightforward implementation by regulatory agencies."¹³³ In particular, "the agencies solicit comment on their interpretation of the *Rapanos* opinions and whether the significant nexus standard, articulated by a single justice, must be a mandatory component of any future definition of 'waters of the United States.'"¹³⁴ This approach gets the significance of the *Rapanos* decision exactly backwards.

First, no circuit court has found the plurality opinion alone to be controlling, contrary to the approach the Agencies take in the Proposal. Lower courts have properly interpreted Justice Kennedy's opinion as the controlling holding of *Rapanos*. As the Ninth Circuit noted, "Justice Kennedy, constituting the fifth vote for reversal, concurred only in the judgment. His concurrence is the narrowest ground to which a majority of the Justices would assent if forced to choose in almost all cases. . . . Justice Kennedy's concurrence provides the controlling rule of law."¹³⁵ The Sixth and Eleventh Circuits reached the same conclusion.¹³⁶ Some circuits have ruled that waters that meet either Justice Kennedy's test or Justice Scalia's test may be considered jurisdictional.¹³⁷

Second, in the 2015 Rule, the Agencies relied on the significant nexus test, in combination with their scientific analysis, to determine the jurisdictional status of wetlands. The 2015 Rule included the "significant nexus standard" as an "important element of the agencies' interpretation of the CWA."¹³⁸ This standard was "informed by the ecological and hydrological connections" in prior Supreme Court opinions and Justice Kennedy's *Rapanos* opinion.¹³⁹ As the Agencies recognized, "[a]ll nine of the United States Courts of Appeals to have considered the issue have

¹³² 2015 Technical Support Document, *supra* note 47, at 48.

¹³³ 84 Fed. Reg. at 4196.

¹³⁴ *Id.* at 4177.

¹³⁵ *Northern California River Watch v. City of Healdsburg*, 496 F.3d 993, 999–1000 (9th Cir. 2007); *see also United States v. Robertson*, 875 F.3d 1281, 1292 (9th Cir. 2017) (ruling *City of Healdsburg* to still be good law).

¹³⁶ *See United States v. Gerhke Excavating, Inc.*, 464 F.3d 723, 724 (6th Cir. 2006); *United States v. Robinson*, 505 F.3d 1208, 1221 (11th Cir. 2007).

¹³⁷ *See United States v. Bailey*, 571 F.3d 791, 799 (8th Cir. 2009) ("[W]e join the First Circuit in holding that the Corps has jurisdiction over wetlands that satisfy either the plurality or Justice Kennedy's test.") (citing *United States v. Johnson*, 467 F.3d 56, 66 (1st Cir. 2006)).

¹³⁸ 80 Fed. Reg. at 37,056.

¹³⁹ *Id.*

stated that Justice Kennedy’s significant nexus standard may be used to establish applicability of the CWA.”¹⁴⁰ To determine a significant nexus,

[a]ll of the courts of appeals that have addressed the issue have agreed that a nexus is formed between a non-navigable water and a traditionally navigable water when the non-navigable water, alone or in combination with other similarly situated waters in the region, performs a function or otherwise has an effect on a downstream traditionally navigable water that is neither speculative nor insubstantial.¹⁴¹

Accordingly, it is clear that the “significant nexus” test is the governing standard under current Supreme Court precedent. It is therefore arbitrary and capricious for the Agencies to ignore this standard in formulating the Proposal.

2. The Proposal Mischaracterizes the Relationship Between the Scalia and Kennedy Opinions

The Proposal also mischaracterizes the relationship between the Scalia and Kennedy opinions, asserting that they “contain substantial similarities”¹⁴² and ignoring that Justice Kennedy explicitly rejected Justice Scalia’s limitation of jurisdiction to “relatively permanent” bodies of water and wetlands with “a continuous surface connection” to jurisdictional waters—both of which are part of the Proposal. The Proposal ignores Justice Kennedy’s conclusion in *Rapanos* that “the plurality’s opinion is inconsistent with the Act’s text, structure, and purpose.”¹⁴³

Regarding the plurality’s “relatively permanent flow” criterion, Justice Kennedy wrote that “[t]o be sure, Congress could draw a line to exclude irregular waterways, but nothing in the statute suggests it has done so. Quite the opposite.”¹⁴⁴ Justice Kennedy rightly noted that focusing on whether there is a relatively permanent flow “makes little practical sense in a statute concerned with downstream water quality.”¹⁴⁵ In particular, Justice Kennedy had concerns about “[a]reas in the western parts of the Nation.”¹⁴⁶ He emphasized this point with the example of the Los Angeles River, which often has almost no water in it but that has significant and important flows during rain events.¹⁴⁷ Thus, under Justice Kennedy’s test, “the Corps [could] reasonably interpret the Act to cover the paths of such intermittent streams.”¹⁴⁸ The Agencies incorrectly assert otherwise. Instead, the Proposal relies as “a threshold matter” on “relatively permanent

¹⁴⁰ 2015 Technical Support Document, *supra* note 47, at 41 (listing cases).

¹⁴¹ *Id.* at 44.

¹⁴² 84 Fed. Reg. at 4167.

¹⁴³ *Rapanos*, 547 U.S. at 776 (Kennedy, J., concurring in the judgment).

¹⁴⁴ *Id.* at 770.

¹⁴⁵ *Id.* at 769.

¹⁴⁶ *Id.*

¹⁴⁷ *See id.*

¹⁴⁸ *Id.*

flowing and standing waterbodies.”¹⁴⁹ This threshold test is precisely what a majority of the Court—Justice Kennedy plus the four dissenters—rejected in *Rapanos*.

Regarding wetlands, Justice Kennedy again emphasized Supreme Court precedent’s “broader focus on wetlands’ ‘significant effects on water quality and the aquatic ecosystem.’”¹⁵⁰ Based on this approach, Justice Kennedy noted that “a continuous connection is not necessary for moisture in wetlands to result from flooding—the connection might well exist only during floods.”¹⁵¹ He explicitly endorsed jurisdiction over wetlands even in the absence of a continuous surface connection: “As applied to wetlands adjacent to navigable-in-fact waters, the Corps’ conclusive standard for jurisdiction rests upon a reasonable inference of ecologic interconnection, and the assertion of jurisdiction for those wetlands is sustainable under the Act by showing adjacency alone.”¹⁵²

Again, the Agencies incorrectly assert otherwise. The Proposal limits the definition of adjacent wetlands to those that “abut” other navigable waters. In contrast, the Fourth Circuit found “no evidence that Justice Kennedy . . . intended to differentiate between abutting and other adjacent wetlands.”¹⁵³ Only the plurality relied on whether a wetland abutted another water to determine if it was adjacent.¹⁵⁴ As described by the Fourth Circuit,

Justice Kennedy explained, abutting wetlands are not necessarily any more important than other adjacent wetlands because “filling in wetlands separated from another water by a berm can mean that floodwater, impurities, or runoff that would have been stored or contained in the wetlands will instead flow out to major waterways.”¹⁵⁵

Limiting the scope of the CWA’s application to wetlands is contrary to the purpose of the CWA. As Justice Kennedy wrote, “Important public interests are served by the Clean Water Act in general *and by the protection of wetlands in particular.*”¹⁵⁶ Instead, the Proposal adopts the narrow interpretation of the plurality opinion, which, according to Justice Kennedy “give[s]

¹⁴⁹ 84 Fed. Reg. at 4169–70.

¹⁵⁰ *Rapanos*, 547 U.S. at 773 (Kennedy, J., concurring in the judgment) (quoting *Riverside Bayview*, 474 U.S. at 135).

¹⁵¹ *Id.* at 773–74.

¹⁵² *Id.* at 780.

¹⁵³ *Precon Development Corp., Inc. v. U.S. Army Corps of Engineers*, 633 F.3d 278, 291 (4th Cir. 2011).

¹⁵⁴ *Rapanos*, 547 U.S. at 741–42; *see also Precon*, 633 F.3d at 291 (describing that although Justice Scalia’s opinion “clearly found the abutting/adjacent distinction meaningful,” Justice Kennedy’s opinion “explicitly approved of the Corps’ regulatory definition of ‘adjacent,’ which includes both those wetlands that directly abut waters of the United States and those separated from other waters” by certain features).

¹⁵⁵ *Precon*, 633 F.3d at 291 (quoting *Rapanos*, 547 U.S. at 775 (Kennedy, J., concurring in the judgment)).

¹⁵⁶ *Rapanos*, 547 U.S. at 777 (Kennedy, J., concurring in the judgment).

insufficient deference to Congress' purposes in enacting the Clean Water Act and to the authority of the Executive to implement that statutory mandate."¹⁵⁷

The Proposal attempts to mask its inconsistency with the "significant nexus" test by declaring that the new "definition as proposed today 'rests upon a reasonable inference of ecological interconnection' with navigable waters," citing Justice Kennedy's opinion.¹⁵⁸ But the agencies do not cite any underlying facts to support this conclusion. Nor do the Agencies describe any waters that would be considered jurisdictional in the Proposal because of ecological interconnection. The Proposal's conclusion is contrary to the consistent scientific evidence underpinning the 2015 Rule, and the Agencies fail to provide a reasoned explanation as to why they are departing from that science.

3. The Proposal Incorrectly Asserts that Justice Kennedy Intended for the Significant Nexus Test to Apply Only to Case-by-Case Determinations

The Proposal attempts to justify its rejection of the "significant nexus" test by incorrectly asserting that Justice Kennedy intended for this test to apply only to case-by-case determinations. Therefore, the Proposal argues, it is unnecessary to follow that test if the Agencies adopt a more specific regulation.¹⁵⁹ But Justice Kennedy argued that a *case-by-case application* of the significant nexus test—not the test itself—was necessary *only until* the agencies adopted a specific regulation *based on the significant nexus test*.¹⁶⁰

In the absence of a regulation after the *Rapanos* decision, Justice Kennedy intended for the "significant nexus" principle to guide case-by-case application of the decision. However, importantly, he also intended for the "significant nexus" principle to serve as the foundation for any rule interpreting the jurisdiction of the CWA. The Proposal argues that "Justice Kennedy's 'significant nexus' test for wetlands adjacent to nonnavigable tributaries *was only needed* 'absent more specific regulations.'"¹⁶¹ By reversing the order of the words in the sentence, the Agencies misread the opinion. The full sentence from Justice Kennedy's opinion carries a different meaning: "Absent more specific regulations, however, the Corps must establish a significant nexus on a case-by-case basis when it seeks to regulate wetlands based on adjacency to nonnavigable tributaries."¹⁶² The case-by-case determinations—not the significant nexus test itself—were necessary only until the Agencies adopted a regulation based on the test. Justice

¹⁵⁷ *Id.* at 778.

¹⁵⁸ 84 Fed. Reg. at 4186 (quoting *Rapanos*, 547 U.S. at 780 (Kennedy, J., concurring in the judgment)).

¹⁵⁹ *See id.* at 4170 ("[t]he agencies propose to eliminate the case-by-case application of Justice Kennedy's significant nexus test"); *id.* at 4189 ("the proposal to provide regulatory certainty through categorical treatment of adjacent wetlands rather than on the case-by-case application of Justice Kennedy's significant nexus test"); *id.* at 4196 ("an approach that relies on potentially subjective case-by-case application that reduces regulatory certainty for the regulated community and hinders straightforward implementation by regulatory agencies").

¹⁶⁰ *Rapanos*, 547 U.S. at 782 (Kennedy, J., concurring in the judgment).

¹⁶¹ 84 Fed. Reg. at 4175 (quoting *Rapanos*, 547 U.S. at 782 (Kennedy, J., concurring in the judgment)) (emphasis added).

¹⁶² *Rapanos*, 547 U.S. at 782 (Kennedy, J., concurring in the judgment).

Kennedy further elaborated on how such a regulation based on the significant nexus test might be established. “*Where an adequate nexus is established* for a particular wetland, it may be permissible, as a matter of administrative convenience or necessity, to presume covered status for other comparable wetlands in the region.”¹⁶³ This statement clarifies that Justice Kennedy intended that the significant nexus test would determine jurisdiction under the Act, whether that nexus was determined on a case-by-case basis or with respect to categories of waters by regulation. The Proposal is inconsistent with binding Supreme Court precedent because it does not rely on the significant nexus test.

B. The Agencies Are Incorrect About the Extent of Their Authority Under the Commerce Clause

The Proposal states that its narrow assertion of jurisdiction is necessary because it “recognizes the constitutional underpinnings of the CWA, which was Congress exercising its commerce power over navigation.”¹⁶⁴ Contrary to the Agencies’ assertions,¹⁶⁵ the legislative history makes it clear that Congress intended to use its full power over Commerce and not just its power over navigation as an instrument of interstate commerce. In addition, protecting non-adjacent wetlands and ephemeral streams for recreational purposes is well within Congress’s Commerce Clause authority under the test established by the Supreme Court in *United States v. Lopez* and *United States v. Morrison*.

1. When Enacting the CWA, Congress Intended to Reach the Limits of its Commerce Clause Authority

Congress, when enacting the CWA, recognized that the Supreme Court’s interpretation of the term “navigable waters” had expanded over time. It intended to build on and expand this interpretation, in particular by protecting waters not only for purposes of navigation, but also to protect and restore water quality. In particular, the Conference Committee report declared that 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.”¹⁶⁶ The Proposal is contrary to this express congressional intent because it claims to be based only on Congress’s power over navigation.

Although the Supreme Court in the 1870 case *The Daniel Ball* had interpreted “navigable waters” to mean only waters that were navigable in fact,¹⁶⁷ over the course of the twentieth century, the Supreme Court expanded its interpretation of this term in several cases. For

¹⁶³ *Id.* (emphasis added).

¹⁶⁴ 84 Fed. Reg. at 4170 (internal quotations and citations omitted).

¹⁶⁵ *Id.* at 4168 (“As a threshold matter, the power conferred on the agencies under the CWA to regulate the “waters of the United States” is grounded in Congress’ commerce power over navigation.”).

¹⁶⁶ U.S. GOV’T PRINTING OFF., A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 327 (conference report) (emphasis added) [hereinafter Legislative History].

¹⁶⁷ 77 U.S. 577, 563 (1870) (“Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.”).

example, in one case the Court found that navigable waters included rivers where changed conditions had rendered them no longer navigable.¹⁶⁸ In another, a lake was used for transporting livestock, but not for purposes of shipping freight in commerce.¹⁶⁹

More fundamentally, the Supreme Court recognized federal power over non-navigable tributaries for purposes other than directly regulating navigation.¹⁷⁰ The Supreme Court found it “clear that Congress may exercise its control over the non-navigable stretches of a river in order to preserve or promote commerce on the navigable portions” even when the project would have only “an incidental effect in protecting or improving the navigability” of those waters.¹⁷¹ Indeed, the Court stated that “[t]here is no constitutional reason why Congress cannot under the commerce power treat the *watersheds* as a key to flood control on navigable streams *and their tributaries*.”¹⁷² Even before the enactment of the CWA, then, the Supreme Court read the authority of Congress over navigable waters at a watershed level to include not just navigable waters but also their tributaries.

In the CWA, Congress intended to further expand the definition of navigable waters. In the House consideration of the CWA conference report, one of the bill’s primary sponsors, Representative John Dingell, repeatedly emphasized this point. First, he noted that “the conference bill defines the term ‘navigable waters’ broadly *for water quality purposes*. 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.”¹⁷³ At another point, after reviewing the Supreme Court’s precedents, he explained: “Thus, this new definition clearly encompasses all water bodies, including main streams and their tributaries, *for water quality purposes*. No longer are the old, narrow definitions of navigability, as determined by the Corps of Engineers, going to govern matters covered by this bill.”¹⁷⁴

Two points emerge from these statements. First, Congress was aware of the Supreme Court’s expansion of the term “navigable waters” beyond the *Daniel Ball* test and intended to build upon it. Second, Congress was not protecting waters only for purposes of promoting navigation;

¹⁶⁸ See *Economy Light & Power Co. v. United States*, 256 U.S. 113, 123 (1921) (“[A] a river having actual navigable capacity in its natural state and capable of carrying commerce among the states is within the power of Congress to preserve for purposes of future transportation, even though it be not at present used for such commerce, and be incapable of such use according to present methods, either by reason of changed conditions or because of artificial obstructions.”).

¹⁶⁹ See *Utah v. United States*, 403 U.S. 9, 11 (1971) (“The hauling apparently was done by the owners of the livestock, not by a carrier for the purpose of making money. Hence it is suggested that this was not the use of the lake as a navigable highway in the customary sense of the word. That is to say, the business of the boats was ranching and not carrying water-borne freight. We think that is an irrelevant detail. The lake was used as a highway and that is the gist of the federal test.”).

¹⁷⁰ See *Oklahoma ex rel. Phillips v. Guy F. Atkinson Co.*, 313 U.S. 508, 522–23 (1941) (“A part of the local benefits of flood control is frequently protection of navigation in the tributary itself.”).

¹⁷¹ *Id.* at 523.

¹⁷² *Id.* at 525 (emphasis added).

¹⁷³ Legislative History, *supra* note 166, at 250 (House consideration of conference report) (emphasis added).

¹⁷⁴ *Id.* (emphasis added).

instead it intended to protect them “for water quality purposes.” This discussion makes it apparent the degree to which Congress considered existing definitions of “navigable waters” when crafting the CWA and consciously decided to build upon them, stretching to the full extent of its constitutional powers. A definition that covers non-adjacent wetlands and ephemeral streams would not depart from the term “navigable” or render that term meaningless in the CWA, contrary to what the Proposal suggests.

Furthermore, even if the Agencies were correct to assert that Congress intended to exercise only the constitutional power over navigation,¹⁷⁵ that argument would not limit the jurisdictional scope of the CWA. Congress’s constitutional power over navigation is broad and includes the power to regulate water for purposes beyond navigation.

Congress has a “paramount” power over navigable waters.¹⁷⁶ This power is “irrespective of whether navigation . . . is used.”¹⁷⁷ As the Supreme Court recognized seven years after the passage of the CWA: “Reference to the navigability of a waterway adds little if anything to the breadth of Congress’ regulatory power over interstate commerce. It has long been settled that Congress has extensive authority over this Nation’s waters under the Commerce Clause.”¹⁷⁸ Prior to the passage of the CWA, the Supreme Court also described the “plenary power of Congress over navigable waters.”¹⁷⁹ Therefore, the extent of Congress’s power over navigation would not justify the limits to the jurisdictional scope of the CWA in the Proposal.

To argue that Congress intended only to exercise its commerce power over navigation, the Proposal relies heavily on dicta from a footnote in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* (“SWANCC”).¹⁸⁰ The Agencies’ reliance on this footnote is overstated and misplaced. According to the Proposal, “[n]othing in the legislative history of the 1972 CWA amendments signifies that Congress intended to exert anything more than its commerce power over navigation.”¹⁸¹ But the footnote does not stand for that proposition. The footnote actually stands for the far more modest observation that “neither this [conference report quotation], nor anything else in the legislative history *to which respondents point*, signifies that Congress intended to exert anything more than its commerce power over navigation. Indeed, respondents admit that *the legislative history is somewhat ambiguous*.”¹⁸² The Agencies’ selective quotation gives a misleading impression of the significance of this dicta.

In *SWANCC*, the Supreme Court recognized that “the term ‘navigable’ is of ‘limited import’ and that Congress evidenced its intent to ‘regulate at least some waters that would not be deemed

¹⁷⁵ See 84 Fed. Reg. at 4170.

¹⁷⁶ *Kaiser Aetna v. United States*, 444 U.S. 164, 174 (1979).

¹⁷⁷ *Id.*

¹⁷⁸ *Id.* at 173.

¹⁷⁹ *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 427 (1940).

¹⁸⁰ See 84 Fed. Reg. at 4164, 4170, 4172, 4174, 4182, citing *SWANCC*, 531 U.S. 159, 168 n.3 (2001).

¹⁸¹ *Id.* at 4172 (quoting *SWANCC*, 531 U.S. at 168 n.3).

¹⁸² *SWANCC*, 531 U.S. at 168 n.3 (emphasis added).

‘navigable’ under the classical understanding of that term.’”¹⁸³ The Supreme Court concluded on this understanding that “it was the significant nexus between the wetlands and ‘navigable waters’ that informed” their prior reading of the CWA’s text.¹⁸⁴ The Agencies acknowledge in the Proposal that Justice Scalia and Justice Kennedy’s opinions in *Rapanos* “both recognize the jurisdictional scope of the CWA is not restricted to traditional navigable waters.”¹⁸⁵ But the Agencies proceed to improperly rely on a much more constrained reading of the CWA than is actually expressed in Supreme Court precedent.

In fact, the Supreme Court has described the CWA’s purpose as representing “a broad, systemic view of the goal of maintaining and improving water quality” and noted that “as the House Report on the legislation put it, ‘the word ‘integrity’ . . . refers to a condition in which the natural structure and function of ecosystems is [are] maintained.’”¹⁸⁶ In *Rapanos*, Justice Kennedy wrote that the “required nexus [between wetlands and other jurisdictional waters] must be assessed in terms of the statute’s goals and purposes[, and] Congress enacted the law to ‘restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.’”¹⁸⁷

The Agencies previously emphasized the importance of “integrity” in the CWA’s “statutory goals.”¹⁸⁸ Nowhere does the Proposal describe how it would “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹⁸⁹ Nor does the Proposal discuss how it will “provide[] for the protection and propagation of fish, shellfish, and wildlife” or “provide[] for recreation in and on the water.”¹⁹⁰ These statutory purposes for recreation and habitat, from the same section of the CWA, provide further content to the goals of biological and chemical integrity. The Proposal is arbitrary and capricious because the Agencies have failed to explain how the Proposal advances these statutory purposes and have therefore “entirely failed to consider an important aspect of the problem.”¹⁹¹ It also fails to acknowledge or explain that this is a policy change.

Without explanation, the Agencies depart from their previous correct observation that “[h]aving been enacted with the objective of restoring and maintaining the chemical, physical, and biological integrity of our nation’s waters, the CWA serves to protect water quality.”¹⁹² The Agencies also previously stated that the CWA’s purpose of protecting the “biological integrity” of waters indicated that “the statute is clear that protection of aquatic wildlife is an important

¹⁸³ *Id.* at 172 (quoting *Riverside Bayview*, 474 U.S. at 133).

¹⁸⁴ *Id.*

¹⁸⁵ 84 Fed. Reg. at 4168.

¹⁸⁶ *Riverside Bayview*, 474 U.S. at 132 (quoting H.R. Rep. No. 92-911, p. 76 (1972)).

¹⁸⁷ *Rapanos*, 547 U.S. at 779 (Kennedy, J., concurring in the judgment).

¹⁸⁸ See 2015 Technical Support Document, *supra* note 47, at 7.

¹⁸⁹ 33 U.S.C. § 1251(a).

¹⁹⁰ *Id.*

¹⁹¹ *State Farm*, 463 U.S. at 43.

¹⁹² 2015 Technical Support Document, *supra* note 47, at 10.

aspect of protecting water quality and is addressed by the CWA.”¹⁹³ Using that interpretation of the CWA,

the agencies’ conclusions [in the 2015 Rule] that certain categories of waters are jurisdictional are not based on an ‘any connection’ theory; instead they are based on careful examinations of the science and the law to conclude that particular categories of waters significantly affect the chemical, physical, and biological integrity of a traditional navigable water, interstate water, or the territorial seas.¹⁹⁴

The Proposal fails to discuss this previous historical practice to cover wetlands and ephemeral streams because of their effects on other waters. The Proposal also fails to explain how it would accomplish the CWA’s goals related to “chemical, physical, and biological integrity.”¹⁹⁵

2. The Protection of Non-adjacent Wetlands and Ephemeral Streams Satisfies the *Lopez* Test

Under the Supreme Court’s *Lopez* decision, there are three categories of activities or things that Congress may regulate under the interstate commerce clause: (1) channels of interstate commerce; (2) instrumentalities of interstate commerce; and (3) “activities that substantially affect interstate commerce.”¹⁹⁶ Congress may properly regulate non-adjacent wetlands and ephemeral streams under the third category.

Congress has the authority to regulate individual activities when it has a “rational basis” to conclude that regulated “activities, taken in the aggregate, substantially affect interstate commerce.”¹⁹⁷ This type of analysis is particularly relevant when considering a “comprehensive regulatory regime.”¹⁹⁸ The CWA is such a “comprehensive regulatory program.”¹⁹⁹ Although the filling of an individual non-adjacent wetland or degradation of an individual ephemeral stream may not substantially impact interstate commerce by itself, in the aggregate the impact of changes to these waters could substantially affect interstate commerce by, among other things, affecting the millions of visitors to national parks and the billions of dollars in economic activity that they contribute.

The regulation of non-adjacent wetlands need not suffer from the deficiencies of the “migratory bird rule” in the 1986 regulations. In *SWANCC*, the Supreme Court held that the migratory bird

¹⁹³ *Id.* at 15.

¹⁹⁴ *Id.* at 31.

¹⁹⁵ 33 U.S.C. 1251(a).

¹⁹⁶ *United States v. Lopez*, 514 U.S. 549, 558–59 (1995).

¹⁹⁷ *Gonzales v. Raich*, 545 U.S. 1, 22 (2005).

¹⁹⁸ *Id.* at 27.

¹⁹⁹ *Milwaukee v. Illinois*, 451 U.S. 304, 317 (1981); *see also id.* at 318 (“No Congressman’s remarks on the legislation were complete without reference to the ‘comprehensive’ nature of the Amendments.”); *SWANCC*, 531 U.S. at 179 (Stevens, J., dissenting) (quoting same).

rule “exceeds the authority granted to” the Corps and EPA “under § 404(a) of the CWA.”²⁰⁰ The Court, therefore, did not rule on the constitutionality of this justification under the Commerce Clause.²⁰¹ However, Chief Justice Rehnquist wrote that there were “significant constitutional questions” raised by the justification and that the Court “would have to evaluate the precise object or activity that, in the aggregate, substantially affects interstate commerce.”²⁰² Furthermore, the Court sought a “clear indication” of congressional intent where “an administrative interpretation of a statute invokes the outer limits of Congress’ power.”²⁰³ Regulation of wetlands based on their benefits to recreation would not raise the same types of questions.

In a pre-*Lopez* opinion that is consistent with the test the Supreme Court subsequently developed in that case, the Tenth Circuit upheld Congress’s power to regulate intrastate waters used for recreational purposes in the CWA.²⁰⁴ In that case, the State of Utah challenged the constitutionality of the application of section 404 of the CWA to an intrastate lake. At the district court, evidence showed that the lake “affects interstate commerce because, *inter alia*, the lake is used by interstate travelers for public recreation.”²⁰⁵ In language that tracks the third *Lopez* category, the Tenth Circuit held that “the discharge of dredged or fill material into [the intrastate lake] by plaintiff or others could well have a *substantial economic effect* on interstate commerce.”²⁰⁶ Describing the movement of interstate visitors to the lake, the Tenth Circuit ruled that “interstate movement of travelers has been held to be within the reach of the Commerce Clause.”²⁰⁷ This reasoning fits squarely within the *Lopez* framework and demonstrates why recreational use of intrastate waters justifies CWA jurisdiction.

²⁰⁰ *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159, 173 (2001).

²⁰¹ *Id.* at 172.

²⁰² *Id.* at 173.

²⁰³ *Id.* at 172.

²⁰⁴ *Utah v. Marsh*, 740 F.2d 799, 803 (10th Cir. 1984).

²⁰⁵ *Id.* at 801; *see also id.* at 803 (“The lake also provides recreationists with opportunities to fish, hunt, boat, water ski, picnic, and camp, as well as the opportunity to observe, photograph, and appreciate a variety of bird and animal life; non-resident visitation at the lake has averaged 6,919 persons per year, or 2% of total visitation, over the 1967-1980 period.”).

²⁰⁶ *Id.* at 803 (emphasis added).

²⁰⁷ *Id.* at 804 (citing *Heart of Atlanta Motel, Inc. v. United States*, 379 U.S. 241, 256 (1964)). The court also noted that the lake was on the flyway of migratory birds as an additional reason to uphold the commerce authority. *See id.* The district court in *SWANCC* cited *Marsh* to support the migratory bird rule. *See Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 998 F. Supp. 946, 950 (N.D. Ill. 1998) (“The [Tenth Circuit] explained that the lake was subject to federal commerce clause jurisdiction because, among other things, it was ‘on the flyway of several species of migratory waterfowl which are protected under international treaties.’”) (quoting *Marsh*, 740 F.2d at 804). However, the district court did not discuss the recreation and interstate traveler rationales in *Marsh*, which were only alluded to as “other things” than migratory birds supporting commerce authority. *Id.*

C. Section 101(b) Does not Demonstrate a Congressional Intent to Narrow Federal Authority

The Proposal also cites section 101(b) of the CWA as a reason to interpret the term “navigable waters” narrowly. Specifically, the Agencies argue that the proposed definition is based, in part, on “the limitations on federal authority embodied in section 101(b) of the Act.”²⁰⁸ But the agencies misread that provision. Congress did not intend to limit federal authority through section 101(b). Instead, this section does two things. First, it recognizes that states will take the lead role in enforcing the Act through its cooperative federalism scheme. Second, it preserves the ability of states to go above and beyond the minimum federal standards established by the CWA. Both of these aims reflect Congress’s intent to allow states to be active partners of the federal government in promoting the CWA’s goals; neither involves limiting federal authority.

The relevant part of section 101(b) reads:

It is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter.²⁰⁹

The purpose of this section is to provide a role for states in protecting water quality as implementers of the CWA, not to narrow federal authority. For example, the Senate Report on the bill stated that:

This section establishes a policy that the discharge of pollutants should be eliminated by 1985, that the natural chemical, physical, and biological integrity of the Nation’s waters be restored, and that an interim goal of a water quality allowing fish propagation and suitable for swimming should be reached by 1981. The States are declared to have *the primary responsibility and right to implement such a goal.*²¹⁰

Other statements in the congressional debate over the CWA emphasize this point. Senator Buckley was concerned that aspects of the bill such as conditions on federal grants to states in section 106 and the EPA’s role in establishing the elements for state plans might “erode the initiative and flexibility of the States in exercising ‘their primary responsibility and rights . . . to prevent and eliminate water pollution.’”²¹¹ That concern was about excessive federal intrusion into how states choose to protect water quality, not about other state powers. And during the bill’s debate, EPA Administrator Bill Ruckelshaus indicated that the agency’s understanding of

²⁰⁸ 84 Fed. Reg. at 4189.

²⁰⁹ 33 U.S.C. § 1251(b).

²¹⁰ Legislative History, *supra* note 166, at 1429 (Senate report) (emphasis added).

²¹¹ *Id.* at 1521 (Senate report) (emphasis added).

Section 101(b) was that the “policy statement in the bills recognizes the primary role of the States *in implementing the pollution control programs.*”²¹²

In other words, Section 101(b) identifies the role for states to play in the cooperative federalism framework established by the CWA. As part of this scheme, the Supreme Court found that state certifications under Section 401 are one way that “the Clean Water Act provides for a system that respects the States’ concerns.”²¹³ Similarly, state issuance of Section 402 or Section 404 permits is another way that states implement the CWA “[c]onsonant with its policy ‘to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution,’ . . . but only upon EPA approval of the State’s proposal to administer its own program.”²¹⁴ Justice Blackmun also considered it to be “entirely understandable that Congress thought it neither imperative nor desirable to insist upon an exclusive approach to the improvement of water quality” because the CWA “contemplates a shared authority between the Federal Government and the individual States.”²¹⁵ All of these statements quote or cite section 101(b).

The structure of the Agencies’ argument in the Proposal further demonstrates that section 101(b) was intended to preserve a role for states in a cooperative federalism scheme. The Proposal states that “[e]nsuring that States retain authority over their land and water resources pursuant to section 101(b) *and section 510* helps carry out the overall objective of the CWA and ensures that the agencies are giving full effect and consideration to *the entire structure and function of the Act.*”²¹⁶ Section 510 of the CWA, titled “State Authority,” outlines the CWA’s cooperative federalism structure.²¹⁷ This section establishes a federal floor for regulation but allows states to set their own standards so long as the standard is not “less stringent than” the federal standard or interferes with other states.²¹⁸ As the Supreme Court has acknowledged, sections 101 and 510 of the “Act also allow[] States to impose more stringent water quality controls.”²¹⁹ Rather than leaving responsibility for certain waters to the states, section 510 provides that “States may develop water quality standards more stringent than required by this regulation.”²²⁰ The Supreme Court has also explained that Congress did not intend for section 510 or other provisions of the CWA protecting sovereign interests of states to be a restriction on federal regulation:

²¹² *Id.* at 1192 (administration statements) (emphasis added).

²¹³ *S.D. Warren Co. v. Maine Bd. of Env’tl. Prot.*, 547 U.S. 370, 386 (2006) (citing 33 U.S.C. § 1251(b)).

²¹⁴ *EPA v. California ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 206–08 (1976) (quoting 33 U.S.C. § 1251(b)).

²¹⁵ *City of Milwaukee v. Illinois & Michigan*, 451 U.S. 304, 341 (1981) (Blackmun, J., dissenting) (citing 33 U.S.C. § 1251(b)).

²¹⁶ 84 Fed. Reg. at 4169.

²¹⁷ *See* 33 U.S.C. § 1370.

²¹⁸ *Id.*

²¹⁹ *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. 700, 705 (1994) (citing 33 U.S.C. §§ 1311(b)(1)(C), 1370).

²²⁰ *Id.* (quoting 40 CFR § 131.4(a) (1993)).

Congress, in crafting the Act, protected certain sovereign interests of the States; for example, § 510 allows States to adopt more demanding pollution-control standards than those established under the Act. . . . [T]hat section only concerns state authority and *does not constrain the EPA's authority to promulgate reasonable regulations* requiring point sources in one State to comply with water quality standards in downstream States.²²¹

The structure of the CWA and these provisions, as interpreted by the Supreme Court, do not limit federal jurisdiction.

The Proposal also includes the unfounded proposition that “[c]ontrolling all waters using the Act’s federal regulatory mechanisms would significantly reduce the need for the more holistic planning provisions of the Act and the state partnerships they entail.”²²² Under this reading of the CWA, each provision of the Act should be read as a silo that does not overlap with other provisions to improve water quality. This cramped reading does not comport to the structure of the CWA or its history.

The CWA set an ambitious goal that “the discharge of any pollutant by any person shall be unlawful,” except in compliance with other CWA provisions.²²³ The existence of planning provisions does not render that regulatory prohibition void. The discussion of comprehensive plans calls for EPA, “with other Federal agencies, State water pollution control agencies, interstate agencies, and the municipalities and industries involved, [to] prepare or develop comprehensive programs *for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters.*”²²⁴ This section calls for the federal and state governments to work together, not for separate regimes that cannot overlap. Importantly, the section does not include the term *discharge of a pollutant*, which the CWA elsewhere defines as pollution from point sources.²²⁵ Rather than limiting regulatory authority, as the Agencies now argue, this provision complements it with plans to address other types of pollution from other sources. The purpose of section 101(b) of the CWA is to preserve the ability of states to go beyond federal pollution standards and to create an active role for states in CWA implementation. The Proposal’s reading of this provision instead as a limitation on federal power is incorrect.

IV. The Proposal Will Harm National Parks That Depend on Clean Water for Recreational Use and Habitat for Fish and Wildlife

Congress’s purposes in enacting the CWA included the protection of fish and wildlife and recreational uses of waters. The Proposal is inconsistent with these purposes because it will harm water quality nationwide, including in national parks. The elimination of protections for non-adjacent wetlands and ephemeral streams will harm downstream waters, whose quality is significantly affected by pollution in wetlands and ephemeral streams. Many national parks will

²²¹ *Arkansas v. Oklahoma*, 503 U.S. 91, 106–07 (1992) (emphasis added).

²²² 84 Fed. Reg. at 4169.

²²³ 33 U.S.C. § 1311(a).

²²⁴ 33 U.S.C. § 1252(a) (emphasis added).

²²⁵ 33 U.S.C. § 1362(12).

be particularly affected by the Proposal, as demonstrated by the following legislative history, research on the benefits of wetlands and tributaries, and case studies that NPCA has developed.

A. Congress Intended to Protect Aquatic Recreation and Habitat for Fish and Wildlife When Enacting the CWA

The Proposal does not implement Congress’s intent in the CWA to provide for aquatic recreation and to protect fish and wildlife habitat. The purposes of the CWA include the protection of water quality in order to “provide[] for the protection and propagation of fish, shellfish, and wildlife” and to “provide[] for recreation in and on the water.”²²⁶

Furthermore, the Agencies previously concluded that “wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically integrated with rivers via functions *that improve downstream water quality*, including the temporary storage and deposition of channel-forming sediment and woody debris, temporary storage of local ground water that supports baseflow in rivers, and transformation and transport of stored organic matter.”²²⁷ The recreational value of downstream waters depends on water quality that is determined by the functions of tributaries, including ephemeral streams, and wetlands. Thus, development or degradation of ephemeral streams or wetlands significantly affects downstream water quality that impacts interstate commerce in recreation as well as fish and wildlife habitat.

The congressional emphases on fish and wildlife habitat and recreation permeate the CWA. For example, section 304 mandates that EPA “shall develop and publish . . . criteria for water quality accurately reflecting the latest scientific knowledge (A) on the kind and extent of all identifiable effects on health and welfare including . . . recreation which may be expected from the presence of pollutants in any body of water.”²²⁸ EPA must also publish information on “the factors necessary . . . to allow recreational activities in and on the water.”²²⁹ State water quality “standards shall be established taking into consideration their use and value for . . . recreational purposes.”²³⁰ When deciding whether to veto a section 404 dredge-and-fill permit, EPA must consider, among other things, whether “the discharge of such materials into such area will have an unacceptable adverse effect on . . . shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.”²³¹ Protection of recreational uses as well as fish and wildlife habitat also plays a role in how the EPA sets effluent limits.²³² As recognized by

²²⁶ 33 U.S.C. § 1251(a)(2).

²²⁷ Connectivity Report, *supra* note 46, at 6-3 (emphasis added).

²²⁸ 33 U.S.C. § 1314(a)(1).

²²⁹ *Id.* § 1314(b)(2).

²³⁰ *Id.* § 1313(c)(2)(A).

²³¹ *Id.* § 1344(c).

²³² *See id.* § 1311(g)(2)(C) (“such modification will not interfere with the attainment or maintenance of that water quality which shall . . . the protection and propagation of a balanced population of shellfish, fish, and wildlife, and allow recreational activities, in and on the water”); *id.* § 1311(h)(2) (“the discharge of pollutants in accordance with such modified requirements will not interfere, alone or in combination with pollutants from other sources, with the attainment or maintenance of that water quality which . . . the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife, and allows recreational activities, in and on the water”).

the Supreme Court, the “designated use of [a] river as a *fish habitat directly reflects the Clean Water Act’s goal* of maintaining the ‘chemical, physical, and biological integrity of the Nation’s waters.’”²³³

The legislative history confirms the importance that Congress placed on recreation, fish and wildlife habitat, and conservation when enacting the CWA. During floor debate in the House, Representative Harold T. Johnson of California said he was

confident that anyone concerned with the preservation of our environment, the conservation of our natural resources, and the restoration of the purity of one of our most important resources, the water we need for homes and farms, our businesses and industries, and *for our fish and wildlife and recreation purposes* can support this legislation.²³⁴

One problem that Congress hoped to address with the passage of the CWA was fish mortality caused by pollution. Representative William Keating of Ohio observed there was

no question that pollution of our Nation’s waterways is becoming more of a problem each year. In 1960, it was estimated that 6 million fish were killed by water pollution in the United States. In 1968, the figure had more than doubled to 15 million. And in 1969, the latest year for which reliable estimates are available, there were more than 41 million fish killed as a result of pollution in our country’s rivers, lakes, and streams.²³⁵

Speaking on behalf of the administration, the chair of the Council of Economic Advisers testified, “[n]avigable waters that can provide the habitat for fish and wildlife are better than such waters not in that viable condition.”²³⁶

As for recreation, the conference report explained, with reference to section 404, that EPA would be empowered to veto a permit because of “unacceptable adverse effect[s]” on, among other things, “recreational activities in a given site.”²³⁷ During the debate over the bill’s passage, Senator Frank Moss of Utah argued, “[c]leanup of our waterways will again make water-based recreation a possibility for the millions of people who now inhabit our cities.”²³⁸ Senator Jennings Randolph of West Virginia noted that, as a result of acid mine drainage, “the recreational potential of many streams is diminished or eliminated altogether.”²³⁹

²³³ *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. 700, 714 (1994) (quoting 33 U.S.C. § 1251(a)) (emphasis added).

²³⁴ Legislative History, *supra* note 166, at 409 (statement of Representative Johnson) (emphasis added).

²³⁵ *Id.* at 479 (statement of Representative Keating).

²³⁶ *Id.* at 1123 (statement of Paul V. McCracken, Chair, Council of Economic Advisers).

²³⁷ *Id.* at 239 (House consideration of conference report).

²³⁸ *Id.* at 1343.

²³⁹ *Id.* at 187 (Senate consideration of the conference report).

Congress has continued to emphasize protecting fish and wildlife habitat and recreational uses through subsequent amendments to the CWA. For example, when Congress created the National Estuary Program as part of the CWA in 1987, it found that “the Nation’s estuaries are of great importance for fish and wildlife resources and recreation and economic opportunity.”²⁴⁰ In 2000, Congress revised the “criteria for coastal recreational waters” such that the EPA “shall publish new or revised water quality criteria for pathogens and pathogen indicators . . . for the purpose of protecting human health in coastal recreation waters.”²⁴¹ This is in stark contrast to the Proposal’s characterization of recreation as merely one of “a variety of beneficial purposes.”²⁴² Recreation was and continues to be a primary beneficial purpose of the CWA’s protections.

B. Pollution in Non-Adjacent Wetlands and Ephemeral Streams Will Harm Downstream Waters, Including Those in Many National Parks

As EPA previously recognized in a review of the relevant scientific literature in 2015, wetlands and intermittent and ephemeral streams are hydrologically connected to and “exert a strong influence on the integrity of” traditionally navigable waters downstream.²⁴³ As a result, pollution in non-adjacent wetlands and ephemeral streams impacts downstream water quality. Many national parks contain traditionally navigable waters whose water quality will be harmed by pollution in upstream wetlands and ephemeral streams. This impact would be significant because, according to the American Fisheries Society, the Proposal would eliminate protection for “thousands of miles of headwater streams and millions of acres of wetlands that provide invaluable ecosystem services and habitat for many species of fish.”²⁴⁴

1. Pollution in Wetlands That Will Lose Protection as a Result of the Proposal Will Affect Downstream Waters

The Agencies are tasked with the CWA’s goal of protecting water quality. The Proposal fails to sufficiently protect wetlands adjacent to ephemeral streams and wetlands that do not abut or have a direct hydrological connection with other jurisdictional waters. Because these wetlands affect

²⁴⁰ Water Quality Act of 1987, Pub. L. 100-4, § 317 (1987); *see also* 33 U.S.C. § 1330(a)(2)(A) (allowing EPA Administrator to convene a conference on a nominated estuary where “the attainment or maintenance of that water quality in an estuary which . . . allows recreational activities, in and on the water, requires the control of point and nonpoint sources of pollution”); *id.* § 1330(b)(4) (describing purpose of estuary conference to “develop a comprehensive conservation and management plan that recommends priority corrective actions and compliance schedules addressing point and nonpoint sources of pollution to restore and maintain the chemical, physical, and biological integrity of the estuary, including restoration and maintenance of water quality, a balanced indigenous population of shellfish, fish and wildlife, and recreational activities in the estuary”).

²⁴¹ Beaches Environmental Assessment and Coastal Health Act of 2000, Pub. L. 106-284, §3 (2000); 33 U.S.C. § 1314(a)(9).

²⁴² 84 Fed Reg. at 4192.

²⁴³ *See* Connectivity Report, *supra* note 46, at ES-2 to ES-6.

²⁴⁴ Susan A.R. Colvin, et al., *AFS Special Report: Headwater Streams and Wetlands are Critical for Sustaining Fish, Fisheries, and Ecosystem Services*, 44 FISHERIES 73, 86 (2019).

the water quality and integrity of downstream waters, the Proposal will result in serious harm to the water quality of even protected waters.

As part of the 2015 rulemaking, the EPA conducted a literature review and analysis on the connectivity of wetlands and streams to downstream waters. This report, referred to as the “Connectivity Report,” reviewed 1,353 sources, of which 86% came from refereed scientific journals, to draw conclusions about connectivity.²⁴⁵ According to the 2015 Connectivity Report, “the literature clearly shows that wetlands and open waters in riparian areas and floodplains are physically, chemically, and biologically integrated with rivers via functions that improve downstream water quality.”²⁴⁶ Furthermore,

[w]etlands and open waters in non-floodplain landscape settings . . . provide numerous functions that benefit downstream water integrity. . . . This diverse group of wetlands (e.g., many prairie potholes, vernal pools, playa lakes) can be connected to downstream waters through surface-water, shallow subsurface-water, and ground-water flows and through biological and chemical connections.²⁴⁷

The impacts do not depend on whether wetlands share a permanent surface connection with relatively permanent waters. Instead, these

[c]onnections between riparian/floodplain wetlands and streams or rivers occur over a gradient of connectivity, for example, they can be permanent, can occur frequently (e.g., if the wetland is located within the mean high-water mark), or can occur infrequently (e.g., if the wetland occurs near the edge of the floodplain . . .). Even riparian/floodplain wetlands that rarely flood can have important, long-lasting effects on streams and rivers.²⁴⁸

Subsequent research has bolstered this conclusion. A 2018 peer-reviewed study found that geographically isolated wetlands “play a significant role in controlling hydrological processes in upstream areas and downstream flow.”²⁴⁹ That study found that geographically isolated wetlands, which largely would be considered non-adjacent under the Proposal, actually had a greater impact on downstream flow than riparian wetlands—defined similarly to the Proposal’s definition of adjacent wetlands as those that shared a continuous surface connection with a stream—likely because isolated, or non-adjacent, wetlands often have a greater storage value.²⁵⁰ Another recent study found that geographically isolated, or non-adjacent, wetlands “buffer dynamics of the surficial aquifer and stream base flow, providing an indirect but significant

²⁴⁵ Connectivity Report, *supra* note 46, at 1-16.

²⁴⁶ Connectivity Report, *supra* note 46, at ES-2.

²⁴⁷ *Id.* at ES-3.

²⁴⁸ Connectivity Report, *supra* note 46, at 4-1.

²⁴⁹ S. Lee et al., *Assessing the cumulative impacts of geographically isolated wetlands on watershed hydrology using the SWAT model coupled with improved wetland modules*, 223 J. ENVTL. MGMT. 37 (2018).

²⁵⁰ *Id.* at 45–46.

nexus to the regional hydrologic system.”²⁵¹ Because of the significant nexus between these wetlands and jurisdictional waters, pollution in or destruction of these wetlands can cause serious harm to downstream water quality.

2. Pollution in Ephemeral Streams That Will Lose Protection as a Result of the Proposal Will Affect Downstream Waters

The Proposal likewise fails to protect ephemeral streams. In the Proposal, the Agencies define “ephemeral” streams to be “surface water flowing or pooling only in direct response to precipitation, such as rain or snow fall.”²⁵² Ephemeral streams would not be considered jurisdictional in the Proposal. However, these streams affect downstream water quality and therefore should be protected by the CWA.

According to the EPA’s 2015 Connectivity Report,

[t]he scientific literature unequivocally demonstrates that streams, individually or cumulatively, exert a strong influence on the integrity of downstream waters. All tributary streams, including perennial, intermittent, and ephemeral streams, are physically, chemically, and biologically connected to downstream rivers via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported.²⁵³

According to documents supporting the Proposal, “the actual percentage of ephemeral streams across the country is likely higher than 18 percent.”²⁵⁴ In the arid West, “39 percent [of streams] are mapped as ephemeral.” Failure to regulate these streams would leave over a third of all stream miles in the arid West unregulated and a fifth or more nationwide. As the Agencies acknowledge, “[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.”²⁵⁵ These streams impact the quality of downstream waters in a number of ways, including through heat transfer that can lead to eutrophication of navigable waters,²⁵⁶ through nutrient transfer such as for nitrogen,²⁵⁷ and by distributing metals from old mining operations.²⁵⁸

²⁵¹ Daniel L. McLaughlin, David A. Kaplan & Matthew J. Cohen, *A Significant Nexus: Geographically Isolated Wetlands Influence Landscape Hydrology*, 50 WATER RESOURCES RES. 7153 (2014).

²⁵² 84 Fed. Reg. at 4173.

²⁵³ Connectivity Report, *supra* note 46, at ES-2.

²⁵⁴ Resource and Programmatic Assessment, *supra* note 33, at 40.

²⁵⁵ *Id.* at 11.

²⁵⁶ *See* Connectivity Report, *supra* note 46, at 3-19.

²⁵⁷ *See id.* at 3-24.

²⁵⁸ *See id.* at 3-34.

3. Pollution in Intermittent Streams Will Affect Downstream Waters

The Agencies also indicate that they are seeking comment on whether to limit CWA jurisdiction to just perennial streams (i.e., neither intermittent nor ephemeral streams would be considered jurisdictional).²⁵⁹ Although NPCA does not support the distinction between intermittent and ephemeral streams in the Proposal because of the loss of protections for certain streams, the science does indicate that it is important to retain CWA protection for intermittent streams, which make up at least 52 percent of all streams.²⁶⁰

C. The Proposal Threatens the Significant Economic Activity Generated by National Parks

The Proposal's threat to water quality in national parks would cause significant economic harm. The National Park System received over 318 million visitors in 2018.²⁶¹ The NPS estimates that visits in 2017 created about \$18.2 billion in spending in "gateway regions" near National Parks.²⁶² Some of the most visited national parks are closely connected to water and depend on water quality. For instance, Grand Canyon National Park and Glen Canyon National Recreation Area received over 6 million and 4.5 million visitors, respectively, in 2017.²⁶³ Both of these parks are in an arid region where intermittent and ephemeral streams play a significant hydrological role.²⁶⁴ Acadia National Park, on the coast of Maine, received over 3.5 million visitors in 2017, and the Chattahoochee National River in Georgia had over 2.7 million visitors.²⁶⁵ Clean water is an integral part of the experience at these parks, and the water quality at these parks supports the conservation of a variety of fish and wildlife.

Visitors to national parks are also a part of the broader "outdoor recreation economy" estimated at \$887 billion annually.²⁶⁶ The U.S. Department of Commerce's Bureau of Economic Analysis found that outdoor recreation contributes 2.2% of the country's annual GDP.²⁶⁷ Within that

²⁵⁹ See 84 Fed. Reg. at 4177.

²⁶⁰ See Resource and Programmatic Assessment, *supra* note 33, at 40.

²⁶¹ *Visitation Highlights*, NAT'L PARK SERV., available at <https://www.nps.gov/subjects/socialscience/highlights.htm>.

²⁶² NAT'L PARK SERV., 2017 NATIONAL PARK VISITOR SPENDING EFFECTS (2018), available at https://www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/NPS_2017_Visitor_Spending_Effects.pdf.

²⁶³ *Annual Park Report for Recreation Visits in 2018*, NAT'L PARK SERV., [https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Park%20Ranking%20Report%20\(1979%20-%20Last%20Calendar%20Year\)](https://irma.nps.gov/Stats/SSRSReports/National%20Reports/Annual%20Park%20Ranking%20Report%20(1979%20-%20Last%20Calendar%20Year)).

²⁶⁴ See JULIANE M. BOWEN, U.S. GEOLOGICAL SURVEY, REVIEW OF AVAILABLE WATER-QUALITY DATA FOR THE SOUTHERN COLORADO PLATEAU NETWORK AND CHARACTERIZATION OF WATER QUALITY IN FIVE SELECTED PARK UNITS IN ARIZONA, COLORADO, NEW MEXICO, AND UTAH, 1925 TO 2004, SCIENTIFIC INVESTIGATIONS REPORT 2008-5130, at 5 (2008).

²⁶⁵ *Annual Park Report for Recreation Visits in 2018*, *supra* note 263.

²⁶⁶ OUTDOOR INDUS. ASS'N, THE OUTDOOR RECREATION ECONOMY (2017), available at https://outdoorindustry.org/wp-content/uploads/2017/04/OIA_RecEconomy_FINAL_Single.pdf.

²⁶⁷ *Outdoor Recreation Satellite Account: Updated Statistics for 2012-2016* (2018), BUREAU OF ECON. ANALYSIS, <https://www.bea.gov/news/2018/outdoor-recreation-satellite-account-updated-statistics-2012-2016>.

amount, boating and fishing amounted to the largest segment of economic activity at \$36.9 billion annually.²⁶⁸ These activities depend on clean water. If the water quality in national parks is degraded because hydrologically-linked wetlands and ephemeral streams lose CWA protection, the result could be a loss of economic benefits if visitors were to choose to stay away from these parks.

The Proposal departs from the Agencies' previous conclusions on the importance of tributaries and wetlands to downstream water quality without acknowledgement. EPA has previously stated that "wetlands play a crucial role in the life cycle of up to 90 percent of the fish caught recreationally," while recognizing estimates of recreational fishing's economic impact at \$116 billion annually.²⁶⁹ The Agencies also previously argued that "[p]rotection of tributaries under the CWA is critically important because they serve many important functions *which directly influence the integrity of downstream waters.*"²⁷⁰ The Proposal does not recognize, or respond, to these previous conclusions.

The Proposal does acknowledge that removing CWA protections would harm the outdoor recreation economy, including hunting and fishing activities specifically, but it does not quantify the impact. The Proposal notes that

narrowing the scope of CWA regulatory jurisdiction over waters may result in a reduction in the ecosystem services provided by some waters, and as a result, some entities may be adversely impacted. Some business sectors that depend on habitat, such as those catering to hunters or anglers, . . . could experience a greater impact than others.²⁷¹

The Proposal's accompanying economic analysis also correctly observes that "[c]hanges in water quality can also impact recreational activities and by extension those businesses and localities that support these activities."²⁷² These impacts would harm the multibillion outdoor recreation economy with potentially significant concentrated impacts in national parks that support fishing and boating recreation. Despite identifying these impacts as issues of concern, at no point does the Proposal attempt to quantify their overall magnitude or assess whether, in light of these detrimental impacts, the Proposal will be beneficial for the nation.

D. The Economic Analysis and Resource and Programmatic Assessment Accompanying the Proposal are Flawed

Both the Economic Analysis and the Resource and Programmatic Assessment prepared in support of the Proposal are incomplete and flawed. As a result, the Agencies are proposing a

²⁶⁸ *Id.*

²⁶⁹ EPA, ECONOMIC BENEFITS OF WETLANDS 2 (2006), available at <https://www.epa.gov/sites/production/files/2016-02/documents/economicbenefits.pdf>.

²⁷⁰ 2015 Technical Support Document, *supra* note 47, at 233 (emphasis added).

²⁷¹ 84 Fed. Reg. at 4201-02.

²⁷² EPA & ARMY CORPS, ECONOMIC ANALYSIS OF PROPOSED REVISED DEFINITION OF WATERS OF THE UNITED STATES 215 (2014) [hereinafter Economic Analysis].

significant reduction in the protections afforded by the CWA without a complete understanding of the impacts of the Proposal. The economic analysis improperly fails to make a direct comparison to a 2015 Rule baseline, adopts a limited case study-based approach and is therefore incomplete, and fails to explain significant divergences from the economic analysis that the Agencies prepared for the 2015 Rule. The Resource and Programmatic Assessment is also woefully incomplete in its assessment of the impacts of the Proposal.

The economic analysis accompanying the Proposal does not include a direct comparison of the Proposal to the 2015 Rule. Instead, the Proposal relies on a two-stage analysis.²⁷³ According to this analysis, the Proposal “provides clearer definitions for ‘tributary’ and ‘adjacent wetland’ and would eliminate the case-specific significant nexus analysis needed for many waters *under the pre-2015 practice*.”²⁷⁴ The Agencies then state that a comparison to pre-2015 practice was difficult to achieve because of that uncertainty²⁷⁵—uncertainty that the Agencies introduced by not comparing the Proposal directly to the 2015 Rule. This analytical sleight of hand obscures the actually forgone benefits of the Proposal.

A direct comparison to the 2015 Rule is necessary because that rule was in force in twenty-two states at the time the Proposal was published,²⁷⁶ and the Agencies have abandoned the litigation over their attempt to delay the effective date of the 2015 Rule.²⁷⁷ The 2015 Rule is therefore the baseline against which the Proposal must be measured in at least part of the country. By failing to make this comparison, the Agencies have not properly considered the costs and benefits of the Proposal.

The Agencies also conducted only a limited, case study-based economic analysis that is not indicative of the nationally forgone benefits. The Agencies used case studies of only three watersheds, which include only limited public lands and are not near urban areas.²⁷⁸ For instance, the segment of the Rio Grande Basin used does not include Big Bend National Park, which supports significant water-based recreational opportunities. The Agencies also did not quantify lost recreational benefits from the Proposal. These limited case studies allowed the Agencies to conclude that “[b]ased on the results from the three case study analyses, it is very likely that many of these reductions in services will be small, infrequent, and dispersed over wide geographic areas, thereby limiting the significance of the financial impacts on small organizations and governments and small entities within specific business sectors.”²⁷⁹ However, these case studies fail to capture the important variation in benefits provided by wetlands and

²⁷³ See *id.* at 172.

²⁷⁴ *Id.* at 104 (emphasis added).

²⁷⁵ See, e.g., *id.* at 105 (chart with impacts Proposal listed as “unknown” for four categories of analysis).

²⁷⁶ 84 Fed. Reg. at 4162.

²⁷⁷ See Ellen M. Gilmer, *EPA, Army Corps give up on WOTUS delay rule*, E&E NEWS, Mar. 11, 2019, <https://www.eenews.net/greenwire/stories/1060126937>.

²⁷⁸ The watersheds used are in the Ohio River Basin (HUC 0509 and HUC 0510), in the Lower Missouri River Basin (HUC 1025 and HUC 1027), and in the Rio Grande Basin (HUC 1306 and HUC 1307). Economic Analysis, *supra* note 272, at 127; see also 84 Fed. Reg. at 4201. These areas are mapped in the Economic Analysis, *supra* note 272, at 126.

²⁷⁹ Economic Analysis, *supra* note 272, at 215; see also 84 Fed. Reg. at 4201–02.

ephemeral streams in different areas based on their geographic scarcity, proximity to population centers, and different uses, including for recreation.

The new economic analysis also reaches numbers for forgone benefits from the repeal of the 2015 Rule that are significantly different from what the Agencies reached in their 2015 analysis. The new analysis does not acknowledge this discrepancy. The new analysis finds that forgone benefits from reverting to a pre-2015 regulatory environment range from \$32.6 to \$37.7 million annually (2017\$).²⁸⁰ But the Agencies' 2014 economic analysis found that the 2015 Rule would result in benefits of \$300.7 to \$397.6 million annually (2010\$).²⁸¹ These estimates differ by an order of magnitude, but the Agencies fail to explain this discrepancy.

The Resource and Programmatic Assessment also does little to explain the actual impact of the proposal. For instance, the Agencies conclude that under the Proposal "fewer wetlands adjacent to [traditionally navigable waters] would be considered jurisdictional as compared to both baselines," but the Agencies were "unable to quantify this change."²⁸² Similarly, the Agencies were "unable to quantify what the change in jurisdiction would be for this category of wetlands [adjacent to intermittent or ephemeral streams] as compared to the proposed rule" but concluded that "compared to both baselines, fewer wetlands would be considered jurisdictional under the proposed rule for this category of wetlands."²⁸³ The Agencies ultimately conclude that their "ability to make quantitative estimates of potential changes in CWA jurisdiction under the proposed rule relative to either baseline is severely limited by available data. That said, the agencies anticipate that the largest potential effects associated with the proposed rule policies would be to ephemeral streams and to wetlands."²⁸⁴ The failure to determine, analyze, or even qualitatively describe the magnitude of that impact to ephemeral streams and wetlands is arbitrary and capricious.

E. Examples on Water Quality Impacts in Specific National Parks

Wetlands and intermittent and ephemeral streams play a significant role in the water quality in many national parks. NPCA's 2014 comments on the proposed Clean Water Rule, attached as Exhibit A, outline several ways that these waters impact water quality in national parks. This section includes additional specific examples by geography of waters in national parks that might be affected by lost CWA protections for ephemeral streams and non-adjacent wetlands.

1. The Proposal Would Impact Water Quality in Western National Parks

The Proposal's exclusion of ephemeral streams and non-adjacent wetlands from CWA protections would have profound effects on national parks in the West. Intermittent and ephemeral streams are particularly important to water quality in the Southwest, where they make

²⁸⁰ Economic Analysis, *supra* note 272, at vii.

²⁸¹ *Id.* at 33.

²⁸² Resource and Programmatic Assessment, *supra* note 33, at 46.

²⁸³ *Id.*

²⁸⁴ *Id.* at 52.

up over 81% of streams.²⁸⁵ As mentioned above, over a third of streams in the “arid west” would lose CWA protections under the proposal.²⁸⁶

Scientific and technical studies demonstrate why the removal of CWA protection from ephemeral streams and non-adjacent wetlands would harm national parks in the West. In a 2008 scientific report on the Four Corners region, the USGS and NPS identified several “Parks with significant intermittent or ephemeral drainages,” including Chaco Wash in Chaco Culture National Historical Park, Pueblo Colorado Wash in Hubbell Trading Post National Historical Site, and the Little Colorado River in Petrified Forest National Park.²⁸⁷ That report notes that

[El Morro National Monument], Sunset Crater National Monument . . . , and [Petroglyph National Monument] are dry most of the time. A vast network of perennial, intermittent and ephemeral springs, pools, washes, and streams sustain the larger water bodies and their associated riparian corridor; these areas collectively support the diverse flora and fauna throughout the region. The intermittent and ephemeral features typically flow during spring runoff or following rainfall. Unique and significant water-dependent features such as hanging gardens and cottonwood stands are supported by springs.²⁸⁸

Furthermore, “[m]ore than 90 side canyons fed by springs and ephemeral drainages are considered tributaries to the main body of Lake Powell.”²⁸⁹ The USGS-NPS study identified fourteen intermittent or ephemeral streams that drain into Lake Powell as suffering from “one or more water-quality standard exceedance.”²⁹⁰ The map below (Figure 1) from that report shows the extensive network of intermittent and ephemeral streams that feed into Glen Canyon National Recreation Area, including streams that pass through other National Parks such as Canyonlands, Capitol Reef, and Arches National Parks. Protecting the water in Lake Powell depends on protecting the water in intermittent and ephemeral streams that already violate water-quality standards.

²⁸⁵ 2015 Technical Support Document, *supra* note 47, at 259.

²⁸⁶ See *supra* Section I.B.

²⁸⁷ BOWEN, *supra* note 264, at 5.

²⁸⁸ *Id.*

²⁸⁹ *Id.* at 64.

²⁹⁰ *Id.* at 67.

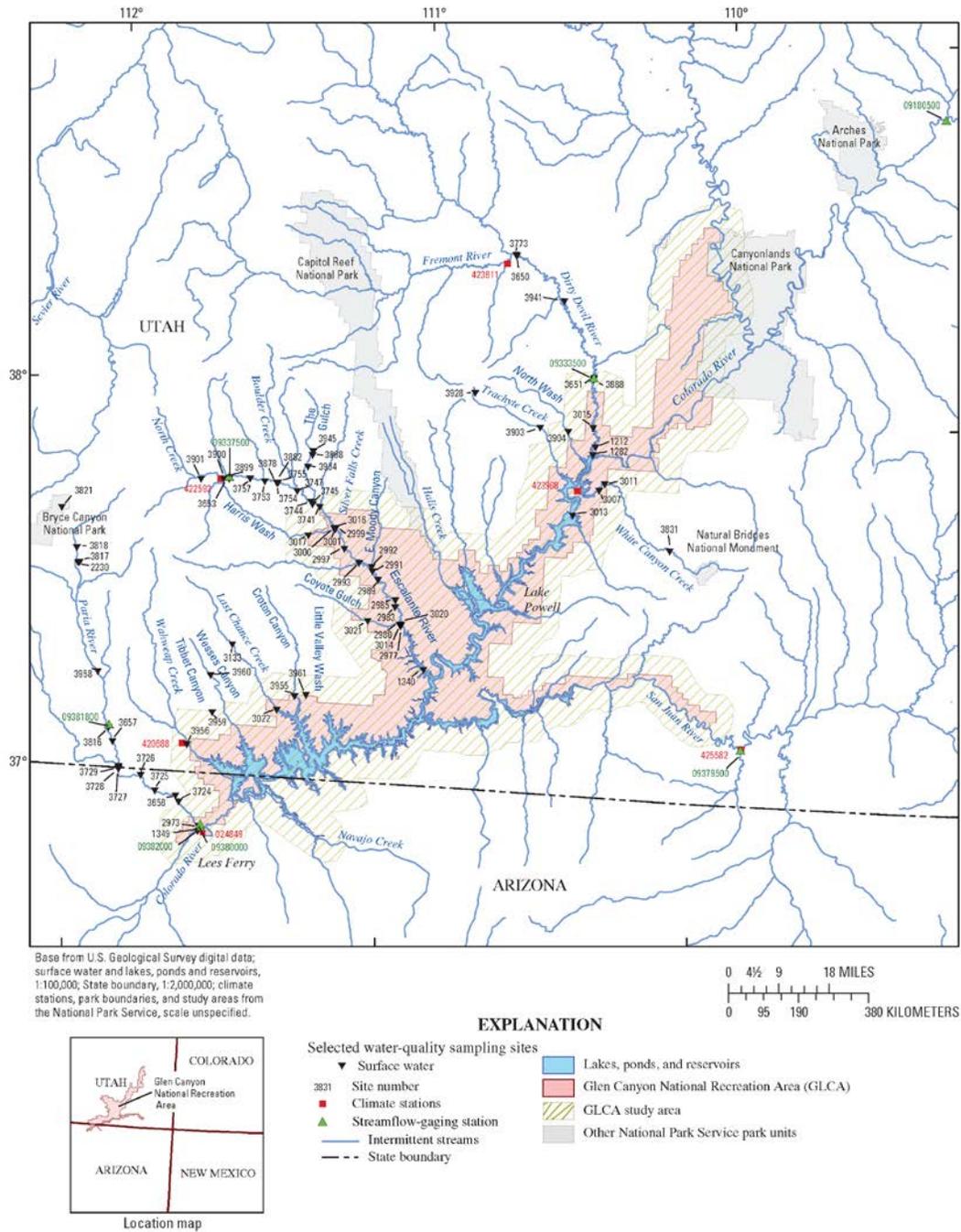


Figure 1: Map of Intermittent Streams, Glen Canyon National Recreation Area²⁹¹

The 2015 Connectivity Report also noted the extensive importance of ephemeral and intermittent streams in the Four Corners region. “Based on the National Hydrography Dataset, 94%, 89%, 88%, and 79% of the streams in Arizona, Nevada, New Mexico, and Utah, respectively, are

²⁹¹ *Id.* at 68.

nonperennial. Most of these streams connect to downstream waters.”²⁹² These streams are “periodically connected to downstream waters by low-duration, high-magnitude flows.”²⁹³ According to that report, this “substantial connection [causes] important consequences of runoff, nutrients, and particulate matter originating from ephemeral tributaries on the integrity and sustainability of downstream perennial streams.”²⁹⁴

EPA had previously published a report on *The Ecological and Hydrological Significance of Ephemeral and Intermittent Streams in the Arid and Semi-arid American Southwest*, which provided a “comprehensive review of the present scientific understanding of the ecology and hydrology of ephemeral and intermittent streams [to] help place them in a watershed context, thereby highlighting their importance in maintaining water quality, overall watershed health, and provisioning of the essential human and biological requirements of clean water.”²⁹⁵ In that report, EPA noted that lowland leopard frogs in Saguaro National Park depend on ephemeral pools for breeding.²⁹⁶ Furthermore, wildlife in Organ Pipe Cactus National Monument, including lizards and snakes, prefer mesquite woodlands that are “restricted to ephemeral and intermittent streams” in the monument.²⁹⁷ These ephemeral habitats would lose CWA protections in the Proposal.

To highlight another example, a stretch of river that attracts fly fishing and kayaking in Black Canyon of the Gunnison National Park in Colorado is polluted with selenium.²⁹⁸ The existing pollution in the river calls for more CWA protection, not less. Over 300,000 people visited the park in 2017, generating \$18.7 million in spending.²⁹⁹ As the map below (Figure 2) illustrates, the U.S. Fish and Wildlife Service’s National Wetlands Inventory identifies freshwater emergent wetlands and freshwater forested wetlands within the watershed of Black Canyon of the Gunnison National Park that do not have a hydrological surface connection to other waters. Wetlands can reduce selenium inflow by 89 percent.³⁰⁰ Under the Proposal, it is likely that many of these wetlands will not be classified as Waters of the United States and will therefore be at greater risk of receiving the discharge of pollutants or of being dredged or filled. The downstream consequences of such actions would make Black Canyon of the Gunnison National

²⁹² Connectivity Report, *supra* note 46, at 5-7.

²⁹³ *Id.*

²⁹⁴ *Id.* at 5-8.

²⁹⁵ EPA, THE ECOLOGICAL AND HYDROLOGICAL SIGNIFICANCE OF EPHEMERAL AND INTERMITTENT STREAMS IN THE ARID AND SEMI-ARID AMERICAN SOUTHWEST 2 (2008), *available at* https://www.epa.gov/sites/production/files/2015-03/documents/ephemeral_streams_report_final_508-kepner.pdf.

²⁹⁶ *Id.* at 55.

²⁹⁷ *Id.* at 53–54.

²⁹⁸ *See* NAT’L PARK SERV., STATE OF THE PARK REPORT: BLACK CANYON OF THE GUNNISON NATIONAL PARK 10 (2014).

²⁹⁹ *See* NAT’L PARK SERV., 2017 NATIONAL PARK VISITOR SPENDING EFFECTS 19 (2018), *available at* https://www.nps.gov/nature/customcf/NPS_Data_Visualization/docs/NPS_2017_Visitor_Spending_Effects.pdf.

³⁰⁰ *See* Drew Hasen, et al., *Selenium Removal by Constructed Wetlands: Role of Biological Volatilization*, 32 ENVTL. SCI. & TECH. 591 (1998).

Park a less attractive destination because of the potential for increased selenium pollution and would therefore negatively impact the commerce generated by visitors the park.

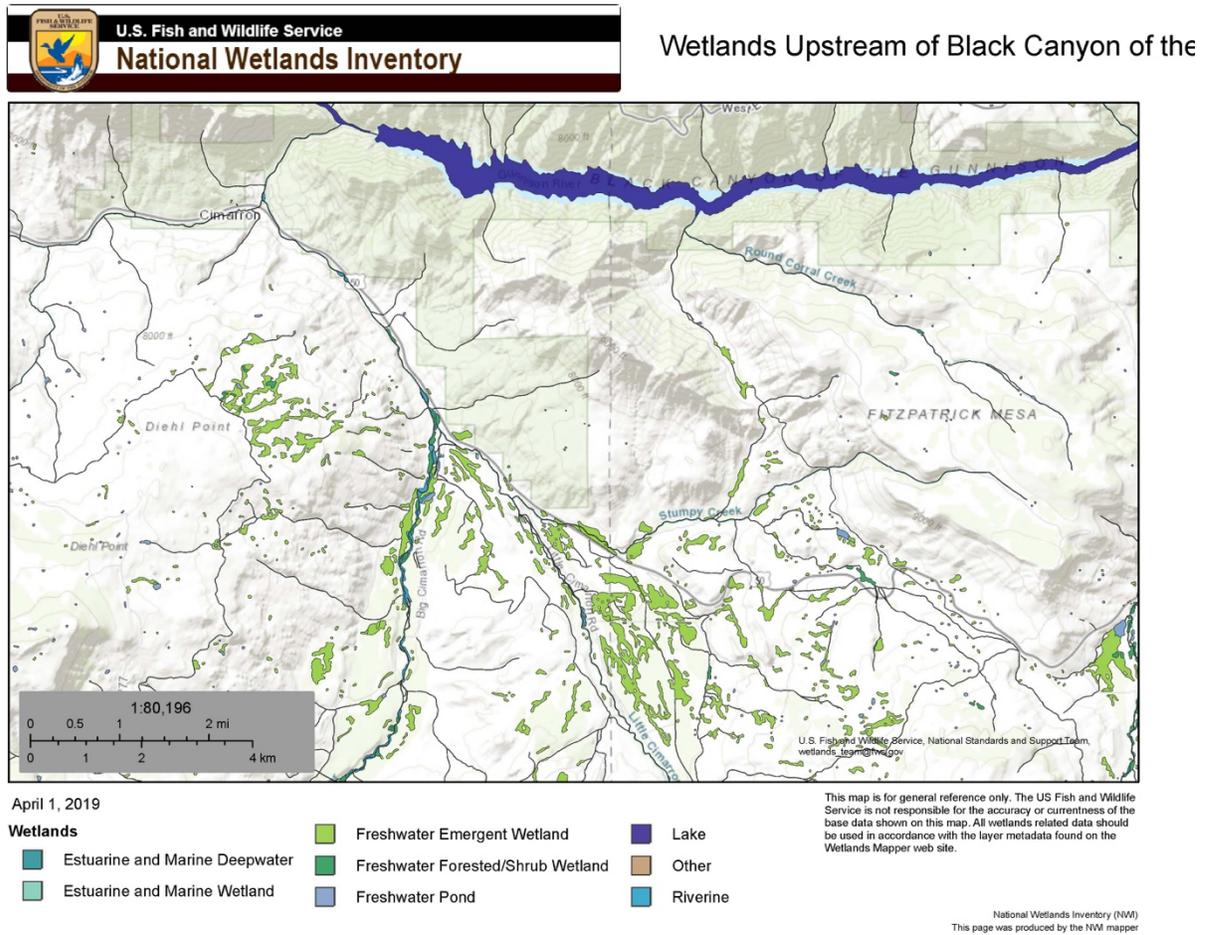


Figure 2: Wetlands Upstream of Black Canyon of the Gunnison National Park³⁰¹

2. The Proposal Would Impact Water Quality in Eastern National Parks

The negative impacts of the Proposal on water quality in national parks would not be limited to western parks with high concentrations of intermittent and ephemeral streams. Many eastern national parks also depend on non-adjacent wetlands or ephemeral streams for water quality that would not be covered by the Proposal.

One example of a popular national park in the East facing water contamination issues is the New River Gorge National River in West Virginia, which receives over a million annual visitors. Particularly after heavy rains, the river suffers from impairment by fecal coliform. The USGS found that “tributary inflows to the New River are the major pathways for input of fecal

³⁰¹ Map generated using the Wetlands Mapper tool on April 1, 2019. National Wetlands Inventory: Wetlands Mapper, U.S. FISH & WILDLIFE SERV., <https://www.fws.gov/wetlands/data/Mapper.html>.

contamination to the New River in the gorge.”³⁰² That study found multiple tributaries contaminated with fecal coliform with flows below five cubic feet per second.³⁰³ These streams would lose CWA protection under the Proposal’s potential flow requirement of five cubic feet per second, which could result in increased contamination for this park.³⁰⁴

America’s most popular national park, Great Smoky Mountains National Park, also faces coliform bacteria impacts to water sources, including along the Appalachian Trail.³⁰⁵ Headwaters streams in Great Smoky Mountains National Park also face threats from high acidity. According to the NPS, “acidic streams are suspected to be the main cause for the decline of the native brook trout population in the park.”³⁰⁶ Although wetlands make up a small percentage of the park and the surrounding ecosystems, these wetlands include karst-depression wetlands (pictured below in Figure 3).³⁰⁷ Wetlands within park boundaries would retain protection by NPS, but karst-depression wetlands outside of the park would likely be considered non-adjacent in the Proposal and therefore be at risk of dredging and filling. Wetlands can serve as buffers for acidity.³⁰⁸ Karst-depression wetlands provides habitat for “plants and animals that are otherwise rare or absent in southern uplands” and the “ecological significance of karst wetlands is thus disproportionate to their limited area.”³⁰⁹ The loss of CWA protections for wetlands such as these in ecosystems near the park in North Carolina and Tennessee would undermine the benefits they provide in the acidity buffering and further threaten species such as native brook trout and reduce the benefits of the associated recreational fishery.

³⁰² MELVIN V. MATHES, ET AL., U.S. GEOLOGICAL SURVEY & NAT’L PARK SERV., PRESUMPTIVE SOURCES OF FECAL CONTAMINATION IN FOUR TRIBUTARIES TO THE NEW RIVER GORGE NATIONAL RIVER, WEST VIRGINIA, 2004, at 5 (2007).

³⁰³ See *id.* at 8.

³⁰⁴ See 84 Fed. Reg. at 4178.

³⁰⁵ Brian C. Reed & Mark S. Rasnake, *An Assessment of Coliform Bacteria in Water Sources Near Appalachian Trail Shelters Within the Great Smoky Mountains National Park*, 27 WILDERNESS & ENVTL. MED. 107 (2016).

³⁰⁶ NAT’L PARK SERV., *Great Smoky Mountains: Water Quality*, available at <https://www.nps.gov/grsm/learn/nature/water-quality.htm>.

³⁰⁷ See, e.g., U.S. GEOLOGICAL SURVEY, *Gum Swamp in Great Smoky Mountain National Park, Tennessee*, available at <https://www.usgs.gov/media/images/gum-swamp-great-smoky-mountain-national-park-tennessee>.

³⁰⁸ See, e.g., W.M. Mayes, et al., *Wetland Treatments at extremes of pH: A review*, 407 SCI. TOTAL ENV’T 3944 (2007).

³⁰⁹ WILLIAM J. WOLFE, USGS, HYDROLOGY AND TREE-DISTRIBUTION PATTERNS OF KARST WETLANDS AT ARNOLD ENGINEERING DEVELOPMENT CENTER, TENNESSEE 2 (1996).



Figure 3: Karst-Depression Wetland in Great Smoky Mountains National Park³¹⁰

3. Additional Examples of Impacts to Water Quality in National Parks

The attached NPCA comments from 2014 provide additional examples. For instance, in the Colorado River watershed, which includes iconic national parks like Grand Canyon National Park, Lake Mead National Recreation Area, and the Glen Canyon National Recreation Area, intermittent and ephemeral streams make up over 81 percent of all streams. Tributaries to the Flathead River, which feeds Glacier National Park, could be placed at risk by a loss of CWA protection for ephemeral streams. This reduction of regulatory protection could also undo some of the work of a transboundary agreement with Canada to prevent pollution to that river from energy development. Shenandoah National Park and adjacent areas contain tributaries of the Chesapeake Bay, where less than a third of sites attained water quality standards in a 2010–2012 study. Loss of CWA protection would also compound existing threats to wildlife habitat, such as northern prairie wetlands, that are already at risk due to climate change.³¹¹

³¹⁰ *Gum Swamp in Great Smoky Mountain National Park, Tennessee*, U.S. GEOLOGICAL SURVEY, <https://www.usgs.gov/media/images/gum-swamp-great-smoky-mountain-national-park-tennessee>.

³¹¹ Supporting information for the examples in this paragraph can be found in the attached 2014 NPCA comments. See Exhibit A.

V. The Agencies Failed to Perform an Endangered Species Act Consultation

Under the Endangered Species Act, the Agencies must consult with the U.S. Fish & Wildlife Service or the National Marine Fisheries Service (collectively, “the Services”) on “any action authorized, funded, or carried out” that might “jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species.”³¹² The Proposal could jeopardize species that depend on water quality, use wetlands for portions of their life cycle, or depend on intermittent or ephemeral streams. Therefore, the Agencies must consult with the Services on whether the elimination of federal protection for these waters would harm certain species. The failure to do so is a violation of the Endangered Species Act.

Many different endangered or threatened species depend on the waters that would no longer be protected by the CWA under the Proposal. The EPA indicates that “more than one-third of the United States’ threatened and endangered species live only in wetlands, and nearly half use wetlands at some point in their lives.”³¹³ For example, the trispot darter requires ephemeral streams for several life stages,³¹⁴ and the Department of the Interior considered connectivity to ephemeral streams and wetlands when designating critical habitat for that species.³¹⁵ According to the U.S. Fish & Wildlife Service, the “endangered Sonoma County California tiger salamander requires seasonal wetlands for breeding.”³¹⁶ According to a special report of the American Fisheries Society, headwaters ecosystems are also critical for endangered and threatened species of trout and salmon.³¹⁷

The “promulgation of regulations” is an action that triggers the need for Endangered Species Act consultation.³¹⁸ If the Agencies finalize the Proposal without engaging in formal consultation with the Services, that would be a violation of the Endangered Species Act. Accordingly, the Proposal should be withdrawn until the Agencies complete such a consultation.

³¹² 16 U.S.C. § 1536.

³¹³ *Why are Wetlands Important?*, EPA, <https://www.epa.gov/wetlands/why-are-wetlands-important> (last visited Apr. 12, 2019).

³¹⁴ *See* Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Trispot Darter, 83 Fed. Reg. 67,190, 67,193–94 (Dec. 28, 2018) (describing life stages).

³¹⁵ *See id.* at 67,195.

³¹⁶ Endangered and Threatened Wildlife and Plants; Recovery Plan for Four Species of the Santa Rosa Plain, 81 Fed. Reg. 39,945, 39,945 (June 20, 2016).

³¹⁷ *See* Susan A.R. Colvin, et al., *AFS Special Report: Headwater Streams and Wetlands are Critical for Sustaining Fish, Fisheries, and Ecosystem Services*, 44 FISHERIES 73, 81 (2019).

³¹⁸ 50 C.F.R. § 402.02 (defining “action”).

VI. The Army Corps Must Analyze the Environmental Impacts of the Proposal under the National Environmental Policy Act

The Army Corps of Engineers must comply with the requirements of the National Environmental Policy Act (“NEPA”) in promulgating any revised definition of “waters of the United States.”³¹⁹ For all “major federal actions” significantly affecting the environment, NEPA requires that agencies produce an environmental impact statement (“EIS”) considering the direct, indirect, and cumulative impacts of the action and practicable alternatives.³²⁰ At the very least, an agency must produce an environmental assessment (“EA”) examining whether the proposed action will have significant impacts on the environment.³²¹

For the 2015 Rule, the Corps satisfied this requirement because it “prepared a final environmental assessment and Findings of No Significant Impact consistent with the National Environmental Policy Act (NEPA).”³²² That analysis concluded that “additional protections associated with the incremental increase in the amount of waters subject to Clean Water Act jurisdiction is expected to have a beneficial impact on fish and wildlife for which the protected waters provide habitat.”³²³ According to the Corps, the 2015 Rule would also have a “beneficial impact on recreation, based on the increase in wildlife available for hunting, fishing, bird watching, and photography.”³²⁴ The Corps determined that there was no significant impact on the environment because “adverse impacts to the aquatic environment would be avoided or minimized as a result of the adoption of the proposed action.”³²⁵

In contrast to the 2015 Rule, the Proposal would severely restrict the Corps’ CWA jurisdiction, potentially imperiling the environmental and ecological health of a broad swath of the nation’s waters and endangered species that reside in such waters. It is therefore almost certain that the Proposal will significantly affect the quality of the human environment, requiring the preparation of a full EIS. At a minimum, the Corps must prepare an EA to determine whether the Proposal will have any significant impacts. Yet the docket for the Proposal does not contain an EIS or EA and the Proposal does not discuss the Corps’ obligations under NEPA at all.³²⁶ The Proposal should therefore be withdrawn until the Corps conducts the required analysis under NEPA.

³¹⁹ Although the CWA exempts most actions taken by the EPA Administrator under the statute from NEPA, 33 U.S.C. § 1371(c)(1), there is no such exemption for actions taken by the Corps.

³²⁰ 42 U.S.C. § 4332(2)(C).

³²¹ See 40 C.F.R. § 1508.9.

³²² 80 Fed. Reg. at 37,104.

³²³ U.S. ARMY, OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS, FINDING OF NO SIGNIFICANT IMPACT, ADOPTION OF THE CLEAN WATER RULE: DEFINITION OF WATERS OF THE UNITED STATES 24 (2015).

³²⁴ *Id.* at 25.

³²⁵ *Id.* at 28.

³²⁶ At this point in the rulemaking process for the 2015 Rule, the Corps had prepared a draft EA in accordance with NEPA. See 79 Fed. Reg. 22,188, 22,222 (Apr. 21, 2014).

Thank you for your consideration of these comments. NPCA and the Clinic appreciate the opportunity to submit these comments and welcome the opportunity to participate further in efforts to protect clean water. Please direct any follow-up communications to Shaun A. Goho, 617-496-5692 (sgoho@law.harvard.edu).

Sincerely,

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