November 14, 2014

Water Docket
Environmental Protection Agency
Mail Code 2822T
1200 Pennsylvania Ave. NW.
Washington, DC 20460

Attention: Docket ID No. EPA-HQ-OW-2011-0880

Submitted via www.regulations.gov and via email to ow-docket@epa.gov

To Whom It May Concern:

Thank you for considering our comments on the Environmental Protection Agency's (EPA) and U.S. Army Corps of Engineers' (the Corps) proposed rule, "Definition of 'Waters of the United States' Under the Clean Water Act." These comments are submitted on behalf of the Natural Resources Defense Council, and are joined by the Sierra Club, the Conservation Law Foundation, the League of Conservation Voters, Clean Water Action, and Environment America.

Americans depend on and deserve clean water. People should feel safe when they swim that they will not get a waterborne illness. They should have confidence that the streams feeding their drinking water supplies will not be recklessly polluted or destroyed. They should have waters with abundant fish that are safe to eat, and they should be able to boat without fighting through rafts of disgusting, sometimes toxic, algae.

We applaud the administration's efforts to protect our waterways from pollution. This proposed rule will help to improve the condition of the nation's waters, and we strongly support EPA's and the Corps' efforts to clarify which waters are protected by the Clean Water Act. We urge the agencies to strengthen the proposal and move quickly to finalize it, providing much needed clarity to regulated parties, pollution control officials, and all Americans who benefit from clean water.

It is difficult to overstate the importance of the issue this rule addresses. Whereas "waters of the United States" are protected from pollution and destruction by the Clean Water Act's important programs, aquatic features that are not considered "waters of the U.S." lack such protection under the federal Act. Virtually every one of the Act's critical safeguards depends upon the presence of "navigable waters," which the law defines to mean "waters of the U.S.,"[1] including:

[1] 33 U.S.C. § 1362(7) (defining "navigable waters" to mean "the waters of the United States").

- The national goal that pollutant discharges "be eliminated by 1985";[2]
- The absolute prohibition on discharging "any radiological, chemical, or biological warfare agent, any high-level radioactive waste, or any medical waste";[3]
- The core requirement that if an entity is going to discharge pollutants into waters from a point source, it must first apply for and obtain a permit that limits the pollutants allowed to be discharged;[4]
- The obligation that states develop water quality standards protecting designated uses and that EPA review them to ensure they are adequately protective;[5]
- EPA's review of total maximum daily load cleanup plans to restore impaired waters;[6]
- The requirement to develop water body-specific control strategies to address toxic pollution problems that are not solved by discharge standards applicable to sources of such pollution;[7]
- The obligation that states prepare biennial reports on water quality conditions;[8]
- Protections against the discharge of oil or hazardous substances;[9]
- The bar on a vessel that "is not equipped with an operable marine sanitation device" from operating in protected waters;[10]
- The directive for states to develop management programs for nonpoint pollution, and the related directive that EPA provide grants to assist with the implementation of such programs;[11]
- The requirement that applicants for federal permits obtain a state's certification that the discharge will comply with various provisions of the Act, including state water quality standards;[12] and
- Restrictions on the disposal of sewage sludge.[13]

Put simply, a water body that is denied treatment as a "water of the U.S." is subject to an assortment of industrial and municipal pollution assaults.

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[2] *Id.* § 1251(a)(1).
[3] *Id.* § 1311(f).
[4] *See id.* §§ 1311(a) (generally prohibiting the "discharge of any pollutant" without compliance with other requirements of the Act), 1362(12) (defining "discharge of a pollutant" to mean "any addition of any pollutant to navigable waters from any point source").
[5] *Id.* §§ 1313(c)(2)(A) & (c)(4).
[6] *Id.* § 1313(e)(3)(c) ("The Administrator shall approve any continuing planning process submitted to him under this section which will result in plans for all navigable waters within such State, which include . . . total maximum daily load for pollutants in accordance with subsection (d) of this section").
[7] *Id.* § 1314(l)(1).
[8] *Id.* § 1315(b).
[9] *See, e.g., id.* § 1321(b)(3) ("The discharge of oil or hazardous substances … into or upon the navigable waters of the United States in such quantities as may be harmful as determined by the President … is prohibited, except … where permitted in quantities and at times and locations or under such circumstances or conditions as the President may, by regulation, determine not to be harmful."); *id.* § 1321(j)(5) (providing for the development of facility response plans in the case of "[a]n onshore facility that, because of its location, could reasonably be expected to cause substantial harm to the environment by discharging into or on the navigable waters, adjoining shorelines, or the exclusive economic zone.").
[10] *Id.* § 1322(h)(4).
[11] *Id.* §§ 1329(a), (b) & (h).
[12] *Id.* § 1341.
[13] *Id.* § 1345.

It is likewise hard to overstate the importance of the aquatic resources that are implicated by this proposed rule. The three major categories of water bodies that have been thrown into the most doubt by developments in the law include so-called "isolated" waters; non-navigable tributaries, especially ones that do not flow "relatively permanently"; and waters adjacent to tributaries that are not considered "traditionally navigable." Although the exact extent of these categories is hard to quantify based on currently available information and is subject to interpretation, some statistics will give a rough sense of the scope of the problem. Approximately 20 percent of the roughly 110 million acres of wetlands in the continental U.S. could be considered "isolated."[14] Nearly two million miles of the nation's streams – about 59 percent of the total -- outside of Alaska are intermittent or ephemeral.[15] An estimated 53 percent of the streams outside of Alaska are "start reaches," making them unlikely to be traditionally navigable. Collectively, these streams have untold acres of wetlands adjacent to them.[16] An estimated 117 million Americans depend on drinking water suppliers that draw at least in part from intermittent, ephemeral, or headwater streams.[17]

These comments are organized as follows. First, we provide background on the establishment and judicial interpretation of the Clean Water Act showing that Congress intended for the law to be applied broadly, and that the Supreme Court's recent decisions support the continued exercise of broad jurisdiction. Second, we show how the existing policies governing implementation of the law – primarily a pair of guidance documents – do not properly protect water bodies consistent with the legal framework. Third, we explain why the proposed

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[14] Eric Pianin, Administration Establishes New Wetlands Guidelines; 20 Million Acres Could Lose Protected Status, Groups Say, Washington Post, Jan. 11, 2003, at A05 ("The new regulation would shift responsibility from the federal government to the states for protecting as much as 20 percent of the 100 million acres of wetlands in the Lower 48 states, according to official estimates."); Solicitor General Resp't Arg. Tr., *Rapanos v. U.S.* & *Carabell v. U.S. Army Corps of Eng'rs*, at 41-42 (U.S. Feb. 21, 2006) ("about 20 percent of the Nation's wetlands are isolated"); Letter from Benjamin H. Grumbles, Acting Assistant Administrator for Water, U.S. EPA, to Anu Mittal, Director, Natural Resources & Environment, General Accounting Office, at 2 (Feb. 4, 2004), reprinted in U.S. GENERAL ACCOUNTING OFFICE, GAO-04-297,WATERS AND WETLANDS: CORPS OF ENGINEERS NEEDS TO EVALUATE ITS DISTRICT OFFICE PRACTICES IN DETERMINING JURISDICTION, appendix IV (Feb. 2004) ("The Continental United States has lost over half of its wetlands since European settlement, with approximately 100 million wetland acres remaining. Of those, some 20% may be wetlands that are less obviously connected to the broader aquatic ecosystem."). Notwithstanding the 100 million acre estimate in some of these prior assessments, the figure is closer to 110 million acres, according to the U.S. Fish and Wildlife Service. *See* T.E. Dahl, U.S. Fish & Wildlife Serv., U.S. Dept. of Interior, Status and Trends of Wetlands in the Conterminous United States 2004 to 2009, at 16 (2011), available at http://www.fws.gov/wetlands/Documents/Status-and-Trends-of-Wetlands-in-the-Conterminous-United-States-2004-to-2009.pdf.

[15] Letter from Benjamin H. Grumbles, Assistant Administrator for Water, U.S. EPA, to Jeanne Christie, Executive Director, Association of State Wetland Managers, at 2 (Jan. 9, 2006) (mis-dated as Jan. 9, 2005). Please note that these figures may not be precise; for instance, we are aware that the House of Representatives' Science Committee recently released a set of maps prepared for EPA, and the national map states that there are "7,339,124 miles of linear streams in the U.S. (including Puerto Rico), [of which] 77 percent (5,661,337 miles) are intermittent or ephemeral." Indus Corporation under contract with U.S. EPA Office of Water, Streams and Waterbodies in the United States (Oct. 2013), available at http://science.edgeboss.net/sst2014/documents/epa/national2013.pdf. We are unsure of the full basis for these estimates, and they seem to include data for Alaska, which are not included in the figures cited above, but the central point is the same – an enormous amount of the nation's water resources are at stake.

[16] *Id.*

[17] U.S. EPA, Geographic Information Systems Analysis of the Surface Drinking Water Provided by Intermittent, Ephemeral, and Headwater Streams in the U.S. (last updated on Oct. 29, 2013), available at http://water.epa.gov/lawsregs/guidance/wetlands/surface_drinking_water_index.cfm.

protections for tributaries and adjacent waters are legally and scientifically justified and must be included in the final rule. Fourth, in order to ensure necessary protections for critical waters, and to ensure the rule's consistency with the Clean Water Act, we describe three key aspects of the rule that must be strengthened when the rule is finalized. Fifth, we provide responses to a set of issues on which the agencies specifically request public comment. Finally, we describe needed improvements in the current process of documenting and tracking jurisdictional decisions, to ensure improved consistency and clarity throughout the country and over time as the rules are implemented.

I. BACKGROUND

CONGRESS INTENDED THE CLEAN WATER ACT TO BE APPLIED BROADLY, AND THE SUPREME COURT'S DECISIONS IN *SWANCC* AND *RAPANOS* SUPPORT THE CONTINUED EXERCISE OF BROAD JURISDICTION.

A. The Jurisdictional Scope of the Clean Water Act Is Broad

It is clear from the statutory language and legislative history that the intent of Congress when passing the Clean Water Act was to embrace the broadest possible definition of "navigable waters" when it defined that term as "the waters of the United States."

The need for this broad scope is well documented. By the 1960s, the deterioration of the Nation's waters was alarmingly evident. Symbolic of their disastrous state was the Cuyahoga River, running through Cleveland, Ohio into Lake Erie; it became so polluted with industrial waste in the 1950s and 1960s that it caught fire on more than one occasion.[18] Lake Erie itself became so polluted from municipal waste and agricultural runoff that it was projected to become biologically dead. Unchecked water pollution in inland waterways accounted for record fish kills; for example, some 26 million fish died as a result of the contamination of Lake Thonotosassa, Florida.[19] Industry discharged mercury into the Detroit River at a rate of between 10 and 20 pounds per day, causing in-stream water to exceed the Public Health Service limit for mercury six times over.[20] Waterways in many cities across the country were reduced to nothing more than sewage receptacles for industrial and municipal waste. The rate of wetlands loss from the 1950s to the 1970s was approximately 450,000 acres per year.[21]

Leaving the problem to individual states coupled with piecemeal federal law was clearly failing. There was a general – and accurate – perception that past approaches relying on state-by-state water quality standards was not cleaning up the waters and, indeed, waters were becoming more polluted. There was clearly a need for a broader federal role to address water pollution. Public outcry demanded a strong response from Congress.

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[18] *U.S. v. Ashland Oil & Transp. Co.*, 504 F.2d 1317, 1326 (6th Cir. 1974).
[19] Robert W. Adler, et al., *The Clean Water Act: 20 Years Later* 5 (1993).
[20] *Id.*; *see also* Comm. on Pub. Works, Committee Print 93d Cong. 1st Sess., *A Legislative History of the Water Pollution Control Amendments of 1972* at 1253 (1973) (hereinafter "1972 Legislative History").
[21] W.E. Frayer et al., U.S. Fish & Wildlife Service, *Status and Trends of Wetlands and Deepwater Habitats in the Coterminous United States, 1950s to 1970s* at 3 (Apr. 1983).

B. Legislative Language and Legislative History Confirm that Congress Intended a Broad Scope of Protection

And Congress responded. The 1972 Act was hailed as the first truly comprehensive federal water pollution legislation. Congressman John Blatnik, Chairman of the House Public Works Committee, characterized it as a "landmark in the field of environmental legislation."[22] Senator Jennings Randolph, Chairman of the Senate Committee on Public Works, said, "It is perhaps the most comprehensive legislation that the Congress of the United States has ever developed in this particular field of the environment."[23]

The law's comprehensive nature was largely in recognition that existing water pollution laws were a failure. As Senator Edmund Muskie told the Senate when introducing the bill that was to become the new Act, "The committee on Public Works, after 2 years of study of the Federal water pollution control program, concludes that the national effort to abate and control water pollution is *inadequate in every vital aspect*."[24]

The very first sentence of the 1972 statute states, "The objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[25] To achieve this objective, Congress adopted a general prohibition on discharging pollutants from point sources into "navigable waters" without a permit, and gave the fullest effect to this and other provisions of the law by defining that key term as "the waters of the United States, including the territorial seas."[26]

1. Congress Deliberately Redefined Previous Definitions of "Navigable Waters" to Encompass All "Waters of the United States."

Both of the House and Senate versions of the bills to amend the Federal Water Pollution Control Act (FWPCA) were written to expand federal authority to control and ultimately eliminate discharges of water pollution across the country.[27] Both the House and Senate sought to radically restructure the Nation's federal authority to control water pollution even though their bills borrowed some language from earlier versions of federal water pollution control law, as well as from the Refuse Act (RA) and the Rivers and Harbors Act (RHA). In their respective

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[22] 1972 Legislative History at 350.
[23] *Id.* at 1269.
[24] *Id.* at 1253 (emphasis added).
[25] 33 U.S.C. § 1251(a). The House report explains, "The word 'integrity' … is intended to convey a concept that refers to a condition in which the natural structure and function of ecosystems is maintained." H.R. Rep. No. 92-911 at 76-77 (1972), 1972 Legislative History at 763. Similarly, the Senate report stated, "Maintenance of such integrity requires that any changes in the environment resulting in a physical, chemical or biological change in a pristine waterbody be of a temporary nature, such that by natural processes, within a few hours, days or weeks, the aquatic ecosystem will return to a state functionally identical to the original." 1972 U.S.C.C.A.N. at 3742.
[26] 33 U.S.C. §§ 1311(a), 1362(12), 1362(7). Other substantive provisions of the Act also strongly underscore that Congress' main purposes in enacting the law were water pollution and water quality, not navigation, and that Congress intended that the scope of the law be broad to achieve these purposes. *See, e.g.*, 33 U.S.C. § 1313(c)(2)(A), regarding water quality standards ("Such standards shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter. Such standards shall be established taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes, *and also taking into consideration their use and value for navigation*.") (emphasis added).
[27] H.R. 11896, 92nd Cong. (1971); S. 2770, 92nd Cong. (1971).

bills, both bodies initially borrowed the term "navigable waters" from the RA and RHA, and included a definition that itself used the term "navigable."[28] However, in the reports discussing their respective versions of the legislation, both the House and Senate expressed concern about potential narrow interpretations of which waters they intended to be covered by the new Act. The House Public Works Committee stated its concern as follows:

> One term that the Committee was reluctant to define was the term "navigable waters." The reluctance was based on the fear that any interpretation would be read narrowly. However, this is not the Committee's intent. The Committee fully intends 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.[29]

The Senate Committee on Public Works stated:

> Through a narrow interpretation of the definition of interstate waters the implementation of the 1965 Act was severely limited. Water moves in hydrologic cycles and it is essential that discharges of pollutants be controlled at the source.[30]

So while the House report focused upon the need for a broad constitutional interpretation of the Act's scope, and the Senate report spoke to the scientific reality of waters being interconnected, both bodies signaled their desire not to constrain the reach of the Act to those waters previously protected primarily on the grounds of navigability.

When the House and Senate met in conference committee, they took an additional step to ensure that the definition of "navigable waters" did not result in unduly narrow interpretations. As discussed in the report of the Conference Committee, the House version of the definition was accepted into the final bill, but – critically -- the word "navigable" was deleted from the definition. Thus, the new definition read as follows: "The term 'navigable waters' means the waters of the United States, including the territorial seas."[31]

The Conference report spoke to this change, using the exact terminology of the earlier House Public Works Committee report confirming that the term "be given the broadest possible constitutional interpretation," and expressing that the interpretation of this definition must be "unencumbered by agency determinations which have been made or may be made for administrative purposes."[32]

Finally, the debate in Congress on final passage of the Act confirmed the conference report's intent that the law be given broad application. For example, Congressman John D.

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[28] In the Senate, the earlier definition read: "the term navigable waters means the navigable waters of the United States, portions thereof, and the tributaries thereof, including the territorial seas and the Great Lakes." S. 2770, 92nd Cong. § 502(h) (1971), 1972 Legislative History at 1698. The House bill's initial definition read: "the term 'navigable waters' means the navigable waters of the United States, including the territorial seas." H.R. 11896, 92nd Cong. § 502(8) (1971), 1972 Legislative History at 1069.
[29] H.R. Rep. No. 92-911 at 131 (1972), 1972 Legislative History at 818.
[30] S. Rep. No. 92-414 at 77 (1971), 1972 Legislative History at 1495.
[31] S. Rep. No. 92-1236 at 144 (1971), 1972 Legislative History at 327.
[32] *Id.*

Dingell Jr. explained the definition in his statement to the House on the conference committee bill:

> [T]he 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.[33]

After reviewing the broad extent of the Commerce Clause authority, Representative Dingell went on to state:

> Thus, the 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. Indeed the conference report states on page 144:
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> > "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."[34]

Thus, Congress quite intentionally expanded the Act's jurisdictional scope in 1972 because of the new and ambitious water pollution reduction goals of the Act. For this reason, Congress chose to discard the traditional definition of the term "navigable waters" as it had been used in earlier laws and rejected placing other limits on the new law's jurisdictional reach such as some had proposed in earlier versions of the legislation.[35] Instead, Congress deleted the word "navigable" from the "navigable waters" definition of the 1972 Act, thereby asserting federal jurisdiction over all "the waters of the United States" in keeping with its stated objective to rid the Nation's waters of pollution.

2. Historically, the Clean Water Act Was Construed by the Courts to Apply to a Wide Variety of Waters.

Long before the cases to which the present proposal responds, the Supreme Court, in *International Paper Co. v. Ouellette*, recognized that the Act was designed to establish "an all-encompassing program of water pollution regulation," and "applies to all point sources *and virtually all bodies of water*."[36] Other courts also observed that "[i]t seems clear Congress intended to regulate discharges made into every creek, stream, river or body of water that in any way may affect interstate commerce,"[37] and that "Congress, by defining the term 'navigable waters' . . . to mean 'the waters of the United States, including the territorial seas,' asserted federal jurisdiction over the nation's waters to the maximum extent permissible under the Commerce Clause of the Constitution."[38]

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[33] 118 Cong. Rec. 33, 756 (1972), 1972 Legislative History at 250 (emphasis added).
[34] 118 Cong. Rec. 33, 767 (1972), 1972 Legislative History at 250-51 (emphasis added).
[35] The definition of "navigable water" in earlier versions of the bill that became the FWPCA of 1972 had made express reference to "navigability." Clean Water Restoration Act of 1966; sec. 211 § 2(4), 80 Stat. 1246, 1253.
[36] 479 U.S. 481, 492 (1987) (emphasis added; internal quotations omitted).
[37] *United States v. Earth Sciences, Inc.*, 599 F.2d 368, 375 (10th Cir. 1979).
[38] *NRDC v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975).

Likewise, when first presented with the question of whether certain aquatic features were "waters of the U.S.," the Supreme Court concluded that the Corps of Engineers could reasonably apply the Act's legal protections to wetlands. In *United States v. Riverside Bayview Homes, Inc.*, the Court said:

> In view of the breadth of federal regulatory authority contemplated by the Act itself and the inherent difficulties of defining precise bounds to regulable waters, the Corps' ecological judgment about the relationship between waters and their adjacent wetlands provides an adequate basis for a legal judgment that adjacent wetlands may be defined as waters under the Act.[39]

In other words, the Court believed that the precise contours of the law should be determined by the technical agencies charged with implementing it.

3. Additional Evidence That the Scope of the Act Must Be Construed Broadly

As noted above, the Act's core permit program – the § 402 National Pollutant Discharge Elimination System program[40] - applies to "navigable waters," i.e., to "the waters of the United States," as defined in § 502(7). Accordingly, the evolution of § 402 offers relevant contextual evidence concerning the proper implementation of the § 502(7) definition.

The § 402 NPDES program was designed to supersede the preexisting permit program under the 1899 Refuse Act. Section 402 provides that permits previously issued under the Refuse Act would thenceforth constitute NPDES permits, and that no further Refuse Act permits would be issued.[41] Significantly, the Refuse Act does not merely govern discharge into traditionally navigable waters. To the contrary, it encompasses discharge "into any navigable water of the United States, *or into any tributary* of any navigable water from which the same shall float or be washed into such navigable water."[42] Thus, to interpret the Clean Water Act in a way that would cause non-navigable tributaries of traditionally navigable waters to become excluded from the law, one would have to believe that the 1972 Congress *cut back* the geographic scope of the predecessor 19th Century statute.[43] The notion that Congress intended any such cutback is untenable.

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[39] 474 U.S. 121, 134 (1985).

[40] Section 402 authorized issuance of permits for "the discharge of any pollutant," 33 U.S.C. § 1342(a)(1), and section 502 defines "discharge of a pollutant" as the addition of a pollutant "to navigable waters." *Id.* § 1362(12).

[41] *Id.* §§ 1342(a)(4) & (5).

[42] *Id.* § 407 (emphasis added).

[43] Indeed, the cutback would be dramatic. *See* Letter from Benjamin H. Grumbles, Assistant Adm'r for Water, U.S. EPA, *available in* Brief of Assn. of State Wetlands Managers et al., as Amici Curiae Supporting Respondent in Rapanos v. United States, 547 U.S. 715 (2006) (Nos. 04-1034 & 04-1384), 2006 WL 139206 (estimating that over half of all U.S. streams are not traditionally navigable); Lance D. Wood, *Don't be Misled: CWA Jurisdiction Extends to All Non-Navigable Tributaries of the Traditional Navigable Waters and to Their Adjacent Wetlands*, 34 Envtl. L. Rep. 10187, 10193 n.32 (2004) (in the Missouri River watershed, there are by conservative estimate 559,669 miles of traditional navigable waters plus tributaries, of which traditional navigable waters represent only 3,151 miles – less than 1 percent). Even if only a fraction of these tributaries were to be left out of the scope of the Clean Water Act's protections – such as those lacking "relatively permanent flow" or an individualized showing of a demonstrable "significant nexus" to traditional navigable waters – the water pollution impacts would be significant.

The 1977 Amendments to the Act further confirm the inclusive nature of the law's scope. During the deliberations on those amendments, some members of Congress sought to narrow the waters covered by the Clean Water Act. Although the proposed narrowing language was included in the House bill, the Senate rejected it, and this history is extremely instructive.[44] Under the House's language, the dredge-and-fill permitting safeguards would have encompassed only traditionally navigable waters, together with wetlands that were "contiguous or adjacent" to such waters and also "periodically inundated."[45] Numerous Senators objected to the proposal as a significant weakening of the law and stressed that excising certain waters would undermine the basic structure of the Act. For example, Senator Baker emphasized that:

> Comprehensive jurisdiction is necessary not only to protect the natural environment but also to avoid creating unfair competition. Unless federal jurisdiction is uniformly implemented for all waters, dischargers located on nonnavigable tributaries upstream from the larger rivers and estuaries would not be required to comply with the same procedural and substantive standards imposed upon their downstream competitors.[46]

To avoid this outcome, the Senate Environment and Public Works Committee developed an amendment that exempted certain activities from needing permits, but which did not backtrack on jurisdiction. Senator Gary Hart then framed the choice for his colleagues:

> The Congress can capitulate. The Congress can abandon the national interest. The Congress can permit activities of a dredge-and-fill nature to go forward on those *small streams, marshes, wetlands, and swamps* which will make their way into the bigger waterways of this country. . . . Or we can establish a program of the sort the committee has established, which will protect all of those water systems; which will protect *all of the elements of those systems*, which will not permit dredge and fill activities to deposit very toxic materials into those waterways."[47]

Even strong opponents of comprehensive coverage under the Act acknowledged that the law, as written, covered a wide variety of aquatic resources. Senator Lloyd Bentsen, who led the charge in the Senate in 1977 to significantly roll back the scope of the Act's restrictions on the discharge of dredged or fill material, objected to the Environment and Public Works Committee's amendment. He complained: "The committee's amendment skirts the fundamental problem: the definition of Federal jurisdiction in the regulation of dredge and fill activities. The program *would still cover* all waters of the United States, including small streams, ponds, isolated marshes, and intermittently flowing gullies."[48] In the same vein, Senator Pete Domenici objected to the then-current "interpretation, saying almost all waters in the country were

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[44] *See United States v. Riverside Bayview Homes, Inc.*, 474 U.S. 121, 136-37 (1985) (discussing the 1977 debate and Congress's ultimate abandonment of any effort to narrow the definition of "waters").

[45] *See, e.g.*, Comm. on Env't & Pub. Works, Committee Print, 95th Cong., 2d Sess., Legislative History of the Clean Water Act of 1977, at 901 (Oct. 1978).

[46] *Id.* at 920. *See also id.* at 922 (Senator Baker stating: "Continuation of the comprehensive coverage of this program is essential for the protection of the aquatic environment. The once seemingly separable types of aquatic systems are, we now know, interrelated and interdependent. We cannot expect to preserve the remaining qualities of our water resources without providing appropriate protection for the entire resource."); *id.* at 923 (Senator Baker continuing, "let me emphasize that the protection of water quality must encompass the protection of the interior wetlands and smaller streams.").

[47] *Id.* at 908 (emphasis added).

[48] *Id.* at 903 (emphasis added).

navigable and, therefore, dredge and fill, and the corps ends up being a national permit system."[49] Despite these Senators' criticisms of the law's broad scope, Congress ultimately retained the 1972 definition of "waters of the United States" for all of the Act's key programs.

Thus, the current proposal and the legal uncertainty about the scope of the law must be understood in context. The broad jurisdiction evinced by the Clean Water Act's legislative language and Congress' intent makes clear that EPA and the Corps must of course work within the bounds proscribed by the Supreme Court (which, as discussed in detail below, are modest), but within those bounds they must exercise their remaining authority to the fullest extent to protect streams, wetlands, and other waters.

C. Congress Ratified Certain Elements of the Jurisdictional Rules.

As noted above, Congress amended the Act in 1977, specifically debated the proper scope of the law, and refused to narrow the Act's scope. This debate occurred against a backdrop of regulations that had been adopted by the Corps in 1975.[50] It is critical, therefore, to look at what those rules protected, as that provides the context for Congress's refusal to change course.

The Corps' rules defining the scope of the law read as follows:

> (2) "*Navigable waters*". (i) The term, "navigable waters," as used herein for purposes of Section 404 of the Federal Water Pollution Control Act, is administratively defined to mean waters of the United States including the territorial seas with respect to the disposal of fill material and excluding the territorial seas with respect to the disposal of dredged material and shall include the following waters:
>
> > (*a*) Coastal waters that are navigable waters of the United States subject to the ebb and flow of the tide, shoreward to their mean high water mark (mean higher high water mark on the Pacific coast);
> >
> > (*b*) All coastal wetlands, mudflats, swamps, and similar areas that are contiguous or adjacent to other navigable waters. "Coastal wetlands" includes marshes and shallows and means those areas periodically inundated by saline or brackish waters and that are normally characterized by the prevalence of salt or brackish water vegetation capable of growth and reproduction;
> >
> > (*c*) Rivers, lakes, streams, and artificial water bodies that are navigable waters of the United States up to their headwaters and landward to their ordinary high water mark;
> >
> > (*d*) All artificially created channels and canals used for recreational or other navigational purposes that are connected to other navigable waters, landward to their ordinary high water mark;

[49] *Id.* at 925.

[50] See 40 Fed. Reg. 31320, 31324-25 (July 25, 1975) (promulgating 33 C.F.R. §209.120(d)(2) definition of "navigable waters" for purposes of section 404 of the Act); *id*. at 31326 (phasing in implementation of portions of regulation from 1975 to 1977).

(*e*) All tributaries of navigable waters of the United States up to their headwaters and landward to their ordinary high water mark;

(*f*) Interstate waters landward to their ordinary high water mark and up to their headwaters;

(*g*) Intrastate lakes, rivers and streams landward to their ordinary high water mark and up to their headwaters that are utilized:

(*1*) By interstate travelers for water-related recreational purposes;

(*2*) For the removal of fish that are sold in interstate commerce;

(*3*) For industrial purposes by industries in interstate commerce;

(*4*) In the production of agricultural commodities sold or transported in interstate commerce;

(*h*) Freshwater wetlands including marshes, shallows, swamps and similar areas that are contiguous or adjacent to other navigable waters and that support freshwater vegetation. "Freshwater wetlands" means those areas that are periodically inundated and that are normally characterized by the prevalence of vegetation that requires saturated soil conditions for growth and reproduction; and

(*i*) Those other waters which the District Engineer determines necessitate regulation for the protection of water quality as expressed in the guidelines [required by section 404(b)(1) of the Act]. For example, in the case of intermittent rivers, streams, tributaries, and perched wetlands that are not contiguous or adjacent to navigable waters identified in paragraphs (*a*)-(*h*), a decision on jurisdiction shall be made by the District Engineer.[51]

It should be readily apparent that even these very early rules – adopted in response to a federal court's rejection of the Corps' initial narrow jurisdictional regulations[52] -- were fairly inclusive.[53]

This history is critical because the Supreme Court specifically considered the scope of these rules and Congress's awareness of them. In *Riverside Bayview*, the Court concluded that Congress – by debating and rejecting amendments to the Act that would have overturned these specific regulations -- acquiesced in the regulations with respect to adjacent wetlands. The Court stated, "[a]lthough we are chary of attributing significance to Congress' failure to act, a refusal by Congress to overrule an agency's construction of legislation is at least some evidence of the

[51] *Id.*

[52] *NRDC v. Callaway*, 392 F. Supp. 685, 686 (D.D.C. 1975).

[53] To be sure, some of the terms in these regulations were not as inclusive as a natural reading of them might suggest. For example, "lakes" were defined to include "natural bodies of water greater than five acres in surface area and all bodies of standing water created by the impounding of navigable waters identified in paragraphs (a)-(h) above," and "headwaters" was defined as generally representing "the point on the stream above which the flow is normally less than 5 cubic feet per second…." 40 Fed. Reg. at 31,325.

reasonableness of that construction, particularly where the administrative construction has been brought to Congress' attention through legislation specifically designed to supplant it."[54]

In keeping with this precedent, the agencies lack the discretion to refuse to protect waters that would have been protected under the 1975 regulations to which Congress acquiesced. That is to say, features included within these rules at least must be included. As discussed below, the law and science establishes that many more waters should be protected as well.

D. The Supreme Court's Decisions in SWANCC and Rapanos Do Not Preclude the Continued Exercise of Broad Jurisdiction.

Despite the clear legislative history and purpose of the Clean Water Act, previous Supreme Court precedent in *Riverside Bayview* and *Ouellette*, and numerous lower court cases broadly interpreting the jurisdictional scope of the law, in 2001, the Supreme Court – in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* ("*SWANCC*")[55] – held that the non-navigable, intrastate, "isolated" waters in that case could not be classified as "waters of the United States" solely based on the government's so-called "Migratory Bird Rule," an interpretation of the jurisdictional regulations that protected aquatic habitat used by migrating birds. Likewise, in *Rapanos v. United States*,[56] the Supreme Court issued several opinions – though no legal rationale commanded a majority of the Court – which have caused strenuous debate over the decision's implications for the legal scope of the Act. Nonetheless, these decisions do not preclude the continued exercise of broad jurisdiction under the Act and should not be read to impose limitations on jurisdiction beyond their narrow holdings.

1. The *SWANCC* Decision

The holding of *SWANCC* was narrow, and was largely limited to the facts of the case or very similarly situated waters. At issue in that case were waters that had been abandoned gravel pits that, over the years, had filled with water and were used as habitat by migrating waterfowl. In asserting jurisdiction over the waters, the Corps cited the presence of migratory birds as the jurisdictional trigger for the Clean Water Act; they did not cite any of the other bases in their regulations that also allowed them to assert Clean Water Act protections over intrastate waters, whether they appear to be "isolated" or not.[57] Accordingly, the Supreme Court did not invalidate any of the regulatory bases for asserting jurisdiction over such water bodies (such as links to interstate commerce). Nor did the Court overturn its earlier unanimous decision in *Riverside Bayview* or alter its prior holding deferring to the expert judgment of the agencies with respect to waters included in the regulatory definition.

The Court's holding was very constrained; it ruled that the Corps' regulations "as clarified and applied to petitioner's balefill site pursuant to the 'Migratory Bird Rule' . . . exceeds the authority granted to respondents under § 404(a) of the CWA."[58] The five-Justice

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[54] 474 U.S. at 137.
[55] 531 U.S. 159 (2001).
[56] 547 U.S. 715 (2006).
[57] The term "isolated" does not currently appear in the Act itself or in EPA or Corps jurisdictional regulations.
[58] 531 U.S. at 174 (internal citations omitted). The Migratory Bird Rule was contained in the 1986 preamble to the Corps' regulations, and is not codified in the Code of Federal Regulations. 51 Fed. Reg. 41,206, 41,217 (Nov. 13, 1986).

majority decision did contain gratuitous language – dicta – that was read by industry lawyers and others as inviting additional legal attacks on federal protection for waters that are not traditionally navigable. Fortunately, when those arguments were made, the courts generally did not interpret *SWANCC* broadly, though it still did lead to a cutback on legal protections.[59]

2. The *Rapanos* Decision and Its Three Major Opinions

Although the claims of those opposed to Clean Water Act protections who were trying to expand upon the *SWANCC* decision were largely rejected by the lower courts, in October 2005 the Supreme Court took up two other cases – *United States v. Rapanos* and *Carabell v. U.S. Army Corps of Engineers* – that together questioned the extent to which the law protects wetlands adjacent to tributaries that are not traditionally navigable.

In the *Rapanos* and *Carabell* cases, the Bush administration argued that the Clean Water Act and its implementing regulations properly encompass and protect the non-navigable tributaries of "traditionally navigable" waters and the wetlands adjacent to these tributary streams and rivers. This position was supported by briefs filed by more than 30 states' Attorneys General and nine members of Congress who helped pass the Clean Water Act in 1972, its amendments in 1977, or both. Also filing briefs in favor of the government's position were four former EPA administrators who served under Republican and Democratic administrations; a coalition of hunting and angling groups and businesses; state water pollution control officials, wetland managers, fish and wildlife agencies, and floodplain managers; New York City; numerous western resources councils; Macomb County (MI); and many environmental, public health, and conservation groups.

The *Rapanos* petitioners and some supporting organizations argued that the Clean Water Act does not protect non-navigable tributaries and only covers those wetlands directly adjacent to traditionally navigable waters.[60] For instance, the American Farm Bureau Federation, perhaps the most vocal public opponent of this proposal, argued that the Act only includes "waters that are 'navigable'—that 'were or had been navigable in fact or which could reasonably be so made.'"[61]

In its decision, the Supreme Court reached no majority opinion but split 4-1-4 in its analysis of the Clean Water Act and the extent to which the law covers adjacent wetlands.[62] The Court did not invalidate any provision of the agencies' existing rules defining the "waters of the U.S.," but the various opinions suggested three different tests for determining whether wetlands adjacent to non-navigable tributaries remain under the scope of the Act.

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[59] *See, e.g., United States v. Rapanos*, 376 F.3d 629, 638 (6th Cir. 2004) ("[T]he majority of courts have interpreted *SWANCC* narrowly to hold that while the CWA does not reach isolated waters having no connection with navigable waters, it does reach inland waters that share a hydrological connection with navigable waters."), *vacated*, 547 U.S. 715 (2006).

[60] The petitioners in the *Carabell* case advanced a more limited argument, claiming that it was impermissible for the Corps to regulate a wetland as "adjacent" to a protected water body – and therefore subject to the CWA – if it lacked a hydrological connection with the water body. Brief for Petitioner at 12-13, *Carabell v. United States Army Corps of Engineers*, 547 U.S. 715 (2006) (No. 04-1384), 2005 WL 3279898.

[61] Brief for American Farm Bureau Fed. at 10, *Rapanos v. U.S.*, 547 U.S. 715 (2006) (No. 04-1034), available at http://www.appellate.net/briefs/rapanos_amicus.pdf.

[62] *Rapanos v. United States*, 547 U.S. 715 (2006).

The four-justice plurality, in an opinion written by Justice Scalia, would significantly limit the law's scope. Focusing on a 1954 dictionary definition of "waters" more than the language, purpose, or history of the Clean Water Act (a law he characterized as "tedious"), Justice Scalia, joined by Chief Justice Roberts and Justices Thomas and Alito, concluded that:

> [T]he phrase "the waters of the United States" includes only those relatively permanent, standing or continuously flowing bodies of water 'forming geographic features' that are described in ordinary parlance as "streams[,] … oceans, rivers, [and] lakes." The phrase does not include channels through which water flows intermittently or ephemerally, or channels that periodically provide drainage for rainfall.[63]

The opinion also would require wetlands to have a "continuous surface connection" to jurisdictional waters to be protected.[64]

Justice Kennedy concurred that the cases should be remanded, but completely rejected Justice Scalia's reasoning. Indeed, he stated that Justice Scalia's plurality opinion "is inconsistent with the Act's test, structure, and purpose."[65] By contrast, Justice Kennedy would require the agencies to show a physical, biological, or chemical linkage – a "significant nexus" – between wetlands and a more obviously covered water body in order for them to be protected.[66] In particular, Justice Kennedy stated:

> wetlands possess 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." When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term "navigable waters."[67]

Even though the jurisdictional status of tributaries was not at issue in *Rapanos*, Justice Kennedy said that, applied consistently, existing rules "may well provide a reasonable measure of whether specific minor tributaries bear a significant nexus with other regulated waters to constitute 'navigable waters' under the Act."[68] For wetlands adjacent to such non-navigable tributaries, Justice Kennedy suggested that a "significant nexus" could be shown in different ways, depending on the kind of water to which the wetland is adjacent.[69]

Critically for the present rulemaking, Justice Kennedy made clear that water bodies could be shown to have a significant nexus on a categorical basis and that all water bodies within those categories could therefore be protected, even if individual waters did not influence downstream water quality. Specifically, he stated:

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[63] *Id.* at 739 (citation omitted).
[64] *Id.* at 742.
[65] *Id.* at 776.
[66] *Id.* at 779.
[67] *Id.* at 780.
[68] *Id.* at 781.
[69] *Id.* at 782 ("When the Corps seeks to regulate wetlands adjacent to navigable-in-fact waters, it may rely on adjacency to establish its jurisdiction. 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.").

> Through regulations or adjudication, the Corps may choose to identify categories of tributaries that, due to their volume of flow (either annually or on average), their proximity to navigable waters, or other relevant considerations, are significant enough that wetlands adjacent to them are likely, *in the majority of cases*, to perform important functions for an aquatic system incorporating navigable waters.[70]

Justice Kennedy's categorical approach mirrors that of the unanimous Court in *Riverside Bayview*, which noted:

> Of course, it may well be that not every adjacent wetland is of great importance to the environment of adjoining bodies of water. But the existence of such cases does not seriously undermine the Corps' decision to define all adjacent wetlands as "waters." If it is reasonable for the Corps to conclude that *in the majority of cases*, adjacent wetlands have significant effects on water quality and the aquatic ecosystem, its definition can stand. That the definition may include some wetlands that are not significantly intertwined with the ecosystem of adjacent waterways is of little moment, for where it appears that a wetland covered by the Corps' definition is in fact lacking in importance to the aquatic environment--or where its importance is outweighed by other values--the Corps may always allow development of the wetland for other uses simply by issuing a permit.[71]

This framework underscores another way in which the Supreme Court's rulings do not require a major retreat on jurisdiction: the agencies' ecological judgment about the importance of certain types of waters need not be so refined that each water body within the category contributes to the aggregate effect that such waters have downstream. Indeed, both of these passages reveal that only a majority of waters in the category need to satisfy that condition.

In dissent in *Rapanos*, Justice Stevens, joined by Justices Souter, Ginsburg, and Breyer, said that the existing agency regulations reflected a reasonable interpretation of the statutory phrase "waters of the United States," especially in light of *Riverside Bayview*, which upheld the application of these very same rules.[72] While rejecting the rationale of both of the other opinions, these four justices stated that, since they would protect all of the waters that Justice Scalia's test would protect and all of the ones Justice Kennedy's test would protect, the agencies should continue to protect streams and wetlands if they qualify under either test.

In the wake of *Rapanos*, the agencies and the courts have struggled to apply the various opinions, and have done so inconsistently. At bottom, however, what has emerged from the highly litigious past eight years is that the law protects at least those waters meeting Justice Kennedy's test,[73] and that the plurality test is an additional valid approach to protecting waters

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[70] *Id.* at 780-81 (emphasis added).
[71] 474 U.S. at 135 n. 9.
[72] *Rapanos*, 547 U.S. at 792.
[73] No federal court of appeals ruling since *Rapanos* has held that Justice Kennedy's approach may not be used to establish jurisdiction, despite polluter-led arguments to try to establish the plurality test as the sole basis for asserting coverage for a water body. *See generally* Memorandum from Dick Pedersen, President, Environmental Council of the States, ACOEL Memo on Waters of the U.S. Under the CWA, at 8-14 (Sept. 11, 2014) (distributing memo developed by American College of Environmental Lawyers for ECOS, which discusses judicial treatment of *Rapanos*, among other things), available at http://acoel.org/file.axd?file=2014%2f9%2fWaters+of+the+U+S+Final+9_11_14.pdf.

throughout the vast majority of the country.[74] Although working out the precedential effect of the different opinions in *Rapanos* is undoubtedly an interesting legal puzzle,[75] we submit that it is not very important in the context of the present rulemaking, which seeks to establish rules for categories of water bodies, rather than on a case-by-case basis. When viewed in that context, the categories of waters that the science demonstrates to have a significant nexus will entirely subsume the categories of waters that the plurality would have protected. Accordingly, it is appropriate to base the current rulemaking on the significant nexus approach, though we believe that the agencies should also note in the final rule that the plurality's opinion provides an additional rationale to categorically protect certain waters, such as relatively permanent tributaries, ponds, and other waters and wetlands with a continuous surface connection to such waters.

E. Interstate Commerce Provisions of the Existing Rules Remain Intact.

The tests that emerge from *Rapanos* are not the only proper bases for the agencies to protect waters under the Clean Water Act. The current regulations define "waters of the U.S." as including "[a]ll other waters … the use, degradation or destruction of which could affect interstate or foreign commerce. . . ."[76] This provision was not struck down by the Supreme Court in either *SWANCC* or *Rapanos* and, as indicated above, a predecessor version of that

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[74] Only the Eleventh Circuit has held explicitly that Justice Kennedy's test is the only approach that may be used to establish jurisdiction. *United States v. Robison*, 505 F.3d 1208 (11th Cir 2007), *cert. denied sub nom, U.S. v. McWane, Inc.*, 555 U.S. 1045 (2008).

[75] Our own analysis leads us to conclude that no binding holding results from *Rapanos*. In cases like *Rapanos* where there is no majority decision, the rule expressed in the Supreme Court decision *Marks v. United States*, 430 U.S. 188 (1977), is typically used to arrive at a holding. According to *Marks*, "When a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds." *Id.* at 193. However, *Marks* cannot be applied to the opinions in *Rapanos*. The general rule on split opinions from Marks "only works in instances where one opinion can meaningfully be regarded as narrower than another – only when one opinion is a logical subset of other, broader opinions." *United States v. Alcan Aluminum Corp.*, 315 F.3d 179, 189 (2d Cir. 2003) (quoting *King v. Palmer*, 950 F.2d 771, 781 (D.C. Cir. 1991) (en banc)) (internal quotation marks omitted). Applying this analysis to *Rapanos*, Justice Kennedy's reasoning and that of the plurality cannot be considered a logical subset of one another, so the *Marks* analysis is inapplicable. Justice Kennedy underscores his near-complete disagreement with the plurality when he says that "the plurality's opinion is inconsistent with the Act's text, structure, and purpose." *Rapanos*, 547 U.S. at 776. Moreover, the two opinions have entirely disparate rationales that cannot be reconciled; indeed, the opinions' reasoning is primarily based on interpreting different statutory terms – the plurality focuses on the term "waters," whereas Justice Kennedy focuses on the term "navigable." *Compare* 547 U.S. at 731 (plurality opinion) ("We need not decide the precise extent to which the qualifiers 'navigable' and 'of the United States' restrict the coverage of the Act. Whatever the scope of these qualifiers, the CWA authorizes federal jurisdiction only over 'waters.'") *with id.* at 779 (Kennedy, J., concurring) ("Consistent with *SWANCC* and *Riverside Bayview* and with the need to give the term 'navigable' some meaning, the Corps' jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense."). We therefore submit that no binding holding emerges from *Rapanos*, except that additional fact-finding is needed to assert jurisdiction over the wetlands at issue in the cases before the Court. *Alcan Aluminum*, 315 F.3d at 189 ("When it is not possible to discover a single standard that legitimately constitutes the narrowest ground for a decision on that issue, there is then no law of the land because no one standard commands the support of a majority of the Supreme Court.") (citing *Rappa v. New Castle County*, 18 F.3d 1043, 1058 (3rd Cir. 1994)). At minimum, because the two opinions allow for jurisdiction in some individual cases in which the other may not, each could be considered the "narrowest grounds" in particular circumstances, and it is thus appropriate for the agencies to rely on both the plurality and Kennedy rationales in implementing the decision in advance of revised rules.

[76] *See, e.g.*, 40 C.F.R. § 230.3(s)(3).

provision was contained in the regulations that Congress specifically considered and refused to overturn. Accordingly, interstate commerce connections remain a valid basis for the protection of resources even if they do not have a demonstrable "significant nexus" to navigable waters.

The federal government has "the power to regulate those activities having a substantial relation to interstate commerce, i.e., those activities that substantially affect interstate commerce."[77] Although the Court's opinions spawned significant debate about whether Congress's use of the term "navigable waters" (defined as "waters of the United States") in the Clean Water Act was intended to grant EPA and the Corps the authority to regulate all such commerce-affecting activities, the Supreme Court has never definitively ruled on this question. In *SWANCC*, the Court narrowly limited its holding to the facts of the case, ruling that the Corps' regulations, *as applied pursuant to the Migratory Bird Rule*, exceeded Clean Water Act authority.[78] The Court did not invalidate the regulations themselves or rule that they could never be applied based on other factors beyond the presence of migratory birds. In other words, alternative grounds for jurisdiction pursuant to the "could affect commerce" provision of the regulations remained viable after *SWANCC*. Turning to *Rapanos*, the Court produced no binding holding in that case, as discussed above. The four dissenting Justices voted to uphold the existing regulatory approach, and the plurality and Justice Kennedy disagreed with each other about what the actual bounds of the agencies' jurisdiction should be – and in any event, neither Justice Kennedy nor the plurality ruled to invalidate the regulations. As a result, EPA and the Corps still retain the authority to exercise jurisdiction over waters that substantially affect interstate commerce, as long as the sole basis for that authority is not the mere presence of migratory birds.

A further reason to include a provision that permits jurisdiction over waters with interstate commerce connections is that such a requirement was part of the rules to which the Supreme Court found Congress had acquiesced in preparing, debating, and adopting the 1977 amendments to the Act. Specifically, the rules on the books when Congress acted in 1977 stated that water bodies were protected if they were used "[b]y interstate travelers for water-related recreational purposes; [f]or the removal of fish that are sold in interstate commerce; [f]or industrial purposes by industries in interstate commerce; [or i]n the production of agricultural commodities sold or transported in interstate commerce…."[79]

F. Summary: The Legal Framework for Identifying "Waters of the United States"

Based on the foregoing discussion of the Supreme Court's decisions, several principles emerge that the agencies should follow in establishing rules that set out what kinds of aquatic features are covered by the law:

- Congress intended the law to have a comprehensive scope, because controlling pollution in larger waterways requires protecting the smaller and non-perennial resources upstream.

[77] *United States v. Lopez*, 514 U.S. 549, 558-59 (1995).
[78] *SWANCC*, 531 U.S. at 174.
[79] 40 Fed. Reg. at 31,324.

- Congress specifically considered rolling back protections over various non-navigable waters and rejected that approach, thereby ratifying coverage for certain waters.
- For decades, the law was understood to protect the vast majority of the nation's surface waters consistent with Congress's intent.
- The Supreme Court's decisions in *SWANCC* and *Rapanos* together do not require a significant retreat on comprehensive jurisdiction. Rather, they stand for the proposition that, although use by migratory birds, by itself, is not a sufficient basis to make a water body a "water of the United States," non-navigable waters may continue to be broadly protected under the law, and that is true at least for those categories of waters for which the science shows a majority of waters in the category contribute to an aggregate effect that amounts to a "significant nexus" with interstate or traditionally navigable waters.
- Interstate commerce remains a valid basis for protecting waters under the law.

In the sections that follow, we demonstrate that: the current legal status quo – as reflected in EPA/Corps guidance from 2003 and 2008 – does not protect water consistent with these principles; the proposed rule does a much better job of protecting the waters that Congress demanded be covered; and the proposal needs to be strengthened in several key aspects.

II. EXISTING GUIDANCE MUST BE REPLACED

EXISTING GUIDANCE IS MORE LIMITED THAN THE SUPREME COURT'S DECISIONS REQUIRE, ITS PRACTICAL IMPLEMENTATION HAS FURTHER UNDERMINED PROTECTIONS FOR WATERS THAT SHOULD BE COVERED, AND RULEMAKING IS THE PROPER ADMINISTRATIVE APPROACH FOR ADDRESSING THE LEGAL UNCERTAINTY.

Following both *SWANCC* and *Rapanos*, EPA and the Corps jointly developed guidance for field staff to aid in their implementation of the rules and the Court's decisions. As summarized below, these policies do not square with the legal framework that exists today, even after the Court's opinions, and the evidence suggests that these interpretations are resulting in the loss of aquatic resources.

A. *The 2003 Guidance Has Led the Corps and EPA to Leave Many Legally Protected Waters Unprotected*

In 2003, the agencies published a joint memorandum that discussed *SWANCC* and subsequent case law, which on its face did not represent a major retrenchment on clean water protections. It instructed as follows:

> In light of *SWANCC*, field staff should not assert CWA jurisdiction over isolated waters that are both intrastate and non-navigable, where the sole basis available for asserting CWA jurisdiction rests on any of the factors listed in the "Migratory Bird Rule." In addition, field staff should seek formal project-specific HQ approval prior to asserting jurisdiction over waters based on other factors listed in 33 CFR 328.3(a)(3)(i)–(iii).

> Field staff should continue to assert jurisdiction over traditional navigable waters (and adjacent wetlands) and, generally speaking, their tributary systems (and adjacent wetlands). Field staff should make jurisdictional and permitting decisions on a case-by-case basis considering this guidance, applicable regulations, and any additional relevant court decisions. Where questions remain, the regulated community should seek assistance from the agencies on questions of jurisdiction.[80]

In practice, however, the agencies' implementation of the 2003 policy guidance significantly undermined protections for water bodies that are geographically "isolated" and other intrastate waters. As it has unfolded, the guidance's instruction to get site-specific permission to protect any "other waters" under the existing rules has operated as *de facto* prohibition on protecting any "isolated" waters.

For instance, in September, 2005, the U.S. Government Accountability Office (GAO) issued a report that found, among other things, that the Corps was not adequately documenting its rationale for deciding that certain wetlands, streams, and other waters were no longer covered by the Clean Water Act.[81] In the five Corps' districts covered by the GAO investigation, the report found that only five percent or less of the files in four of the five districts contained a detailed rationale to justify a decision that had been made to decline jurisdiction, and that even in the best district, only 31 percent of the files contained such a rationale.[82] The GAO further found that "[t]he percentage of files that contained *no rationale whatsoever* as to why the Corps did not assert jurisdiction ranged from a low of 12 percent to a high of 49 percent in the five districts. The remaining files contained partial rationales."[83] In contrast, the GAO report found that the Corps' did more thoroughly document cases in which jurisdiction was asserted.[84]

More importantly, the GAO confirmed that the Corps was not using its legal authority to protect intrastate, "isolated" waters under the statute and its still-on-the-books regulations. The report states that:

> In the five districts we reviewed, Corps officials said they generally do not consider seeking jurisdiction over isolated, intrastate, nonnavigable waters on the sole basis of 33 C.F.R. § 328.3(a)(3) because (1) headquarters has not provided detailed guidance on when it is appropriate to use this provision; (2) they believe that headquarters does not want them to use this provision; (3) they were concerned about the amount of time that might be required for a decision from headquarters; or (4) few isolated, intrastate,

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[80] 68 Fed. Reg. 1991, 1997-98 (Jan. 15, 2003).

[81] U.S. Government Accountability Office, *Waters and Wetlands: Corps of Engineers Needs to Better Support Its Decisions for Not Asserting Jurisdiction,* Sept. 2005, available at http://www.gao.gov/assets/250/247705.pdf. .

[82] *Id*. at 5. The five Corps districts included in the GAO study are Galveston, St. Paul, Jacksonville, Chicago, and Omaha. *See id.* at 9.

[83] *Id*. at 5 (emphasis added).

[84] *Id*. at 4. This section of the Corps' regulations includes in the definition of "waters of the U.S." those waters described as "[a]ll other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce." 33 C.F.R. § 328.3(a)(3).

> nonnavigable waters were in their districts whose use, degradation, or destruction could affect interstate commerce.[85]

In its conclusions, GAO recommended that the Secretary of the Army, through the Corps, and the Administrator of EPA jointly develop procedures that would provide "greater clarity" to the districts "when using 33 C.F.R. § 328.3(a)(3) as the sole basis for asserting jurisdiction."[86]

The GAO findings are consistent with a report completed by several national environmental organizations the previous year that had also concluded that the EPA and Corps were not fulfilling their obligation under the Act, its regulations, and judicial precedent to use their full legal responsibility to protect all of the waters that they can, leaving unprotected many waters that were, as a matter of law, still covered by the Clean Water Act. The report, issued in August 2004 by Earthjustice, the National Wildlife Federation, the Natural Resources Defense Council, and the Sierra Club, relied upon Corps of Engineers' records and revealed numerous examples of the Corps using the *SWANCC* decision and the 2003 guidance to decline jurisdiction over waters. The case studies in the report indicated that Corps districts around the country refused to assert jurisdiction over obviously significant waters including an 86-acre lake, a 150-mile-long river, a 4,000-acre tract of wetlands, and a 69-mile-long canal – leaving these waters and many others across the nation vulnerable to pollution and destruction.[87]

Indeed, the agencies now readily concede that, under the 2003 guidance, a finding of isolation effectively means that a water body will be treated as non-jurisdictional. In a June 2007 document, for instance, the agencies stated:

> All jurisdictional determinations based on commerce (§ 328.3(a)(3)) must be approved by HQ. Since the [2003] guidance has been in place, we have received 11 requests. Of these 11 requests, 3 cases were determined to be jurisdictional under other parts of the CWA [i.e., (a)(1) waters], 4 cases were determined to be not jurisdictional and 3 cases were withdrawn, and 1 is under review."[88]

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[85] *Id.* at 6.
[86] *Id.* at 41.
[87] *See* Earthjustice, NWF, NRDC, and Sierra Club, *Reckless Abandon: How the Bush Administration is Exposing America's Waters to Harm* (Aug. 2004), available at http://vault.sierraclub.org/watersentinels/downloads/ReckelssAbandon.pdf.
[88] U.S. Army Corps of Eng'rs, Questions & Answers for *Rapanos* & *Carabell* Decision at 19 (June 5, 2007), available at http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/cwa_guide/rapanos_qa_06-05-07.pdf. It is worth noting that the above figure may not be entirely accurate, as it seems slightly inconsistent with a separate estimate. *See* General Accounting Office, Waters & Wetlands: Corps of Engineers Needs to Evaluate Its District Office Practices in Determining Jurisdiction, at 14 n. 14 (Feb. 2004), available at http://www.gao.gov/assets/250/241520.pdf ("Since January 2003, there have been eight cases in which districts sought headquarters' approval to assert jurisdiction over isolated, intrastate, nonnavigable waters, based upon 33 C.F.R. § 328.3(a)(3). In six of these cases, Corps headquarters ultimately determined that the water in question was navigable-in-fact. In one case, headquarters determined the water in question was not jurisdictional; and, in another, the district withdrew its request for headquarters' approval."). Nevertheless, we understand that one bottom line fact remains true – the agencies have not asserted jurisdiction over any water body using their "(a)(3)" authority since the guidance was issued.

In other words, between January 2003 and June 2007, only 11 requests to assert jurisdiction over "isolated" waters based on commerce went to HQ, and *none of them* were approved during that period. And these few were just the tip of the iceberg; this accounting did not tally up the number of cases in which the agencies declined jurisdiction without even bothering to elevate the matter.

Moreover, the Court's decision in *Rapanos* did not alter the agencies' practice with respect to so-called "isolated" waters,[89] even though one of the few things that was clear after *Rapanos* was that at least those waters that significantly affected downstream water quality could be protected, and even though (as discussed below) many kinds of "isolated" waters are critical components of the watersheds in which they are located. In a 2011 document, EPA stated that, since *SWANCC*, "no isolated waters have been declared jurisdictional by a federal agency,"[90] and the economic analysis that accompanied the current proposed rule contains a review of records from the Corps' ORM2 (Operation and Maintenance Business information Link, Regulatory Module) database, which indicates that in a two-year period under current practices, the Corps would likely determine all 8,209 instances of "other waters" it encountered to be non-jurisdictional.[91]

This isolation-equals-non-jurisdiction approach has also been acknowledged in Congressional testimony, as has the fact that it is not required by the case law. At an October 18, 2007 hearing before the House Transportation and Infrastructure Committee hearing – ironically enough, a hearing to mark the 35th anniversary of the Clean Water Act – the then-EPA Assistant Administrator for Water testified about the 2003 guidance and said:

> [T]he basic point there is in the guidance we held open the possibility that there could be circumstances under (a)(3) paragraphs of our regulations where there could be an assertion of jurisdiction over isolated interstate non-navigable waters without relying on the migratory bird rule provisions. As a legal matter, that is still possible, but as a practical matter we had not asserted jurisdiction over those types of wetlands based on that guidance, which is still in place.[92]

Sadly, the 2003 guidance and its *de facto* rule denying protections to intrastate, non-navigable, "isolated" waters are now more than a decade old. Surely many thousands of waters

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[89] *See* U.S. EPA & U.S. Army Corps of Eng'rs, "Clean Water Act Jurisdiction Following the U.S . Supreme Court's Decision in *Rapanos v. United States* & *Carabell v. United States*, at 4 n. 19 (Dec. 2, 2008) (hereinafter "2008 *Rapanos* Guidance), available at http://water.epa.gov/lawsregs/guidance/wetlands/upload/2008_12_3_wetlands_CWA_Jurisdiction_Following_Rapanos120208.pdf ("This guidance does not address SWANCC, nor does it affect the Joint Memorandum regarding that decision issued by the General Counsels of EPA and the Department of the Army on January 10, 2003.").

[90] U.S. EPA, Potential Indirect Economic Impacts and Benefits Associated with Guidance Clarifying the Scope of Clean Water Act Jurisdiction, at 3 (Apr. 27, 2011), available at http://water.epa.gov/lawsregs/guidance/wetlands/upload/cwa_guidance_impacts_benefits.pdf.

[91] U.S. EPA & U.S. Army Corps of Eng'rs, Economic Analysis of Proposed Revised Definition of Waters of the United States, at 12 (Mar. 2014), available at http://www2.epa.gov/sites/production/files/2014-03/documents/wus_proposed_rule_economic_analysis.pdf.

[92] Testimony of Benjamin H. Grumbles, EPA Assistant Administrator for Water, Hearing of House Transportation & Infrastructure Committee: "The 35th Anniversary of the Clean Water Act: Successes and Future Challenges" (Oct. 18, 2007), available at http://www.gpo.gov/fdsys/pkg/CHRG-110hhrg38565/html/CHRG-110hhrg38565.htm.

have been cut out of the Act's pollution protections even though the Supreme Court did not strike down the regulatory basis for their coverage; in essence, the policy that has developed because of the 2003 guidance forces field personnel to disregard the still-lawful rules. This rulemaking presents an opportunity for the agencies to return to a predictable and legal approach to assessing the jurisdictional status of the nation's waterways.

B. Applying the 2008 Guidance to Tributary Streams and Implementing the "Significant Nexus" Framework in a Limited Manner Has Hurt Protections for Many Waters.

Following *Rapanos*, the agencies issued new guidance aimed at addressing the various opinions in the decision. The first post-*Rapanos* guidance came out in June, 2007, and was replaced by a new document in December, 2008. The guidance adds to the confusion created by *SWANCC*, the 2003 guidance, and by the *Rapanos* decision itself by creating new constraints on exercising jurisdiction that were not required by the Court. Specifically, the post-*Rapanos* guidance: (1) inappropriately concluded that categorical protections for tributaries were undermined by *Rapanos*; (2) narrowly limited the scope of the "significant nexus" analysis for those waters to which it applies; and (3) continued the pre-*Rapanos* practice of treating so-called "isolated" waters as *per se* non-jurisdictional, despite the authority in the regulations (and the lack of direction in either *SWANCC* or *Rapanos* to vary from the regulations) authorizing such waters' protection under certain circumstances. Many instances of these policy choices threatening particular water bodies are presented below; NRDC and our partner groups also surveyed examples in a 2009 report.[93]

1. Failing to Protect Tributaries Categorically Leads to Their Pollution and Destruction.

The agencies' post-*Rapanos* guidance does not assert categorical jurisdiction over tributaries, including streams. Rather, it concludes that streams that are not "relatively permanent" must be analyzed under Justice Kennedy's "significant nexus" framework. This approach is wrong as a matter of law and dangerous in fact.

As indicated above, the Supreme Court's decisions did not invalidate *any* provision of the existing regulations, including the provision conferring categorical jurisdiction over tributaries to various kinds of waters. Indeed, the Court would have been unjustified in doing so, as the waters at issue in both *SWANCC* and *Rapanos* were not tributaries themselves.

We have seen a number of examples that indicate that *Rapanos* is being used to deny tributaries protections in the field. For example, in just the few months following the issuance of the 2007 guidance, we identified several examples, including the following:

- The Omaha District found an ephemeral stream to be unprotected based on lack of significant nexus, where the flow of the tributary was unlikely to reach a traditionally

[93] Earthjustice et al., *Courting Disaster: How the Supreme Court Has Broken the Clean Water Act and Why Congress Must Fix It* (2009) (hereinafter "*Courting Disaster*"), available at http://vault.sierraclub.org/watersentinels/downloads/CourtingDisaster.pdf.

navigable water as a result of the intervening presence of "a water-supply reservoir with all impounded water piped to municipal water treatment plants or for re-injection into local bedrock aquifers."[94] This seems completely at odds with the Corps' stated view that "[g]enerally, impoundment of a water of the U.S. does not affect the water's jurisdictional status,"[95] and the existing regulations' separate provision declaring impoundments of certain waters jurisdictional.

- The Nashville District rejected Clean Water Act protections for three ephemeral streams, despite acknowledging the potential importance of such waters. In each case, the district based its assessment of the likelihood of a downstream effect on nothing more than distance and its unsubstantiated conclusion that such distance would attenuate the impact. As the district said in each case: "It is possible during a heavy precipitation event that the unnamed tributary to Horn Springs Branch could carry pollutants and flood waters to TNW along with transferring nutrients and oranic [sic] carbon. However, due to the fact that the water has to travel through two tributaries and between 5-10 river miles to the TNW, the impacts, if any would be very minor."[96]

- The Jacksonville District declared an ephemeral tributary draining a sub-basin approximately 7 acres in size to be non-jurisdictional, with hardly any analysis; rather, the determination states, in a conclusory fashion, that "[t]he frequency and amount of flow in the ditch is not significant enough to provide notable physical, chemical, or biological benefits to downstream waters or a TNW."[97]

Moreover, this practice continues today. In a very incomplete recent review of a few districts' websites, we found an example of an ephemeral tributary draining a 275 acre area that was denied Clean Water Act protection because it was found – by itself – to lack a significant nexus to a downstream navigable water. The determination states:

> Based on the small size of the drainage area (this is a first order stream), the semi-arid conditions, and the distance to the TNW (Arkansas River over 65 miles away) the capacity for this stream to carry pollutants to this TNW is so limited that it is unlikely that any pollutants from this stream would reach the TNW. As a result, any effect this ephemeral non-RPW stream would have on the chemical, physical or biological integrity of the TNW would be speculative and insubstantial.[98]

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[94] U.S. Army Corps of Eng'rs, Omaha District, Approved Jurisdictional Determination: Channel Work in the North Tributary of Newlin Gulch at Lagae Ranch, NWO-2007-2195-DEN, at 3 (Nov. 1, 2007 (enclosed in Appendix A).
[95] U.S. Army Corps of Eng'rs, Jurisdictional Determination Form Instructional Guidebook, at 31 (May 30, 2007), available at http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/cwa_guide/jd_guidebook_051207final.pdf.
[96] U.S. Army Corps of Eng'rs, Nashville District, Approved Jurisdictional Determinations: Horn Springs Group, 200701845, 200701844, and 200701843, at 6 (Sept. 5, 2007) (copy not found online or in NRDC files; cited in NRDC et al. comments on EPA-HQ-OW-2007-0282, at 32 (Jan 21, 2008) (hereinafter "NRDC Comments on 2007 Guidance"), available at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2007-0282-0227).
[97] U.S. Army Corps of Eng'rs, Jacksonville District, Approved Jurisdictional Determination: SAJ-2007-4563, at 5 (Aug. 31, 2007) (enclosed in Appendix A).
[98] U.S. Army Corps of Eng'rs, Kansas City District, Approved Jurisdictional Determination: NWK-2013-00263 (Mar. 6, 2013), available at http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/jd/2013-263-JD.pdf (also enclosed in Appendix A).

2. The Limited Interpretation of the "Significant Nexus" Analysis has Made it More Difficult to Demonstrate that Particular Adjacent Wetlands Are Jurisdictional.

In their post-*Rapanos* guidance materials, the agencies have instructed their staff to implement the law in a way that substantially constrains the evidence relevant to determining whether wetlands adjacent to tributaries not traditionally navigable have a "significant nexus" with traditionally navigable waters, and whether tributaries themselves have such a nexus. In particular, the guidance indicates that it is only appropriate to consider the cumulative effects of those wetlands that are adjacent to the same reach of a single individual tributary, rather than looking more broadly at the effects of similar wetlands over a larger geographic area (e.g., a watershed). With respect to tributaries themselves, the guidance looks only at the specific reach in question and any adjacent wetlands, as opposed to all tributaries in a region.

Long before the guidance was issued, opponents of comprehensive Clean Water Act protections recognized that the degree to which waterways' effects were aggregated would make an important difference in whether water bodies are protected. In urging staff of the White House Council on Environmental Quality not to read *Rapanos* in a way that would preserve broad wetlands protections, an attorney from the law firm Hunton & Williams, which has led the advocacy work of the industry coalition opposing legislation aimed at restoring Clean Water Act jurisdiction,[99] pushed for a limited approach to aggregation:

> The idea is NOT that you add up all the wetlands in the region and see if cumulatively they have a significant effect on traditional navigable waters. (That approach would vitiate Kennedy's case-by-case requirement and the answer to that question will probably always be "yes.")[100]

It is telling that even those urging the government to read *Rapanos* broadly and the scope of Clean Water Act protections more narrowly recognize the premise that wetlands, considered on a regional basis, will significantly impact water quality. Choosing not to look at such impacts therefore can be expected to limit the wetlands found to be significant enough to qualify for protection by EPA and the Corps.

We have found some evidence that the agencies' guidance, which unfortunately adopts a very similar approach to that advocated by Hunton & Williams, is leading to the loss of previously protected wetland resources. In a determination by the New York District of the Corps, a wetland directly abutting an intermittent tributary that flows directly to a traditionally navigable water was found to lack a "significant nexus," despite concluding that "[t]he wetlands are located alongside . . . landfill areas and may retain, convert, and cycle the potential runoff pollutants that would otherwise directly enter the tributary system," and that they "may serve as flood storage areas, retaining flood waters and precluding them from potentially flooding the

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[99] *See, e.g.*, Letter from Deidre Duncan, Hunton & Williams LLP, to U.S. EPA Administrator Gina McCarthy & Sec. of Army John McHugh (Sept. 29, 2014) (identifying Ms. Duncan as counsel for the Waters Advocacy Coalition), available at http://www.fb.org/tmp/uploads/wacletter092914.pdf.

[100] Fax from Hunton & Williams to Greg (last name not identified), at 3 (Sept. 21, 2006) (produced in response to Freedom of Information Act by Council on Environmental Quality) (enclosed in Appendix A).

surrounding commercial development."[101] The determination found that the small size and proximity of the wetland to the navigable water made it less likely that the wetland would provide significant pollution attenuation, and found that the site had only one commercial building on the property and that other onsite wetlands might "better serve" the flood control purposes for the property.[102] The determination also found that the wetland would not be particularly good habitat for aquatic species.[103] In other words, the district looked exclusively at the functions performed by the single wetland under consideration, without looking more broadly at similar wetlands in the region.

Similarly, with respect to tributaries, looking only at the single reach in question makes it far harder to establish jurisdiction, even for resources that are collectively critical. For example, the Buffalo District of the Corps found three separate ephemeral tributaries to the Cuyahoga River to be non-jurisdictional based on a lack of "significant nexus," without considering the tributaries collectively (much less similar tributaries in the region).[104]

3. So-Called "Isolated" Waters Are Being Left Unprotected With Little Or No Analysis Of Their Relationship To Commerce And No Analysis Of Justice Kennedy's Significant Nexus Test.

As noted above, when the agencies' staff have found that a water body is "isolated" and does not qualify for protection under some other provision of the jurisdictional regulations (e.g., it is not itself traditionally navigable), that determination amounts to a jurisdictional death sentence for the water. Evidence suggests that this practice has led the agencies to write off literally thousands of water bodies since *SWANCC*, and often to disregard (or simply fail to examine) potential commerce connections in the process. Moreover, even after the Supreme Court's decision in *Rapanos*, in which Justice Kennedy made clear that hydrologic separation between water bodies could provide a significant nexus, so-called "isolated" waters have not been examined for whether they might have a nexus to downstream waters.[105]

Some examples of this practice continuing under the post-*Rapanos* guidance include the following:

- Parowan Creek in Utah, which supplies water for summer homes, for more than 6,500 head of cattle, for irrigation water for over 13,000 acres of alfalfa production, and for hydroelectric power production was initially found to be protected because of connections to interstate commerce. The field offices of the Corps and EPA concurred that these connections satisfied the rules' commerce test. However, EPA and Corps

[101] Army Corps of Eng'rs, New York District, Approved Jurisdictional Determination, NAN-2007,264-EJE-G, at 9 (Oct. 17, 2007) (enclosed in Appendix A).
[102] *Id.* Using a separate wetland's aquatic function to *diminish* the jurisdictional status of a wetland strikes us as exactly the opposite of the kind of cumulative analysis that Justice Kennedy thought the agencies should undertake.
[103] *Id.*
[104] Army Corps of Eng'rs, Buffalo District, Approved Jurisdictional Determination: City of Independence, 2006-00191, Ephemeral Streams 1, 2 & 3 (Nov. 1, 2007) (enclosed in Appendix A).
[105] *See* 547 U.S. at 786 ("Given the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system.").

headquarters' offices disagreed, and overruled the field determination; no information on the basis of their decision could be established.[106]

- In a non-jurisdictional determination for a five-acre lake in Sedalia, Missouri, the Corps undertook absolutely no analysis of the potential effects of using, degrading, or destroying the water body, instead concluding that the water lacks protection solely because it is an "[u]pland lake, man-made, not connection [sic] to any juridictional [sic] waters or wetlands."[107]

- The Corps found a 15-acre "isolated" lake in Greeley, Colorado to be non-jurisdictional. The lake, according to the determination, is a "private waterskiing lake for use by residents who live adjacent to the lake," but yet the Corps concluded that, among other things, "[t]here is no information available to show that this Ski Lake . . . is or could be used by interstate or foreign travlers [sic] for recreational or other purposes. . . ."[108] But the fact of recreational use by local people, a reasonable person would think, is *per se* evidence that interstate or foreign travelers (e.g., guests of the nearby residents) *could* use the water body.[109]

- The Corps determined a wetland in Peekskill, New York to be "isolated" and non-jurisdictional, despite the fact that it is located only 50 feet from a traditionally navigable water (Annsville Creek), "is situated on top of a former landfill site and may be contributing to the pollution of Annsville Creek," because of its hydrologic connection (albeit by a "non-jurisdictional swale feature") to the creek.[110] The determination finds it to be significant that water only flows from the wetland to the creek, not the other direction. The Corps' analysis of whether the use, degradation, or destruction of the feature could affect interstate commerce is perfunctory.

- The Corps declared a 10-acre wetland in Clay County, Arkansas to be unprotected based entirely on its conclusion that the feature was "isolated." The determination states: "These 10.0 acres of wooded wetland do not have a hydrologic connection to other waters of the US. The area is not within the 100-year floodplain and there is no tributary connection to the TNW."[111] The Corps did not examine what effect the use, degradation, or destruction of the wetland could have.

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[106] *Courting Disaster* at 16.
[107] Army Corps of Eng'rs, Kansas City District, Approved Jurisdictional Determination: Menard Inc., 2007-02074, at 1 (Nov. 27, 2007) (enclosed in Appendix A).
[108] Army Corps of Eng'rs, Omaha District, Approved Jurisdictional Determination: Terra Ceia Estates, NWO-2007-2810-DEN, at 7 (Nov. 2, 2007) (enclosed in Appendix A).
[109] In addition, given its use for waterskiing, one would think that the water body would qualify as a "traditionally navigable water." *See* Instructional Guidebook, Appendix D (stating that the "traditional navigable waters" qualify as protected under 33 C.F.R. § 328.3(a)(1), and include "all . . . waters that are navigable-in-fact").
[110] Army Corps of Eng'rs, New York District, Approved Jurisdictional Determination: 9 Corporate Drive Peekskill Development, LLC, NAN-2007-264-EJE-C, at 2-3 (Oct. 17, 2007) (enclosed in Appendix A).
[111] U.S. Army Corps of Eng'rs, Little Rock District, Approved Jurisdictional Determination: Weston, Steve, #2007-00430, at 1 (Oct. 12, 2007) (enclosed in Appendix A).

- EPA and the Corps jointly refused to approve a request by the Portland District to assert jurisdiction over Long Lake in Klamath Falls, Oregon, using the agencies' residual regulatory authority to protect waters.[112] The agencies reached this conclusion despite a suggestion that the area was used to support cattle and perhaps also for bird watching.[113] Moreover, the agencies did not appear to consider the role that Long Lake might play in an issue obviously related to interstate commerce – water storage in the Klamath Basin. At the time, Long Lake reportedly was under consideration to be used as a water storage and potential supply site by the Bureau of Reclamation.[114]

The agencies' practice of denying protections to "isolated" waters has not altered in recent years. For example, we identified several recent examples of this approach, including:

- Last month, the Omaha District declared a 150-acre prairie pothole basin in Mountrail County, North Dakota not to be covered by the Act, after finding it to be geographically "isolated" and asserting that "there is no documentation of an interstate or foreign commerce nexus…."[115]

- This June, a 10.9 acre pond in Hibbing, Minnesota was found not to have any surface connections to other waters. The St. Paul District stated without analysis that the pond was not known to have any interstate commerce connections, and did not perform any kind of significant nexus analysis.[116]

- This February, the Kansas City District found that a 6 acre wetland near Park City, Kansas to be "isolated" and non-jurisdictional. The Corps' form recites without analysis that the wetland's use, degradation, or destruction would not impact interstate commerce. There was no consideration of whether the wetland, which receives sheet flow from nearby fields, could have a significant nexus to other waters

[112] Memorandum from Brian Frazer, Wetlands & Aquatic Resources Regulatory Branch, U.S. EPA & Russell L. Kaiser, Regulatory Community of Practice, U.S. Army Corps of Eng'rs, Declination of Jurisdiction for Jurisdictional Determination NWP-2007-369 (Nov. 15, 2007(enclosed in Appendix A).
[113] U.S. Army Corps of Eng'rs, Portland District, Approved Jurisdictional Determination: NWP-2007-369, at 8 (Nov. 15, 2007) ("A review of the lake being potentially jurisdictional under the commerce connection as defined in 33 CFR 328.3(a)(3) with cattle and bird watching activities are not sufficient commerce to support jurisdiction.") (enclosed in Appendix A).
[114] *See* Herald & News: Viewpoints, "Long Lake part of the answer to water problems," (July 23, 2007), available at http://www.klamathbasincrisis.org/storage/longlake/partofanswer072307.htm. Strangely, the Corps' determination reports that "[t]he proposed project by the bureau of reclamation will create a direct chemical, physical, biological and hydrological connection to Klamath Lake a TNW," but does not seem to consider whether this connection is indicative that the use, degradation, or destruction of the resource could have interstate commerce effects. *See* Portland District, Approved Jurisdictional Determination: NWP-2007-369, at 8.
[115] U.S. Army Corps of Eng'rs, Omaha District, Approved Jurisdictional Determination: Mountrail County; Redmond Township Repair; FEMA-4128-PW 00117(1) Site 1; Isolated Wetland, NWO-2014-2020-BIS (Oct. 3, 2014), available at http://www.nwo.usace.army.mil/Portals/23/docs/regulatory/ND/jds/NWO-2014-2020-BIS.pdf.
[116] U.S. Army Corps of Eng'rs, St. Paul District, Approved Jurisdictional Determination: Hibbing Taconite Company, 2014-00396-DWW, Review Area 5001 Stockpile (June 24, 2014), available at http://www.mvp.usace.army.mil/Portals/57/docs/regulatory/approvjds_mn/2014000396J%20Stockpile%205001.pdf

by, for instance, intercepting runoff.[117]

- This January, the Sacramento District found that several wetlands on a site in Provo, Utah totaling over 6 acres were "isolated" and non-jurisdictional. The form states (without providing any evidence) that there is no link between these waters and interstate commerce, and does not consider whether the wetlands might have a significant nexus to downstream waters.[118]

4. Existing Guidance Frustrates Effective Law Enforcement.

Another major way that water pollution is made easier by the legal chaos unleashed by the Supreme Court and the existing guidance implementing the Court's opinions is the inability of pollution control officials to effectively enforce the law. Because it is extremely time-consuming and resource-intensive to establish that a particular aquatic feature qualifies as a "water of the United States" under the restrictive case-by-case approach embodied in the existing guidance, enforcing the law is difficult. That is particularly true in cases where the aquatic resource in question has been destroyed; consider the difficulty of showing that a particular water body that once existed (but about which little information may have ever been gathered) also had a "significant nexus" to downstream waters when it was there.

The agencies' enforcement dilemma has had tangible effects. Federal officials have been forced to abandon hundreds, if not thousands, of cases in which EPA and/or the Corps believed the law had been violated. Even when the government believes an enforcement case may be maintained under existing policies and guidance, the absence of clear regulations has made it possible for defendants to drag out litigation over many years, wasting enormous resources in the process. In particular:

- EPA acknowledged that it "has had to discontinue all enforcement cases" in tributaries to the San Pedro River "because it was so time-consuming and costly to prove that the Clean Water Act protects these rivers."[119]

- According to EPA, "[c]hallenges in proving jurisdiction hampered enforcement efforts when a large animal feeding operation in Georgia … discharged liquid manure to tributaries. Unhealthy levels of viruses and bacteria were found downstream in Lake Blackshear, used for waterskiing and other water recreation."[120]

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[117] U.S. Army Corps of Eng'rs, Kansas City District, Approved Jurisdictional Determination: Herb Greenup - Isolated Wetland, NWK-2014-00090 (Feb. 10, 2014), available at http://www.nwk.usace.army.mil/Portals/29/docs/regulatory/jd/2014-90-JD.pdf.

[118] U.S. Army Corps of Eng'rs, Sacramento District, Approved Jurisdictional Determination: Ironton Development, South, SPK-2013-00840-UO (Jan. 8, 2014), available at http://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/2014/january/SPK-2013-00840IsolatedJDPacket.pdf.

[119] U.S. EPA, "Waters of the United States: Enforcement of the law has been challenging," available at http://www2.epa.gov/uswaters.

[120] *Id.*

- According to a New York Times investigative story, in a four-year period, more than 1,500 major pollution investigations of "[c]ompanies that have spilled oil, carcinogens and dangerous bacteria into lakes, rivers and other waters [were] not being prosecuted, according to Environmental Protection Agency regulators working on those cases."[121]

- An EPA analysis in 2011 said, "EPA enforcement managers have indicated that enforcement efforts are shifting from protecting small streams high in the watershed and instead are moving down river. In short, EPA is focusing efforts on larger streams and rivers, where there is more certainty of establishing jurisdiction."[122]

- "An estimated total of 489 enforcement cases (Sections 311, 402, and 404 combined) have been affected such that formal enforcement was not pursued as a result of jurisdictional uncertainty, case priority was lowered as a result of jurisdictional uncertainty, or lack of jurisdiction was asserted as an affirmative defense to an enforcement action."[123] The head of EPA enforcement identified similar figures in an internal analysis.[124]

- In the headwaters of the Weweantic River, which flows into Buzzards Bay in Massachusetts, EPA found that the operators of a cranberry production site dredged and filled several dozen acres of freshwater wetlands to create commercial cranberry bogs. EPA initiated an enforcement action in 1999, which led to a trial court order in 2004 fining the defendants $75,000 and requiring restoration of the impacted wetlands. This decision was upheld on appeal despite the Supreme Court's intervening decision in *SWANCC*, but in 2006 and 2007, the defendants were able, in the wake of *Rapanos*, to get the case sent back to the trial court for additional fact-finding. The defendants were found liable again in 2011 and finally settled the litigation in 2012. After this protracted litigation, the settlement requires – again – the defendants to pay a $75,000 fine and restore wetlands to attempt to compensate for the damage they caused well over a decade ago.[125]

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[121] Charles Duhigg & Janet Roberts, "Rulings Restrict Clean Water Act, Foiling E.P.A.," *New York Times*, at A1 (Feb. 28, 2010), available at http://www.nytimes.com/2010/03/01/us/01water.html?_r=0.

[122] U.S. EPA, Potential Indirect Economic Impacts and Benefits Associated with Guidance Clarifying the Scope of Clean Water Act Jurisdiction, at 13 (Apr. 27, 2011), available at http://water.epa.gov/lawsregs/guidance/wetlands/upload/cwa_guidance_impacts_benefits.pdf.

[123] U.S. EPA Inspector Gen., *Special Report: Congressionally Requested Report on Comments Related to Effects of Jurisdictional Uncertainty on Clean Water Act Implementation*, Report No. 09-N-0149, at 1 (Apr. 30, 2009), available at http://www.epa.gov/oig/reports/2009/20090430-09-N-0149.pdf.

[124] Letter from Representatives James Oberstar & Henry Waxman to Stephen Johnson, EPA Administrator (July 7, 2008) (attaching internal memorandum from Granta Nakayama, Assistant Administrator for Enforcement & Compliance Assurance to Benjamin Grumbles, Assistant Administrator for Water, which identified hundreds of cases in which EPA chose not to pursue formal enforcement action or lowered the priority of the case, or in which defendants raised jurisdictional defenses) (enclosed in Appendix A).

[125] *Courting Disaster* at 30-31; U.S. EPA, Massachusetts Cranberry Farmers Agree to Restore 26 Acres of Wetlands and Pay $75,000 Penalty (Mar. 5, 2012), available at http://yosemite.epa.gov/opa/admpress.nsf/6427a6b7538955c585257359003f0230/14aa7646dceaf937852579c10063b6f0!OpenDocument.

- In an enforcement action regarding the destruction of nearly 200 acres of wetlands adjacent to Pond Creek and Caney Creek, tributaries to the Green River in Kentucky, legal wrangling over the effects of *Rapanos* protracted the litigation enormously. The dischargers were finally held liable more than 17 years after the defendants' actions triggered government action.[126]

5. Rampant Uncertainty in Implementing and Enforcing the Law Demands Clear Regulations that Citizens, Pollution Control Officials, Dischargers, and Courts Can Follow.

As the preceding overview of the recent history of attempts to implement the Act following the Supreme Court's decisions and the agencies' constrained guidance documents illustrates, the only thing that is clear about what waters the Clean Water Act covers today is that there is very little clarity.

Soon after *SWANCC* and continuing for many years, clean water advocates urged Congress to restore the clear protections that once existed in the law by legislatively overruling the Supreme Court's misinterpretation of the law. In 2009, the Administrator of EPA, the Secretaries of Agriculture and Interior, the Acting Assistant Secretary of the Army for Civil Works, and the Chair of the Council on Environmental Quality wrote to Senate Environment and Public Works Chairman Boxer, strongly supporting legislation to restore protections.[127] Later that year, the Environment and Public Works Committee voted out a bill that sought to codify the scope of protections in place immediately before the Supreme Court ruled.[128]

For their part, opponents of legislation consistently argued that Congress did not need to act, but rather EPA and the Corps should adopt regulations identifying covered waters that accounted for the Supreme Court's rulings. For instance, a representative of the Waters Advocacy Coalition testified in 2008 that the agencies should promulgate new regulations.[129] People on all sides of the issue similarly have called for regulatory action over many years, even while vigorously debating what the content of such rules should be.[130] Likewise, Supreme Court

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[126] *Courting Disaster* at 34-35 (describing history of case culminating in *U.S. v. Cundiff*, 555 F.3d 200 (6th Cir. 2009)).

[127] Letter from Nancy Sutley, Council on Environmental Quality Chair, et al. to Senator Barbara Boxer (May 20, 2009), available at http://www.epw.senate.gov/public/index.cfm?FuseAction=Files.View&FileStore_id=293a81f3-7df6-4319-ac22-ce0ed1611e78.

[128] U.S. Senate Comm. on Env't & Pub. Works, Rpt. No. 111-361, 111th Cong., 2d Sess. (Dec. 10, 2010), available at http://www.gpo.gov/fdsys/pkg/CRPT-111srpt361/pdf/CRPT-111srpt361.pdf.

[129] *See, e.g.*, Testimony of Virginia Albrecht, Hunton & Williams, on behalf of the Waters Advocacy Coalition, Hearing of the Committee on Transportation & Infrastructure, U.S. House of Representatives, titled "The Clean Water Restoration Act of 2007," at 16-17 (Apr. 16, 2008), available at http://maplight.org/files/map_research/2012-01/US_111_S787_Oppose_WAC_0.pdf.

[130] U.S. EPA, Fact Sheet: Persons and Organizations Requesting Clarification of "Waters of the United States" By Rulemaking (undated), available at http://www2.epa.gov/sites/production/files/2014-03/documents/wus_request_rulemaking.pdf.

justices have both called explicitly for new rules,[131] and chastised the agencies for not developing them.[132] We are grateful that the agencies have moved forward with a proposed rule to establish enforceable standards for identifying protected waters.

In the sections that follow, we discuss the proposed rule. In general, we believe the proposed rule to be a strong step forward that is largely consistent with the law's central purpose and broad jurisdiction. The proposal appropriately safeguards tributaries and nearby waters categorically based on their myriad impacts on downstream waters. However, it falls short with respect to "other waters," which likewise are critical components of watersheds around the country. The proposal also exempts categories of waters without adequate justification, and maintains an existing exemption that has long been inappropriate. Next, we respond to several specific requests for comment. Finally, we offer some suggestions with respect to documenting future jurisdictional decisions pursuant to the rule.

III. THE PROPOSED CATEGORICAL PROTECTIONS ARE JUSTIFIED

THE PROPOSED CATEGORICAL PROTECTIONS FOR TRIBUTARIES AND ADJACENT WATERS ARE LEGALLY AND SCIENTIFICALLY JUSTIFIED AND MUST BE INCLUDED IN THE FINAL RULE.

As discussed above, the rule must at least afford the protections of the law to the waters that pass Justice Kennedy's "significant nexus" test. Under this test, a water is jurisdictional under the Clean Water Act if there exists "a significant nexus between the [water] in question and navigable waters in the traditional sense."[133] Jurisdiction can be established based on an analysis of a water's "ecological functions vis-à-vis other covered waters."[134] This test allows for waters to be protected not just singly, but also categorically. Justice Kennedy specifically mentioned in his opinion that, "[t]hrough regulations or adjudication, the Corps [or EPA] may choose to identify *categories*" of waters that pass the test, based on scientific considerations.[135] The agencies must "establish a scientific nexus on a case-by-case basis" only in the absence of "more specific regulations" that provide appropriate justification for categorical protections.[136]

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[131] *See Rapanos*, 547 U.S. at 812 (Breyer, J., dissenting) ("In the absence of updated regulations, courts will have to make ad hoc determinations that run the risk of transforming scientific questions into matters of law. That is not the system Congress intended. Hence I believe that today's opinions, taken together, call for the Army Corps of Engineers to write new regulations, and speedily so.").

[132] *Rapanos*, 547 U.S. at 758 (Roberts, C.J., concurring) ("Agencies delegated rulemaking authority under a statute such as the Clean Water Act are afforded generous leeway by the courts in interpreting the statute they are entrusted to administer. *** Rather than refining its view of its authority in light of our decision in SWANCC, and providing guidance meriting deference under our generous standards, the Corps chose to adhere to its essentially boundless view of the scope of its power. The upshot today is another defeat for the agency."); *Sackett v. EPA*, 132 S.Ct. 1367, 1375 (Alito, J., concurring) (discussing ambiguity of term "waters of the United States" and stating, "the EPA has not seen fit to promulgate a rule providing a clear and sufficiently limited definition of the phrase").

[133] *Rapanos*, 547 U.S. at 779.

[134] *Id.* at 780.

[135] *Id.* at 780-81 (emphasis added).

[136] *Id.* at 782.

The proposed categorical protections for tributaries and adjacent waters are a commonsense approach on firm scientific and legal ground.[137] EPA's "Connectivity Report" establishes definitively that tributaries and adjacent waters categorically pass the "significant nexus" test with ease. These findings were confirmed by the independent Science Advisory Board. Therefore, these categorical protections must be included in the final rule.

A. Tributaries

EPA and the Corps propose to define the term "waters of the United States" as including all tributaries of traditionally navigable waters, interstate waters, the territorial seas, and impoundments of those same waters, thereby categorically extending legal protections to all such tributaries. This approach is fully consistent with Justice Kennedy's "significant nexus" test, even though – as discussed above – the Supreme Court's decisions do not require any change in the existing regulations concerning tributaries.[138]

The scientific justification for categorically protecting tributaries is extremely robust. This conclusion is supported by a review and synthesis of more than 1,000 publications from the peer-reviewed scientific literature, often referred to as the Connectivity Report.[139] In that report, EPA concluded that tributaries, as a class, have an undeniable impact on downstream navigable waters, stating:

> The scientific literature demonstrates that streams, individually or cumulatively, exert a strong influence on the character and functioning 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. Headwater streams (headwaters) are the most abundant stream type in most river networks and supply most of the water in rivers. In addition to water, streams transport sediment, wood, organic matter, nutrients, chemical contaminants, and many of the organisms found in rivers. Streams are biologically connected to downstream waters by the dispersal and migration of aquatic and semiaquatic organisms, including fish, amphibians, plants, microorganisms, and invertebrates, that use both up- and downstream

[137] These comments focus on the categories of water bodies that have most been in dispute under the current legal regime. We of course support the continued categorical protection of traditionally navigable waters, interstate waters, the territorial seas, and impoundments of specified waters, and the agencies' proposal amply supports maintaining longstanding safeguards for these as well.

[138] Justice Kennedy indicated that an existing regulatory provision that uses the presence of an ordinary high water mark to identify the lateral limits of a tributary could itself "provide a reasonable measure of whether specific minor tributaries bear a sufficient nexus with other regulated waters to constitute 'navigable waters' under the Act." 547 U.S. at 781. However, Justice Kennedy did not say that the presence of an OHWM is a necessary prerequisite to jurisdiction, and it certainly is not needed if tributaries are shown to have a significant nexus without regard to whether a OHWM is present. As proposed, the rule would use OHWM as a guidepost; it proposes to define "tributary," with respect to flowing waters, as any water that: (1) is "physically characterized by the presence of a bed and banks and ordinary high water mark," and that it (2) "contributes flow, either directly or through another water," to a traditionally jurisdictional water. *See, e.g.*, 79 Fed. Reg. at 22,263 (proposed 33 C.F.R. § 328.3(c)(5). As discussed below, we are not convinced that these requirements are necessary, but they are certainly sufficient.

[139] U.S. EPA, Office of Research & Development, *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence* – External Review Draft (Sept. 2013) (hereinafter "Connectivity Report").

> habitats during one or more stages of their life cycles, or provide food resources to downstream communities. Physical, chemical, and biological connections between streams and downstream waters interact via processes such as nutrient spiraling, in which stream communities assimilate and chemically transform large quantities of nitrogen (N) and other nutrients that would otherwise increase nutrient loading downstream.[140]

These conclusions apply equally to very small and infrequently flowing tributary streams. According to the Connectivity Report, "Even infrequent flows through ephemeral or intermittent channels influence fundamental biogeochemical processes…."[141] And headwater streams, which are the smallest channels where stream flows begin, are the source of approximately 60% of the total mean annual flow to all northeastern U.S. streams and rivers, making their impact on the chemical, physical, and biological integrity of our waters indisputable.[142]

These findings have been confirmed by the Science Advisory Board in its peer review of the Connectivity Report. In its final report to EPA, the SAB wrote:

> The Report concludes that these streams exert a strong influence on the character and functioning of downstream waters, and indeed that all tributary streams are physically, chemically, and biologically connected to downstream waters. Strong scientific support has been provided for this overall conclusion and related findings. The SAB notes that there is a gradient of connectivity that is a function of the frequency, duration, magnitude, predictability, and consequences of physical, chemical, and biological connections. The SAB recommends that the conclusions and findings concerning ephemeral, intermittent, and perennial streams be quantified when possible, related to the four dimensions of connectivity (longitudinal, lateral, vertical and temporal), and discussed with additional detail on biogeochemical transformations and biological connections. In addition, some hydrologic aspects of connectivity require additional detail; these include descriptions of key linkages and exchanges in tributary streams, such as groundwater-surface water interactions, and the role of transition areas between uplands and headwaters. Likewise, the Report should explain how hydrologic connectivity sustains both streams and aquifers, particularly in alluvial systems in the Southwest and in karst systems in the eastern United States.[143]

Although this conclusion should surprise nobody, the fact that the Connectivity Report's assessment that tributaries have a "strong influence" on downstream waters is backed by "[s]trong scientific support" is a more than adequate basis on which to conclude that tributaries, as a class, have a significant nexus to other covered waters and thus should be categorically protected. Indeed, in providing advice to EPA on the proposed rule (as opposed to the

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[140] *Id.* at 1-3.
[141] *Id.* at 1-7.
[142] *Id.*
[143] U.S. EPA Science Advisory Board, SAB Review of the Draft EPA Report *Connectivity of Streams and Wetlands to Downstream Waters: A Review and Synthesis of the Scientific Evidence*, EPA-SAB-15-001, at 3-4 (Oct 17, 2014) (hereinafter "SAB Connectivity Review"), available at http://yosemite.epa.gov/sab/sabproduct.nsf/fedrgstr_activites/AF1A28537854F8AB85257D74005003D2/$File/EPA-SAB-15-001+unsigned.pdf.

Connectivity Report), the SAB stated, "[t]here is strong scientific evidence to support the EPA's proposal to include all tributaries within the jurisdiction of the Clean Water Act."[144]

Ensuring that tributaries are covered under the Clean Water Act's pollution control programs frequently means cleaner water for larger downstream rivers, estuaries, and oceans. Even when they are not helping to make downstream waters better, tributaries have significant impacts on the biological, chemical, and physical condition of downstream waters: pollution dumped into streams high up in the watershed can cause harm in larger water bodies (a classic example being the Gulf of Mexico "Dead Zone"); and filling in upstream tributaries can dramatically alter the physical hydrology of downstream waters (a simple example is a dam built to divert flow from the tributary to an industrial use). It is both intuitive and demonstrably true that processes occurring upstream within these small bodies of water affect the entire river network's structure and function. As the Connectivity Report shows, the science conclusively establishes that tributaries have not only significant but overwhelming effects on downstream navigable waters. The proposal's categorical protections for tributaries are both justified and compelled by these findings, and they must be included in the final rule.

B. Adjacent Waters

EPA and the Corps further propose to define the term "waters of the United States" as including all waters, including wetlands, adjacent to traditionally navigable waters, interstate waters, the territorial seas, impoundments of those same waters, and tributaries.[145] Wetlands, in turn, are defined (as they long have been) as "those areas that are inundated or saturated by surface or groundwater 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." And "adjacent" means "bordering, contiguous or neighboring," including waters that are separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like.[146] This proposal amply satisfies the criteria that Justice Kennedy laid out in his *Rapanos* opinion.

First, Justice Kennedy stated that wetlands' significant nexus can be analyzed "either alone or in combination with similarly situated lands in the region."[147] In other words, the significant nexus test can justify jurisdiction over either individual wetlands or categories of

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[144] U.S. EPA Science Advisory Board, Science Advisory Board (SAB) Consideration of the Adequacy of the Scientific and Technical Basis of the EPA's Proposed Rule titled "Definition of Waters of the United States under the Clean Water Act," EPA-SAB-14-007, at (Sept. 30, 2014) (hereinafter "SAB Rule Review"), available at http://yosemite.epa.gov/sab/sabproduct.nsf/0/518D4909D94CB6E585257D6300767DD6/$File/EPA-SAB-14-007+unsigned.pdf.

[145] *See* 79 Fed. Reg. at 22,269 (proposed 40 C.F.R. § 230.3(s)(6)). We strongly support the agencies' inclusion of adjacent waters generally, as opposed to simply adjacent wetlands, in this provision. Both the Connectivity Report and the SAB find that adjacent waters have a variety of critical connections to downstream waters, without limiting that analysis to adjacent wetlands.

[146] We support the agencies' proposal to eliminate the confusing parenthetical expression "other than waters that are themselves wetlands" from the adjacent waters provision. As proposed, the rule would not provide jurisdiction over waters adjacent to so-called "isolated" waters based solely on their adjacency. As that was the purpose of the provision initially, *see* 79 Fed. Reg. at 22,209, the provision is unneeded. Moreover, because the proposal recognizes that wetlands can serve as tributaries, wetlands and other waters adjacent to those tributary wetlands should be jurisdictional by rule, something that this outdated provision would have prevented.

[147] *Rapanos*, 547 U.S. at 780.

wetlands. Next, Justice Kennedy noted that jurisdiction over waters adjacent to navigable-in-fact waters is "sustainable under the Act by showing adjacency alone," as adjacency to such waters supports a "reasonable inference of ecologic interconnection."[148] According to Justice Kennedy, it may also be reasonable to infer a significant nexus, and therefore CWA jurisdiction, for waters adjacent to "certain major tributaries" if the agencies determine that such tributaries are "significant enough that wetlands adjacent to them are likely, in the majority of cases, to perform important functions for an aquatic system incorporating navigable waters."[149] For wetlands adjacent to other, "minor" tributaries, however, the agencies cannot assume without evidence that adjacent wetlands play an important enough "role in the integrity of an aquatic system."[150] For this reason, Justice Kennedy required a case-by-case analysis for such waters "*absent more specific regulations*."[151] This limited requirement – designed "to avoid unreasonable applications of the statute"[152] – thus permits the agencies to reasonably assert jurisdiction over waters adjacent to non-navigable tributaries through regulations, based on scientific evidence.

EPA and the Corps have put forth those "more specific regulations," supported by overwhelming scientific evidence, in this proposal.[153] With regard to waters adjacent to tributaries, the agencies have now determined, using their expert judgment and the available science, that waters adjacent to *all* tributaries have a significant nexus to traditionally navigable waters. The proposed provision is consistent with Justice Kennedy's interpretation of the Clean Water Act, as jurisdiction is not based on "assumptions" like the ones against which he warned, but rather on a detailed review of relevant science.

EPA's Connectivity Report explains the reasons why adjacent waters – which it refers to as waters located in floodplains and riparian areas with "bidirectional hydrologic exchanges with streams or rivers" – have important effects on downstream waters as follows:

> Wetlands and open-waters in landscape settings that have bidirectional hydrologic exchanges with streams or rivers (e.g., wetlands and open-waters in riparian areas and floodplains) are physically, chemically, and biologically connected with rivers via the export of channel-forming sediment and woody debris, temporary storage of local groundwater that supports baseflow in rivers, and transport of stored organic matter. They remove and transform excess nutrients such as nitrogen and phosphorus (P). They provide nursery habitat for breeding fish, colonization opportunities for stream invertebrates, and maturation habitat for stream insects. Moreover, wetlands in this landscape setting serve an important role in the integrity of downstream waters because they also act as sinks by retaining floodwaters, sediment, nutrients, and contaminants that could otherwise negatively impact the condition or function of downstream waters.[154]

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[148] *Id.*
[149] *Id.* at 780-81.
[150] *Id.* at 781.
[151] *Id.* at 782.
[152] *Id.*
[153] We do not discuss here the assertion of jurisdiction over waters adjacent to the first four types of waters listed in the proposed definition: navigable-in-fact waters, interstate waters, the territorial seas, and impoundments of those waters. Those provisions were not at issue in *Rapanos* and we submit that *Riverside Bayview* provides the applicable precedent for jurisdiction over those kinds of features.
[154] Connectivity Report at 1-3.

These conclusions are irrefutable based on the literature summarized in Chapter 5 of the report. The material presented in the report is more than sufficient to conclude that adjacent waters, including wetlands, are highly connected to downstream waters. For example, "Riparian areas act as buffers that are among the most effective tools for mitigating nonpoint source pollution."[155] These adjacent waters "connect upland and aquatic environments through both surface and subsurface hydrologic flow paths," and they "can reduce flood peaks by storing and desynchronizing floodwaters."[156]

These findings have been confirmed by the Science Advisory Board in its peer review of the Connectivity Report. The SAB found "that the literature review substantiates the Report's conclusion that floodplains and waters and wetlands in floodplain settings support the physical, chemical and biological integrity of downstream waters."[157] In its review of the proposed rule, the SAB reaffirmed this conclusion: "adjacent waters and wetlands have a strong influence on the physical, chemical, and biological integrity of navigable waters."[158]

Critically, the definition of "adjacent" that the agencies have proposed is consistent with the Connectivity Report's scientific criteria for "bidirectional" waters in riparian areas and floodplains, the criteria that circumscribe the waters to which the above conclusions apply.[159] The regulatory proposal defines "adjacent" to mean "bordering, contiguous or neighboring." "Neighboring" is the most inclusive of these terms and is defined as "waters located within the riparian area or floodplain of a water identified in paragraphs (1) through (5) of this section [traditionally navigable waters, interstate waters, the territorial seas, impoundments of those same waters, and tributaries], or waters with a shallow subsurface hydrologic connection or confined surface hydrologic connection to such a jurisdictional water." The Connectivity Report, in turn, draws the above-stated conclusions about waters "in landscape settings that have bidirectional hydrologic exchanges with streams or rivers (e.g., wetlands and open-waters in riparian areas and floodplains)."[160]

Finally, the proposal's definitions for riparian areas and floodplains also closely align with those used in the Connectivity Report.[161] The upshot is that there is enormous overlap

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[155] *Id.* at 1-9.
[156] *Id.*
[157] SAB Connectivity Review at 4.
[158] SAB Rule Review at 2.
[159] Although the SAB recommends that the final Connectivity Report move away from using the term "bidirectional" and instead refer to "waters and wetlands in floodplain settings" to better reflect the geographic position of the waters in question, and although it also suggests discussing riparian areas largely in the Report's section on streams, SAB Connectivity Review at 4, it is noteworthy that the SAB did not question the inclusion of riparian waters in the definition of "adjacent" waters. *See* SAB Rule Review at 2-3.
[160] Connectivity Report at 1-9.
[161] *Compare* the proposal's definition of "riparian area" ("transitional areas between aquatic and terrestrial ecosystems that influence the exchange of energy and materials between those ecosystems") with Connectivity Report at 3-4 ("Riparian areas are transition zones between terrestrial and aquatic ecosystems … [and] include those portions of terrestrial ecosystems that that significantly influence exchanges of energy and matter with aquatic ecosystems.") (internal citations omitted); *compare* the proposal's definition of "floodplain" ("an area bordering inland or coastal waters that was formed by sediment deposition from such water under present climatic conditions and is inundated during periods of moderate to high water flows") with Connectivity Report at 3-4 ("Floodplains are level areas bordering stream or river channels that are formed by sediment deposition from those channels under present climatic conditions. These natural geomorphic features are inundated during moderate to high water events.").

between the proposal's "adjacent waters" and those waters that the Connectivity Report states "are physically, chemically, and biologically connected" with navigable waters.[162] The Connectivity Report therefore amply supports, as it does with regard to tributaries, the conclusion that adjacent waters have scientifically proven effects, which are beyond significant, on other covered waters. These findings justify and in fact require that the proposal's categorical protections for adjacent waters be included in the final rule.

IV. THE RULE SHOULD BE STRENGTHENED

IN ORDER TO ENSURE NECESSARY PROTECTIONS FOR CRITICAL WATERS, AND TO ENSURE THE RULE'S CONSISTENCY WITH THE CLEAN WATER ACT, THE PROPOSAL MUST BE STRENGTHENED IN THREE KEY WAYS.

Although the proposed categorical protections for tributaries and adjacent waters are both justified and compelled, three other aspects of the proposal are deficient and must be revised prior to finalization. First, the rule should include categorical protections for a host of so-called "other waters." Second, the rule should not exclude man-made tributaries without a scientific basis for doing so. Third, the rule should limit the current exemption for waste treatment systems.

A. The Rule Should Categorically Protect Certain "Other Waters"

EPA and the Corps propose to continue the current case-by-case "significant nexus" analysis for all "other waters, including wetlands" that do not fit the definitions of the other six categories of protected waters (and that are not explicitly exempted from regulation). The agencies propose this approach because they conclude that the connectivity of "'other waters' … varies within a watershed and over time, making it difficult to generalize about their connections to, or isolation from, traditional navigable waters, interstate waters, and the territorial seas."[163]

This proposed approach is not legally or scientifically justified. EPA and the Corps seem to recognize this fact, asking in the Federal Register notice that stakeholders provide "comment and information … on how the science could support other approaches that could provide greater regulatory certainty regarding the jurisdictional status of 'other waters,' including expanding the list of waters jurisdictional by rule …"[164] Furthermore, the agencies acknowledge that the Connectivity Report "indicates that there is evidence of *very strong connections* in some subcategories that are not included as jurisdictional by rule."[165]

We propose that certain additional categories of "other waters" should be jurisdictional by rule under two distinct rationales. First, some "other waters" have a significant nexus to

[162] Connectivity Report at 1-9.
[163] 79 Fed. Reg. at 22,197.
[164] *Id.* at 22,212.
[165] *Id.* at 22,198 (emphasis added).

navigable waters and thus must be protected under Justice Kennedy's *Rapanos* test. Second, as discussed above, the agencies can still rely on their Commerce Clause authority to exercise jurisdiction over "other waters" that affect interstate commerce, even if they do not pass the "significant nexus" test.

1. Some "Other" Waters Have a Significant Nexus to Navigable Waters and Should Be Categorically Protected Under Justice Kennedy's Test.

The agencies correctly interpret the Clean Water Act and Supreme Court opinions as supporting jurisdiction over "other waters" (including so-called "isolated" waters) if they have a significant ecological nexus to navigable waters.[166] Scientific evidence shows that several types of "other waters" pass the "significant nexus" test as a class, and the agencies should extend categorical protections to those waters, while relying on case-by-case analysis only for the "other waters" whose categorical nexus cannot yet be established (and those which cannot be protected under alternative rationales as discussed below).

In the notice accompanying this proposed rule, the agencies stated that they were interested in feedback on the following alternative approach for "other waters": "Determine by rule that certain additional subcategories of waters would be jurisdictional rather than addressed with a case-specific analysis … The agencies could choose to determine that there is science available to determine by rule that certain additional subcategories of 'other waters' are similarly situated and have a significant nexus …."[167] Given that there is in fact science available to make such a determination for several subcategories of "other waters," this approach is completely appropriate, and we urge the agencies to adopt it. There is no legal impediment to EPA and the Corps categorically protecting "other waters," including so-called "isolated" waters (or those that the Connectivity Report refers to as "unidirectional wetlands," and that the SAB refers to as "waters in non-floodplain settings"), when they can be shown to pass the "significant nexus" test. In *Rapanos*, Justice Kennedy explicitly rejected the plurality's requirement that wetlands have a "continuous surface connection" to navigable waters,[168] and the dissent agreed with him.[169] Moreover, he noted that physical separation can provide the significant nexus that he deemed to be the crux of Clean Water Act jurisdiction, saying, "[g]iven the role wetlands play in pollutant filtering, flood control, and runoff storage, it may well be the absence of hydrologic connection (in the sense of interchange of waters) that shows the wetlands' significance for the aquatic system."[170]

[166] Although the plurality would deny jurisdiction to wetlands lacking a "continuous surface connection" to a "relatively permanent water," 547 U.S. at 742, only four Justices adopted this position, and therefore it is not binding.
[167] 79 Fed. Reg. at 22,216.
[168] *Rapanos*, 547 U.S. at 773-74.
[169] *Id.* at 804-05.
[170] *Id.* at 786.

From a scientific perspective, there are several mechanisms through which even seemingly "isolated" waters can have a significant nexus to navigable waters. The Connectivity Report states, "'geographic isolation' should not be confused with functional isolation, because geographically isolated wetlands can still have hydrological and biological connections to downstream waters."[171] The Report goes on to explain:

> Isolation is the opposite of connectivity; it is the degree to which system components are not joined. Both connectivity and isolation have important effects on downstream waters. For example, … wetlands that lack output channels can reduce flooding and store excess sediment.[172]

> Wetlands in landscape settings that lack bidirectional hydrologic exchanges with downstream waters (e.g., many prairie potholes, vernal pools, and playa lakes) provide numerous functions that can benefit downstream water quality and integrity. These functions include storage of floodwater; retention, and transformation of nutrients, metals, and pesticides; and recharge of groundwater sources of river baseflow. … [F]or certain functions (e.g., sediment removal and water storage), downstream effects arise from wetland isolation rather than connectivity.[173]

> Biological connectivity can occur between unidirectional wetlands and downstream waters through movement of amphibians, aquatic seeds, macroinvertebrates, reptiles, and mammals, including colonization by invasive species. Many species in those groups that use both stream and wetland habitats are capable of dispersal distances equal to or greater than distances between many unidirectional wetlands and river networks.[174]

However, while the Connectivity Report generally supports the idea of a significant nexus potentially existing between "isolated" or "unidirectional" waters and navigable waters, it gives short shrift to the evidence supporting a conclusive significant nexus finding for such waters, stating that it is too difficult to generalize about their effects.[175] Given the numerous ways documented in the Report that "unidirectional" waters affect the physical, chemical, and biological state of downstream waters, it is clear that they are significant components of the aquatic ecosystem.

The Science Advisory Board's review confirms that the Connectivity Report understates the agencies' ability to make categorical findings about the significant nexus between "unidirectional" waters and larger downstream waters. The SAB states:

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[171] Connectivity Report at 1-12.
[172] *Id.* at 1-5.
[173] *Id.* at 1-10.
[174] *Id.* at 1-12.
[175] *Id.* at 1-4.

> The SAB disagrees with the overall conclusion in Section 1.4.3 of the Report (Conclusion 3) indicating that, "The literature we reviewed does not provide sufficient information to evaluate or generalize about the degree of connectivity (absolute or relative) or the downstream effects of wetlands in 'unidirectional' landscape settings." This statement is inconsistent with the text immediately preceding it, which describes numerous scientifically established functions of non-floodplain wetlands that can benefit the physical, chemical, and biological integrity of downstream waters. Furthermore, the conclusion largely overlooks the effects of deep aquifer connections and non-hydrologic biological connections on downstream waters. The SAB finds that the scientific literature, including references cited in the EPA [Connectivity] Report, provides ample information to support a more definitive statement, and strongly recommends that the authors revise this conclusion to focus on what is supported by the scientific literature and then articulate the specific gaps in our knowledge that must be resolved…[176]

Furthermore, the SAB disagreed with the approach in the agencies' proposed rule of subjecting all "other waters" to case-by-case review. It stated:

> There is … adequate evidence to support a determination that certain subcategories and types of "other waters" in particular regions of the United States (e.g.., Carolina and Delmarva Bays, Texas coastal prairie wetlands, prairie potholes, pocosins, western vernal pools) are similarly situated (i.e., they have a similar influence on the physical, biological, and chemical integrity of downstream waters and are similarly situated on the landscape) and thus are waters of the United States.[177]

As described in detail below, the available science supports a "more definitive statement" about the impact of certain subcategories of "other waters" on downstream water bodies. This conclusion is supported not only by the Connectivity Report, but also by two independently commissioned academic reports reviewing supplementary evidence about so-called "isolated" waters. These reports were developed by students in the River Basin Center at the University of Georgia, and were reviewed and found highly credible by independent experts. The UGA reports and the experts' reviews of them can be found in the docket for this rulemaking.[178] Together with the Connectivity Report, they show that vernal pools, pocosins, sinkhole wetlands in karst regions, Rainwater Basin wetlands, Sand Hills wetlands, playa lakes, interdunal wetlands, Carolina and Delmarva bays, other coastal plain depressional wetlands, and prairie potholes all have a significant nexus to traditionally navigable waters and deserve protection under the law. The agencies must take this scientific evidence into account in determining which waters warrant categorical coverage.

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[176] SAB Connectivity Review at 58.
[177] SAB Rule Review at 3.
[178] *See* Letter from Jon Devine, NRDC & William Sapp, Southern Environmental Law Center, to Water Docket, Comment No. EPA-HQ-OW-2011-0880-10578 (Oct. 17, 2104) (cover letter and attachments), available at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2011-0880-10578.

In the sections that follow, we describe some of the evidence showing how these waters impact downstream water bodies. We respectfully urge the agencies to review all of the available science, including the Connectivity Report, the SAB reviews of the Report and the proposal, the UGA reports, and any other credible scientific information submitted to the docket of this rulemaking or to the SAB in its evaluation of the science supporting this initiative.[179]

a. Vernal Pools Have a Significant Nexus to Downstream Waters.

Vernal pools are shallow, seasonal wetlands that accumulate water during colder, wetter months and gradually dry down during warmer, drier months.[180] They typically do not have surface water connections to permanent waters and are usually situated on underlying substrate that impedes water infiltration.

The Connectivity Report acknowledges several common features of vernal pools that provide scientific evidence of hydrologic connectivity to other waters: temporary or permanent outlets, frequent filling and spilling of higher pools into lower elevation swales and stream channels, and conditions supporting subsurface flows through pools without perched aquifers to nearby streams.[181] The Report cites studies showing that western vernal pools were connected via surface flows 10-60% of the time, and that surface water flowed through swales connecting low-elevation vernal pools to streams during 60% of inundation periods.[182] Additionally, temporary storage of rainfall and snowmelt in vernal pool systems can attenuate flooding, provide a reservoir for adjacent vegetation during the spring growth period, and increase nutrient availability.[183] The Report concludes: "Documented evidence of surface flows connecting western vernal pool complexes to the river network via swales and seasonal streams is available in the literature. Indirect evidence indicates that surface and subsurface flows connect northern pools without perched aquifers to shallow groundwater and thus to nearby streams."[184]

The Report also highlights evidence of biological connections to downstream waters, including the fact that insects and amphibians use glaciated vernal pools as breeding habitat, refuge from predators or other stressors, hunting or foraging habitat, or stepping-stone corridors for dispersal and migration. The Report concludes that nonglaciated vernal pools in western states "are current reservoirs of biodiversity connected genetically to other locations and aquatic

[179] In particular, NRDC and the Southern Environmental Law Center submitted approximately 150 documents to the docket for the SAB's review proceedings. These documents contain relevant information about connectivity from state and federal agencies, public interest organizations, and academics. *See* Letter from Jon Devine, NRDC & Navis Bermudez, SELC, to Science Advisory Board & Water Docket, Comment No. EPA-HQ-OA-2013-0582-1319 (Nov. 5, 2013) (hereinafter "NRDC/SELC SAB Letter"), available at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OA-2013-0582-1319. We incorporate these materials by reference in these comments, but also separately submitted virtually all of these materials to the docket of the current rulemaking.
[180] Connectivity Report at 5-66.
[181] *Id.* at 5-67.
[182] *Id.* at 5-70.
[183] *Id.* at 5-72.
[184] *Id.* at 5-74.

habitats through continuing dispersal."[185] Consistent with this evidence, as noted above, the SAB specifically identified western vernal pools as deserving of treatment as "waters of the United States."[186]

The UGA report titled "Physical, Chemical, and Biological Impacts of Geographically Isolated Wetlands on Waters of the United States" echoes and confirms these findings.[187] It concludes that vernal pools in the northeastern United States have many physical, chemical, and biological impacts on navigable waters, based on the following facts. During high precipitation events, northeastern vernal pools can have surface water connections to nearby navigable waters and may provide groundwater input to adjacent waters or aquifers. Those that do not share connections to navigable waters impact hydrology in river networks by intercepting and storing water before either discharging it slowly or exporting it via evapotranspiration. Northern vernal pools likely retain pollutants and toxins and prevent them from entering downstream waters. Many migratory invertebrates are also found in northern vernal pools, along with birds, reptiles and mammals that transfer nutrients, energy, and genetic material between vernal pools and navigable waters.[188]

Likewise, the same UGA report finds that vernal pools in the western United States also have a variety of significant impacts on navigable waters, for several reasons. Western vernal pools typically have predictable hydrologic cycles that regulate runoff flow and volume; nutrient, carbon, and salt export; and facilitate nutrient cycling among uplands, wetlands, and navigable waterways. Storage of stormwater and sediment in vernal pools limits erosion and runoff that would otherwise reduce water quality of navigable waters. Animals migrating between western vernal pools and navigable waters carry invertebrate species to navigable waters, where they help maintain genetic diversity.[189]

This evidence shows that vernal pools have a significant nexus to downstream waters and should be categorically protected in the final rule.

b. Pocosins Have a Significant Nexus to Downstream Waters.

While the Connectivity Report does not specifically discuss pocosins, the UGA report evaluating so-called "isolated" wetlands finds evidence of a significant nexus to traditionally navigable waters.[190] Pocosins are bogs that naturally occur in broad swaths of flat or slightly depressed land on the Atlantic coastal plain. They are rainwater-fed bogs defined by their

[185] *Id.*
[186] SAB Rule Review at 3.
[187] Sam Woolford, Shannon Bonney, & Ross Pringle, *Physical, Chemical, and Biological Impacts of Geographically Isolated Wetlands on Waters of the United States* (October 2014), *available at* http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2011-0880-10578 (hereinafter "*Isolated Wetlands*").
[188] *Id.* at 5-12.
[189] *Id.* at 12-15.
[190] *Id.* at 16-25.

vegetation communities and usually are not connected or adjacent to navigable surface water, have relatively long hydroperiods with temporary inundation, and are a source of water on the coastal landscape due to their topographically high position. Pocosins are among the kinds of "other waters" that the SAB concludes should be protected as "waters of the United States."[191]

Physical impacts of pocosins on downstream waters include the determination of runoff patterns and volume, and changes in sediment loading in coastal and downstream waters. Pocosins affect the quantity and pattern of water delivery to streams and coastal waters by sequestering and losing (through evapotranspiration) the majority of precipitation entering the systems, and exporting the remainder by overland sheet flow. Studies have shown that natural pocosins regulate water flow and promote slow release of sheet-flow surface runoff to navigable waterways, while drainage of pocosins dramatically increases high-flow events. The increases in both overall runoff volume and peak flows following pocosin development sheds light on the physical impact of pocosins on downstream waters: they serve as water pumps, by sequestering water that is later exported by evapotranspiration instead of draining to navigable waterways, and they serve as water storage, slowing and diffusing water discharge to streams and coastal waters, especially after high precipitation events.

The physical impacts of pocosins on navigable waters are inextricably linked to the chemical impacts they have: natural water storage and sequestration in these systems provides for nutrient retention and organic carbon export to streams and coastal waters. Pocosins are important sources of organic nitrogen and organic carbon to navigable waters, and they retain phosphorus that would otherwise be exported with runoff. As pocosins lose on average two thirds of their hydrologic input to evapotranspiration and export the remainder through sheet-flow surface runoff, they play a large role in maintaining the brackish salinity of coastal streams and estuaries.

While there has been a limited study of pocosin biota in the literature, many mammals, birds, amphibians, reptiles, and fish are known to use both pocosin and riparian areas as habitat, and their movement between those two systems represents a transfer of energy and nutrients that affects the integrity of both.

This evidence shows that pocosins have a significant nexus to downstream waters and should be categorically protected in the final rule.

c. Sinkhole Wetlands in Karst Regions Have a Significant Nexus to Downstream Waters.

Although the Connectivity Report does not specifically discuss karstic sinkhole wetlands, the UGA report evaluating so-called "isolated" wetlands finds evidence of a significant nexus to

[191] SAB Rule Review at 3.

traditionally navigable waters.[192] Sinkhole wetlands in karst regions occur in topographic depressions, which are formed when limestone bedrock is dissolved and the overlying soil collapses.

While they can be classified into several different categories, sinkhole wetlands of each category generally have significant impacts on downstream waters. They can mediate flooding and stormwater runoff and reduce peak flows by retaining water on the landscape before it reaches navigable waterways. Some types can slow water infiltration to aquifers and allow for sediment and pollutant removal. Studies have demonstrated that stream flows downstream of karstic sinkhole wetlands are characterized by peak discharges that are of a lesser volume and longer duration than those upstream.

An additional scientific review by Ducks Unlimited, which can also be found in the docket for this rulemaking, reaffirms these conclusions about the physical impacts of karstic sinkhole wetlands, stating: "'Other waters' that exist in karst topography are often directly linked to subsurface water flows of relatively high velocity, moving easily through underground channels, caves, streams, and cracks in the rock. There tend to be many springs and seeps, many with surface connections, which are the source of some large streams (Winter et al. 1998), and Winter (1998) stated that groundwater recharge in karst terrain is efficient. Entire streams can go subsurface and reappear in other areas and connect directly with wetland basins, and contaminants deposited in 'other waters' are easily mobilized in these regions."[193]

The UGA "isolated" waters report also describes the chemical and biological impacts of karstic sinkhole wetlands.[194] These wetlands maintain water quality by transforming nutrients and organic compounds and cycling organic carbon. While specific studies on biodiversity in karst regions are less numerous than other studies, these have shown strong evidence of biological connectivity. Many sinkhole wetlands are home to a diversity of invertebrates and other migratory species, including many species of birds, amphibians, and reptiles. Many of these species migrate between wetlands and navigable waters.

This evidence shows that sinkhole wetlands in karst regions have a significant nexus to downstream waters and should be categorically protected in the final rule.

d. Rainwater Basin Wetlands Have a Significant Nexus to Downstream Waters.

Although the Connectivity Report does not specifically discuss Rainwater Basin wetlands, the UGA report evaluating so-called "isolated" wetlands finds evidence of a significant nexus to traditionally navigable waters.[195] The wetlands of the Rainwater Basin in south-central

[192] *Isolated Wetlands* at 25-30.
[193] Ducks Unlimited, Comment Letter to EPA & Army Corps of Engineers, Docket ID No. EPA-HQ-OW-2011-0880 at 63 (Nov. 5, 2014).
[194] *Isolated Wetlands* at 26-30.
[195] *Id.* at 30-35.

Nebraska range in size from less than 1 to over 100 acres and are typically shallow depressions with little connection to groundwater or surface water because of a clay soil later that impedes infiltration. Nonetheless, these wetlands exhibit various physical, chemical, and biological impacts on navigable waters similar to those of other depressional wetlands.

Rainwater Basin wetlands provide important water storage functions and regulate the timing and volume of flow to downstream waters. Studies show they reduce soil erosion by lessening peak flows associated with storm events and decreasing the total amount of runoff leaving the watershed. These wetlands also improve downstream water quality when vegetation stabilizes soil at the water's edge, a process known as shoreline anchoring, which reduces soil erosion.

Wetlands in the Rainwater Basin improve downstream water quality by retaining and transforming nutrients into less polluting forms, and by retaining toxins and pollutants in herbicides and pesticides washing off the heavily farmed landscape. Birds, reptiles, and amphibians move between Rainwater Basin wetlands and navigable waters, representing a direct transfer of nutrients, energy, organic matter, and genetic material. In particular, these wetlands are a primary staging area for many migrating bird species using the North American Central Flyway in spring and fall; many of these species move between Rainwater Basin wetlands and traditionally jurisdictional waters.

An additional review by Ducks Unlimited echoes these findings regarding biological connections:

> Folk and Tacha (1990) documented patterns of use of the North Platte River and the region's temporary and semipermanent palustrine wetlands by sandhill cranes. The North and Central Platte River valley provides the primary spring staging habitat for about 80% of the entire midcontinent population of the species (Pearse et al. 2010), and the cranes typically roost in the river channel or nearby wetlands for safety during the night. They found that the cranes were collectively interdependent upon the shallow navigable river and the region's wetlands, providing a biological nexus between the two types of waters. Taken together, these and other studies (Gersib et al. 1989; Tacha et al. 1994; Bishop et al. 2010; Pearse et al. 2011) indicate that the Platte River and the wetlands of the rainwater basin and surrounding landscape function as a complex of aquatic habitats for a diversity of species, and as the 'other waters' of the region are negatively impacted, so too is the biological integrity of the navigable Platte River.[196]

This evidence shows that Rainwater Basin wetlands have a significant nexus to downstream waters and should be categorically protected in the final rule.

e. Sand Hills Wetlands Have a Significant Nexus to Downstream Waters.

[196] Ducks Unlimited at 58.

While the Connectivity Report does not specifically discuss Sand Hill wetlands, the UGA report evaluating so-called "isolated" wetlands finds evidence of a significant nexus to traditionally navigable waters.[197] Wetlands in the Sand Hills region of Nebraska exist in valleys between large sand dunes and are fed primarily by groundwater from the Ogallala aquifer due to permeable sand and gravel soils. Of over 3,000 wetlands in the Sand Hills totaling 1.3 million acres, about 2,000 of them are small ephemeral pools. Yet these wetlands have a broad variety of impacts on navigable waters.

Wetlands in the Sand Hills are areas of significant aquifer discharge and recharge. These waters serve important functions as groundwater discharge constitutes a major component of stream flows in the region. In fact, approximately 98% of the Dismal River and 95% of the Middle Loup River flows are derived from groundwater seepage.[198] A review of additional scientific studies by Ducks Unlimited underscores this important function:

> LaBaugh (1986) also documented interconnections and flow between sandhill wetlands and lakes and groundwater as water in this interconnected system flowed toward lower elevations. Novacek (1989) stated that the sandhill wetlands in Nebraska (including wet meadows) are important to water table and aquifer recharge, with the region containing five principal drainage basins that all ultimately empty into the Platte and Missouri rivers. It has also been stated that most sandhill wetlands are also interconnected with the important Ogallala aquifer as well as the local groundwater (Tiner 2003)… In summary, the scientific evidence is clear that the Sandhill wetlands are, in the aggregate and generally, connected via groundwater linkages to navigable waters and their tributaries in this region of the country.[199]

Sand Hill wetlands also have important chemical interactions with groundwater, the primary source of water in the region. Geographically "isolated" wetlands contribute dissolved organic carbon to underlying aquifers and affect the composition of major ions in adjoining groundwater. Sand Hill wetlands are also sites of nutrient uptake, particularly phosphate and nitrate. Their biological connections are significant as well: many birds, reptiles, amphibians, mammals, and invertebrates migrate between Sand Hill wetlands and permanent navigable waters. These movements represent a direct transfer of nutrients, energy, organic matter, and genetic material.[200]

This evidence shows that Nebraska's Sand Hill wetlands have a significant nexus to downstream waters and should be categorically protected in the final rule.

f. Playa Lakes Have a Significant Nexus to Downstream Waters.

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[197] *Isolated Wetlands* at 35-39.
[198] *Id.* at 36.
[199] Ducks Unlimited at 54-55.
[200] *Isolated Wetlands* at 37-39.

Although the Connectivity Report does not specifically discuss playa lakes, the UGA report evaluating so-called "isolated" wetlands finds evidence of a significant nexus to traditionally navigable waters.[201] Playa lakes are ephemeral isolated wetlands of the southern High Plains. They are shallow, roughly round depressions of unknown origin that dry for the majority of the year due to limited rainfall in this arid region; they are inundated only during periods of heavy precipitation during summer and fall. As some of the only water bodies in the region, playa lakes play a large role in maintaining biodiversity and sustaining populations of birds, as well as in groundwater recharge, nutrient cycling, and water quality enhancement.

Playa lakes are known to recharge aquifers, mitigate floods, and reduce sediment inputs to nearby waterways. Playas in the Southern High Plains of New Mexico and Texas were shown to play a significant role in recharging aquifers by collecting runoff and focusing rapidly flowing surface waters through macropores. In fact, playas represent the only sites for aquifer recharge in some areas.[202] A separate scientific review by Ducks Unlimited echoes the importance of these functions:

> Conceptual models have recognized for years that the playas are critical recharge zones for the Ogallala (e.g., Wood 2000). Gurdak and Roe (2009; 2010) recently provided a comprehensive synthesis of the related literature (approximately 175 studies) and concluded that playas are pathways of relatively rapid recharge and provide an important percentage of recharge to the Ogallala aquifer. Thus, playas are, in the aggregate, critical to supplying water to an important, interstate water body, and they therefore impact the water quantity of the underlying aquifer….Weeks and Gutentag (1984) stated that groundwater from this aquifer discharges naturally into flowing streams and springs, and that the aquifer and valley-fill deposits and associated streams comprise a stream-aquifer system that links the High Plains aquifer to surface tributaries of the Platte, Republican and Arkansas rivers, as well as the Pecos and Canadian rivers (Kreitler and Dutton 1984)….Thus, the significant nexus between the playa wetlands and navigable waters is created by their direct linkage via the Ogallala aquifer.[203]

Playa lakes also have significant chemical impacts on navigable waters. They gather and store nutrients that are carried in surface water runoff. Once runoff is stored, biological and chemical processes may reduce nutrient and pollutant concentrations. Playa lakes have been shown to improve water quality; one study showed concentrations of nitrate and chemical oxygen demand in a Texas playa decreasing with time to levels that were less than nearby aquifers.[204]

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[201] *Id.* at 40-43.
[202] *Id.* at 40.
[203] Ducks Unlimited at 56-57.
[204] *Isolated Wetlands* at 40.

Finally, the biological connections between playa lakes and traditionally navigable waters are considerable. Many waterfowl, shorebirds, and wading birds use playa lakes either as a wintering residence or as a stopover location while migrating to points further north or south within the North American Central Flyway. The biological connections that playa lakes share with waters of the surrounding areas as well as distant locales have been well documented through tagging, tracking, studying, and observing these birds. In addition to birds, macroinvertebrates also provide biological connectivity, which other organisms transport between playa lakes and permanent bodies of water.[205]

This evidence shows that playa lakes have a significant nexus to downstream waters and should be categorically protected in the final rule.

g. Interdunal Wetlands Have a Significant Nexus to Downstream Waters.

While the Connectivity Report does not specifically discuss interdunal wetlands, the UGA report evaluating so-called "isolated" wetlands finds evidence of a significant nexus to traditionally navigable waters.[206] Isolated interdunal wetlands exist in all of the country's major coastal regions, interspersed among sand dunes. They are commonly connected to groundwater sources, but rainwater and surface runoff from surrounding dunes are also important sources of water in these wetlands. They have important impacts on navigable waters, typically rivers and streams flowing through dunal landscapes and nearby oceans and lakes.

The physical impacts of interdunal wetlands on navigable waters are due to groundwater flow between wetlands and nearby waters (streams, lakes, and oceans), direct surface water connections with streams or nearby lakes and oceans, and storage and sink functions for water and sediment. For example, groundwater flow from interdunal wetlands to the Great Lakes (and the reverse) is common. They also exhibit hydrologic connectivity during temporary periods of surface water connections to navigable waters, often in the form of overtopping or erosion caused by storm surges or high winds. Interdunal wetlands that receiving incoming surface water either slow flow rates or prevent these flows from entering nearby Great Lakes, as much of the water is exported through groundwater seepage or evapotranspiration.[207]

The chemical impacts of interdunal wetlands on navigable waters stem from their ability to retain and transform nutrients such as nitrogen and phosphorus. Dynamic hydrology in interdunal wetlands allows for both aerobic and anaerobic microbial processes that promote denitification, which can allow wetlands to function as a nitrogen sink and prevent excess N from entering downstream waters. Open water interdunal wetlands can also trap phosphorus

[205] *Id.* at 41-42.
[206] *Id.* at 43-50.
[207] *Id.* at 44-45.

bound to suspended solids as they retain incoming sediment, as well as other heavy metals and pollutants entering through surface water channels and runoff.[208]

Finally, interdunal wetlands support a wide variety of life: some 1,400 species of living organisms, split about equally between plant and animal species. Many animals move between interdunal wetlands and navigable waters like streams and rivers. These wetlands are extremely important staging and breeding areas for waterfowl, shore birds, and wading birds that migrate along the Atlantic, Mississippi, and Pacific flyways. Population-level changes due to limited wetland resources likely have ecosystem impacts in navigable waters used by migrating birds in other seasons due to changes in nutrient and energy cycling. Mammals, reptiles, fish, and invertebrates also move between these habitats and navigable waters, transferring energy, nutrients, genetic materials, and organic matter.[209]

This evidence shows that interdunal wetlands have a significant nexus to downstream waters and should be categorically protected in the final rule.

h. Carolina and Delmarva Bays, and Other Coastal Plain Depressional Wetlands Have a Significant Nexus to Downstream Waters.

Carolina and Delmarva bays are ponded depressional wetlands that occur along the Atlantic coastal plain from northern Florida to New Jersey. Most bays receive water through precipitation, lose water through evapotranspiration, and lack natural surface outlets. The Connectivity Report identifies several features of these bays that provide evidence of significant physical, chemical, and biological connections with traditionally navigable waters. As the Report states:

> Both mineral-based and peat-based bays have shown connections to shallow groundwater. Bays typically are in proximity to each other or to permanent waters, providing the potential for surface water connections in large rain events via overland flow. Fish are reported in bays that are known to dry out, indirectly demonstrating surficial connections. Amphibians and reptiles use bays extensively for breeding and for rearing young. These animals can disperse many meters on the landscape and can colonize, or serve as a food source to, downstream waters. Similarly, bays foster abundant insects that have the potential to become part of the downstream food chain. Humans have ditched and channelized a high percentage of bays, creating new surface connections to other waters and allowing transfer of nutrients, sediment, and methylmercury.[210]

However, despite acknowledging these connections, the Report goes on to state that "the literature that we reviewed does not provide sufficient information to fully evaluate the impact of

[208] *Id.* at 45-46.
[209] *Id.* at 46-50.
[210] Connectivity Report at 5-49.

Carolina and Delmarva bays on rivers and estuaries at this time."[211] By contrast, the SAB identifies Carolina and Delmarva Bays as "other waters" that should be protected as "waters of the United States."[212]

The UGA report titled "Evidence of Significant Impacts of Coastal Plain Depressional Wetlands on Navigable Waters" finds, to the contrary: "While no specific type of significant nexus can be assumed to exist between every [Coastal Plain Depressional Wetland, a category including Carolina and Delmarva bays] and navigable waters, enough evidence exists to presuppose that each CPDW, individually and/or as part of a wetland complex, significantly affects the biological, chemical, and/or physical integrity of federally jurisdictional waters."[213]

Throughout most of the year Carolina and Delmarva Bays exhibit limited physical connections to downstream navigable waterways, but several studies have shown groundwater and potential surface water connections during extreme weather events. When neither of these connections exist, Carolina and Delmarva Bays influence the physical integrity of downstream waters by acting as water and sediment storage on the landscape, and often as "water pumps" by allowing water entering the wetlands to leave through evapotranspiration. Whether serving as water and sediment sources or sinks, Carolina and Delmarva Bays have a significant effect on the integrity of downstream navigable waters.[214] Because most Carolina Bays are linked through groundwater interactions or periodic, high surface water flows, these connections allow depressional wetlands to function as a high quality water source, important water storage, and/or significant nutrient sink to navigable waters downstream. Ephemeral wetland hydrology supports the bacteria necessary for denitrifcation; thus, ephemeral Carolina Bays likely reduce ammonia and nitrate levels in navigable waters and maintain ecosystem health. Studies have also shown that Carolina Bay soils retain excess nutrients and heavy metals from long-term additions of agricultural water.[215]

Evidence of biological connections is also abundant. Many invertebrates have specific evolutionary adaptations that cause a significant transfer of energy and nutrients between isolated ephemeral wetlands and navigable waters. Cyclic colonizer insects, common in Carolina bays, can play an important role in the trophic dynamics, nutrient cycling, and ecological stability of the permanent waters they inhabit during a portion of the year, including large rivers and their tributaries, interstate waters, navigable lakes, and their adjacent wetlands. Carolina and Delmarva bays also have a substantial impact on the biological integrity of permanent waters due to the production of other insects such as midges and the migration of birds, including several duck species. Amphibians use Carolina and Delmarva bays, upland, and river networks for

[211] *Id.* at 5-57.
[212] SAB Rule Review at 3.
[213] Sam Woolford & Matt Carroll, *Evidence of Significant Impacts of Coastal Plain Depressional Wetlands on Navigable Waters* (July 2014), *available at* http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2011-0880-10578 at 3-4 (hereinafter "*Coastal Wetlands*").
[214] *Id.* at 4-5.
[215] *Id.* at 6-8.

breeding, foraging, dispersal, and overwintering. Because they move among these habitats, they facilitate critical flows of nutrients, energy, and genetic information, and serve as links in an interconnected food web. The same is true of numerous birds and mammals.[216]

Additionally, other coastal plain depressional wetlands beyond Carolina and Delmarva bays significantly affect downstream navigable waters. The UGA report evaluating coastal wetland science finds "that Carolina and Delmarva Bays should be grouped with other depressional wetlands of the Coastal Plain to form a broader class of wetlands called Coastal Plain Depressional Wetlands."[217] Limiting the evaluation of coastal depressional wetlands to merely Carolina and Delmarva Bays excludes many depressional wetlands on the southeastern coastal plain that are similar ecologically, and perhaps more importantly, share similar connections to downstream waters. Wetlands that have regional names such as limesinks, citronelle ponds, cypress domes, oak domes, grady ponds, and flat-bottom ponds have been considered by many researchers as some variant of "Southeastern Depressional Wetlands" due to their ecological similarity. The UGA report references numerous scientific studies explaining the physical, chemical, and biological connections that these other wetlands have with traditional navigable waters, similar to the connections found in Carolina and Delmarva bays.[218]

The UGA report concludes, "we posit that geographically isolated depressional wetlands on the southeastern coastal plain, including those called Carolina and Delmarva bays, clearly impact the physical, chemical, and biological processes and functions in river networks, lakes, and coastal waters. Thus, they should be considered a class of Waters of the United States."[219]

This evidence shows that depressional wetlands on the southeastern coastal plain have a significant nexus to downstream waters and should be categorically protected in the final rule.

i. Prairie Potholes Have a Significant Nexus to Downstream Waters.

Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, that are found in the central United States and Canada. The Connectivity Report emphasizes the variability of both the area they occupy and their range of hydrologic permanence, and states that "individual prairie potholes span the entire continuum of connectivity to and isolation from the river network and other bodies of water."[220]

Yet the Report also notes significant features common to many prairie potholes that demonstrate connectivity:

> Potholes generally accumulate and retain water effectively due to the low permeability of their underlying soil, which can modulate flow characteristics of nearby streams and

[216] *Id.* at 10-14.
[217] *Id.* at 2.
[218] *See id.* at 5-6, 8-9, 14-18.
[219] *Id.* at iii.
[220] Connectivity Report at 5-57.

> rivers. Potholes also can accumulate chemicals in overland flow, thereby reducing chemical loading to other bodies of water. When potholes are artificially connected to streams and lakes through drainage, isolation is eliminated and they become sources of water and chemicals. Potholes also support a community of highly mobile organisms, from plants to invertebrates to birds, that travel among potholes and that can biologically connect the entire complex to the river network.[221]

And the Report ultimately concludes that, "when proper climatic or topographic conditions occur, or biotic communities are present that promote potential or observed connections, measurable influence on the physical, chemical, and biological condition and function of downstream waters is highly likely."[222] In its review of the proposed rule, the SAB specifically identified prairie potholes as a type of "other water" warranting treatment as "waters of the United States."[223]

An independent review of the scientific literature by Ducks Unlimited shows that, in fact, wetlands in the prairie pothole region (PPR), in the aggregate, possess a significant nexus with navigable waters. Prairie potholes are connected to downstream waters primarily due to the abundance and density of potholes on the PPR landscape, in conjunction with their general lack of direct surface water connection to streams and rivers. Prairie potholes "serve the function of storing water that would otherwise flow to downstream waters and thereby affect the downstream navigable waters by decreasing flood flow."[224] Ducks Unlimited documents many studies finding that the presence of these isolated wetlands decreases runoff velocity and volume by capturing high magnitude short duration flows and releasing water through groundwater and evaporation over an extended period.[225] In addition, studies of areas where prairie potholes have been drained have demonstrated the decrease in the cumulative storage capacity of the wetlands, and this decease has been linked to increases in the frequency of flooding in and around the PPR. As Ducks Unlimited observes:

> In most cases, … when a pothole is drained or filled, the water that would have otherwise been retained in the basin is diverted to a ditch or other conveyance and makes its way to a navigable waterway much more rapidly than when the wetland was intact. The significant nexus between the intact pothole and the nearest navigable water, described by Justice Kennedy as the 'absence of [direct] hydrologic connection,' then becomes apparent as the altered flow pattern … brings more water, carrying more sediment, nutrients and other pollutants, much more rapidly, to the navigable water and downstream communities, farms, and other landowners.[226]

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[221] *Id.* at 5-57 to 5-58.
[222] *Id.* at 5-66.
[223] SAB Rule Review at 3.
[224] Ducks Unlimited at 40.
[225] *Id.* at 40-42.
[226] *Id.* at 42.

In contrast to the nexus created by the lack of direct connection, sometimes "a 'fill and spill' type of connectivity is exhibited when the wetland fills to capacity and then spills over into other wetlands and/or to downstream waters."[227] This phenomenon results in temporary but direct hydrologic connections among and between potholes, and between complexes of potholes and the streams and rivers in the region, with associated impacts on regional water regimes in navigable waters and their tributaries.

Ducks Unlimited also reviews several scientific studies demonstrating that prairie potholes "can, and very often do, contribute to groundwater recharge, and this groundwater often continues to move downslope toward intermittent or flowing streams ultimately discharging into navigable waters or their tributaries."[228] Some potholes have a net seepage outflow (groundwater recharge basins), others have a net seepage inflow (groundwater discharge basins), and many basins function alternately, at times having a net outflow into the groundwater and at other times having a net inflow. Critically, Ducks Unlimited notes, "the groundwater to which the pothole wetlands are linked subsequently provides input to lower-lying wetlands and stream valleys."[229]

Prairie potholes also have significant chemical connections with navigable waters. According to Ducks Unlimited's literature review, "Potholes act as sinks for nutrients and other chemicals, including those widely used for agricultural purposes, and thereby affect and improve the quality of runoff water."[230] That review discusses multiple studies showing the impact on downstream water quality when prairie potholes are drained:

> [W]hen as a result of the ditching or filling of wetlands the retention time is shortened or eliminated and the associated biochemical processes are thereby altered, the cleansing or filtration function of the former wetland is lost or degraded, with direct negative impacts on the quality of the downstream navigable waters. Similarly, water retained in a pothole is cleansed of much of its load of pollutants via biochemical processes before it enters groundwater and flows laterally to other areas and other waters, or downward into deeper aquifers….[231]

Finally, prairie potholes have a significant biological nexus to traditional navigable waters. These wetlands are biologically significant on a continental scale due to their importance as a breeding landscape for waterfowl and other migratory birds. Additionally, Ducks Unlimited discusses studies showing that:

> The increased flows in downstream waters resulting from drainage or filling of potholes … would also affect the capability of those waters to sustain populations of organisms

[227] *Id.* at 40.
[228] *Id.* at 45.
[229] *Id.* at 46.
[230] *Id.* at 47.
[231] *Id.*

more suited to the lower flows, decreased concentrations of nutrients and other solutes, and lower sedimentation rates of waters not impacted by drainage. Thus, the biological impacts to aquatic life in navigable waters that result from the increased hydrological connectivity and corresponding increases in stream flow and erosiveness, sediment loads, and nutrient and pesticide concentrations, cannot be ignored as an important component of the significant nexus evaluation for the ecoregion."[232]

This evidence shows that prairie potholes have a significant nexus to downstream waters and should be categorically protected in the final rule.

j. For "Other Waters" that Are Not Categorically Protected, the Agencies' Approach to Assessing "Significant Nexus" is Sensible.

We recognize that the foregoing categories of "other waters" do not encompass all such water bodies in the country. Accordingly, we understand there will be a continuing need for some case-by-case assessments of water bodies' jurisdiction in the future. For those assessments, we believe the agencies have proposed a generally reasonable framework for implementing the "significant nexus" test. The regulatory definition closely tracks Justice Kennedy's test, and the agencies have, for the most part, described a strategy for implementing that test in a way with which we agree.

First, we agree with treating the single point of entry watershed in which a water body being evaluated is located as the "region" governing the analysis.[233] This appears to us to be a reasonable scale on which to evaluate the impacts of similarly situated waters. At the same time, we believe that the rules should allow for the consideration of impacts at a larger scale when waters in separate single point of entry watersheds contribute to water quality further downstream – such as a larger water body to which each of those single point of entry watersheds contribute.

Second, we urge the agencies to consider, in evaluating whether waters are "similarly situated," whether "they perform similar functions," as proposed, but we caution about focusing too narrowly on whether such waters "are located sufficiently close together or sufficiently close to a 'water of the United States' so that they can be evaluated as a single landscape unit with regard to their effect on the chemical, physical, or biological integrity of a [navigable or interstate] water…."[234] We believe, as the separate comments of Ducks Unlimited also stress, that surficial proximity is not a critical element of this assessment.[235]

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[232] *Id.* at 49.
[233] 79 Fed. Reg. at 22,212.
[234] *Id.* at 22,213.
[235] We believe this is consistent with the advice provided by the SAB. Although the SAB indicated that "[s]patial proximity is *one important determinant* of the magnitude, frequency and duration or connections between wetlands and streams that will ultimately influence the fluxes of water, materials and biota between wetlands and downstream waters," SAB Connectivity Review at 60 (emphasis added), it did not suggest that proximity alone is relevant. To the contrary, in discussing the proposed rule's provision on adjacent wetlands, the SAB noted that "the available

Third, we strongly support the agencies' attention, in explaining how "significant nexus" assessments will be made, to a wide variety of physical, chemical, and biological impacts, and especially the agencies' attention to the fact that hydrologic separation can create the requisite nexus. [236]

k. Conclusion

In sum, as the available science demonstrates, all of these subcategories of "other waters" have a significant nexus to navigable waters. In other words, they significantly affect the chemical, physical, and/or biological integrity of navigable waters, interstate waters, and the territorial seas, in ways that are more than speculative or insubstantial. Although it is certainly true that not every specific water body in the "other waters" categories discussed above will perform every function or affect water quality downstream in a significant way (or, sometimes, even a perceptible way), it is legally sufficient that a majority of waters in the category contribute to an aggregate effect that is significant. We respectfully submit that the foregoing evidence (especially when considered alongside other evidence in the record of this rulemaking) definitely meets this standard. Accordingly, these waters must be categorically protected under the Clean Water Act and treated as jurisdictional by rule.

2. Other "Isolated" Waters Substantially Affect Interstate Commerce and Should be Categorically Protected Under the Agencies' Commerce Clause Authority.

As noted above, Justice Kennedy's "significant nexus" test is not the only legitimate basis for exercising jurisdiction over a water body under the Clean Water Act. The current regulations' definition of "waters of the U.S." as including "[a]ll other waters … the use, degradation or destruction of which could affect interstate or foreign commerce"[237] was not struck down by the Supreme Court, and it allows for the protection of resources even if they do not have a demonstrable "significant nexus" to navigable waters. The agencies should continue to protect those categories of "other waters" that have substantial effects on interstate or foreign commerce, especially where it may be difficult to find that waters in the category have a significant nexus, either individually or in the aggregate.

For example, closed or terminal ("endorheic") basins in the Southwest – streams that do not reach other water bodies due to evaporation or percolation – may not have a clear connection to downstream waters, but they may serve as a source of irrigation water for crops that are sold in interstate commerce, or other similar commercial purposes. Indeed, in response to a

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science supports defining adjacency or determination of adjacency on the basis of functional relationships, not on how close an adjacent water is to a navigable water." SAB Rule Review at 2-3. The same could be said for "other waters."

[236] *See generally* 79 Fed. Reg. at 22,213-14.

[237] 33 C.F.R. § 328.3(a)(3).

rulemaking initiative in the wake of *SWANCC* in 2003, Governor Bill Richardson of New Mexico urged EPA and the Corps not to roll back the rules, and particularly pointed to closed basin streams as critical resources to protect.[238] Governor Richardson's comments noted that "[w]aters within the closed basins of New Mexico provide recreation and fishing for interstate and foreign travelers, as well as water for industry."[239]

Similarly, different types of geographically isolated "other waters" recharge the Ogallala aquifer, the source of water supplies for millions of people and businesses. As discussed above, the evidence supports finding that these waters have a significant nexus to navigable waters. But even without that basis for protecting these resources, their critical linkages to interstate commerce would authorize their protection.

B. The Rule Should Not Exempt Ditches Without a Scientific Basis

EPA and the Corps propose to exempt ditches from regulation as "waters of the United States" if they "are excavated wholly in uplands, drain only uplands, and have less than perennial flow." The agencies propose this exemption despite the fact that they explicitly recognize elsewhere in the proposal that ditches often perform the same functions as tributaries – a class of waters that the agencies agree should be categorically protected because of their significant nexus to traditionally jurisdictional waters. Because the science does not demonstrate a functional difference between natural and manmade tributaries, or support the idea that upland ditches can never have a significant nexus to navigable waters, the wholesale exemption of upland ditches from ever being treated as "waters of the United States" is arbitrary and capricious.

In the Federal Register notice accompanying the proposal, the agencies describe in some detail the criteria for what qualifies as an "upland ditch," but without providing a scientific explanation for *why* such ditches should be exempted from Clean Water Act regulation. The Federal Register states:

> The proposed rule would exclude from jurisdiction upland ditches with less than perennial flow. The scientific concept of perennial flow is a widely accepted and well understood hydrologic characteristic of tributaries. Perennial flow means that water is present in a tributary year round when rainfall is normal or above normal. Identifying upland ditches with perennial flow is straightforward and will provide for consistent, predictable, and technically accurate determinations at any time of year. … Site characteristics may also be present to inform the determination of whether the water body is a ditch, such as shape, sinuosity, flow indications, etc., as ditches are often created in a

[238] Letter from NM Gov. Bill Richardson to U.S. EPA, Comments in Response to the Advance Notice of Proposed Rulemaking Regarding the U.S. Supreme Court Decision in Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers et al. (SWANCC). No. 99-1178 Argued October 31,2000 -Decided January 9, 2001, (Mar. 5, 2003) (attached to NRDC/SELC SAB Letter, supra & enclosed in Appendix A).
[239] *Id.*

> linear fashion with little sinuosity and may not connect to another "water of the United States."[240]

While consistency and predictability are worthy goals, they cannot take precedence over the science. And the agencies do not provide a scientific rationale for this exemption in the Federal Register notice because, in fact, there is none.

The agencies concede that many ditches can function as tributaries. "Ditches" are listed in the proposal's definition of "tributary": "A tributary, including wetlands, can be a natural, man-altered, *or man-made* water and includes waters such as rivers, streams, lakes, ponds, impoundments, canals, and *ditches* not excluded in paragraph (t)(3) or (4) of this section" (emphasis added). The Federal Register notice further states: "Other ditches not excluded under paragraphs (b)(3) or (b)(4), if they meet the new proposed definition of 'tributary,' would continue to be 'waters of the United States,' as they have been under the longstanding implementation of the statute and regulations by the agencies."[241] And, in discussing the importance of allowing for man-made tributaries to be protected as such, the agencies state:

> Natural, man-altered, and manmade tributaries provide many of the same functions, especially as conduits for the movement of water and pollutants to other tributaries or directly to traditional navigable waters, interstate waters, or the territorial seas. The discharge of a pollutant into a tributary generally has the same effect downstream whether the tributary waterway is natural or manmade.[242]

A ditch would meet the definition of "tributary" if it has a bed and banks and an ordinary high water mark, and if it contributes flow to a traditionally jurisdictional water. Indeed, the agencies note in the excerpt above that some ditches may "connect to another 'water of the United States.'" In fact, if an upland ditch never functioned as a tributary by contributing flow to a water of the U.S., then the upland ditch exemption would not even be necessary; there is already another exemption in the proposal for ditches that do not contribute flow. Thus, the inclusion of the upland ditches exemption in the proposal is an admission that some upland ditches do contribute flow and can function as tributaries.

The Connectivity Report does not distinguish between natural and manmade tributaries (i.e., between natural streams and ditches). The Report defines rivers and streams as flowing

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[240] 79 Fed. Reg. at 22,203.
[241] *Id.* at 22,219.
[242] *Id.* at 22,202. Indeed, when discussing why the proposal treats manmade tributaries as ditches in certain circumstances, the agencies explain that these features have numerous and significant impacts on downstream waters, some of which are magnified by the fact that they are ditches. *See id.* at 22,206 ("Due to the often straightened and channelized nature of ditches, these tributaries quickly move water downstream to (a)(1) through (a)(3) waters. Ditches and canals, like other tributaries, export sediment, nutrients, and other materials downstream. Due to their often channelized nature, ditches are very effective at transporting water and these materials, including nitrogen, downstream."). The agencies point to no evidence in this discussion that upland ditches that flow less than perennially do not have similar impacts.

water "within a visible channel," in turn defining "channels" as "natural *or constructed* passageways or depressions of perceptible linear extent that convey water and associated materials downgradient."[243] And throughout the Report's discussion of the ecological functions of tributaries, the distinction between natural and manmade channels is never mentioned. In other words, a tributary is a tributary from a functional perspective. When a ditch functions as a tributary, it should be regulated as such.

Limiting the exemption to ditches with less than perennial flow does not save it, as the agencies have stated quite clearly that other types of ephemeral and intermittent tributaries nonetheless have a significant nexus to traditional navigable waters. The agencies offer no evidence on which to conclude this is less true when the tributary takes the form of a manmade ditch.

From a legal perspective, many courts have recognized that ditches can be regulated as tributaries if they perform the same functions as tributaries – even if they are artificial.[244] Many of these decisions were issued before *SWANCC* and *Rapanos*, but the ability to regulate ditches was unaffected by those two cases, which did not hold in any way that the law distinguishes between natural and manmade tributaries.[245] In fact, Justice Kennedy's opinion in *Rapanos* not only authorizes but compels the regulation of ditches that function as tributaries given the agencies' finding that *all* tributaries have a significant nexus to navigable waters.

Achieving our water quality goals critically depends on protecting waters as expansively as the Clean Water Act allows. Excluding waters without a scientific basis for doing so is unjustified and undermines the achievement of these goals. The proposed exemption for all upland ditches is overly broad: EPA and the Corps may not exempt ditches that function as tributaries. The agencies must reject this wholesale exemption and provide for upland ditches to be considered "waters of the United States" whenever they meet the definition of tributaries.

C. The Rule Should Limit the Current Exemption for Waste Treatment Systems

The proposal excludes "[w]aste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act" from being considered Waters of the United States and therefore jurisdictional under the Act. This aspect of the proposal is

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[243] Connectivity Report at 3-1, 3-2, A-3 (emphasis added).

[244] *See U.S. v. Holland*, 373 F. Supp. 665, 673-74 (M.D. Fla. 1974), *Headwaters, Inc. v. Talent Irrigation Dist.*, 243 F. 3d 526, 533-34 (9th Cir. 2001); Answering Brief of Defendants-Appellees, *Nat'l Ass'n of Home Builders v. U.S. Army Corps of Eng'rs*, No. 10-5169 (D.C. Cir., June 10, 2011) at 42 ("a ditch may be a tributary if it contributes flow to a larger body of water"), 42-43 (collecting cases "that have upheld regulatory authority pursuant to the Clean Water Act over channels, canals, drains, and ditches").

[245] *See generally Nat'l Assn. of Home Builders*, 663 F.3d 470, 475 (D.C. Cir. 2011) (noting "the Corps's persistent view that some upland ditches may be jurisdictional"); 2008 *Rapanos* Guidance at 1 (indicating that some upland ditches with seasonal or perennial flow would be jurisdictional); Jon Devine et al., *The Historical Scope of Clean Water Act Jurisdiction*, Natl. Wetlands Newsletter, Vol. 3, No. 6, at 13 (discussing historical protections for a variety of disputed features, including ditches) (enclosed in Appendix A).

unchanged from the current regulations. Because EPA and the Corps are not proposing to do anything new, the Federal Register notice accompanying the proposal contains no commentary or explanation for the exemption.[246]

We have considerable concern with the agencies' current practice with regard to this exemption for waste treatment systems. Since the exemption was written into the regulations, EPA and the Corps have attempted to expand it to cover waters for which it plainly was not intended. In 1980, EPA amended its regulations to provide that:

> Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act … are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as a disposal area in wetlands) nor resulted from the impoundment of waters of the United States.[247]

Clearly, the exclusion was limited. In view of the fact that the Act "was not intended to license dischargers to freely use waters of the United States as waste treatment systems, the definition makes clear that treatment systems created in those waters or from their impoundment remain waters of the United States."[248] Although the second sentence of the regulatory exclusion was suspended in order to dispel concerns that pre-existing treatment systems would be retroactively brought into the regulatory system,[249] the exemption was not meant to be a wholesale authorization of anything described as a "waste treatment system." To the contrary, EPA's initial implementation of the rules rejected a sweeping interpretation; the agency argued in litigation that in-stream disposal of coal mining waste did not qualify for the exemption.[250]

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[246] Indeed, the agencies appear to be trying to wall off this exemption from public comment and perhaps even judicial review. *See* 79 Fed. Reg. at 22,190 (discussing exemptions and stating, "the agencies do not seek comment on these existing regulatory provisions"). However, this exemption is centrally related to the core elements of this rulemaking, especially because many so-called waste treatment systems would qualify as impoundments of jurisdictional waters, such that they should be categorically protected under this proposal. Moreover, as the history recounted in the text indicates, the exemption as currently implemented has not been subjected to notice-and-comment rulemaking, such that it is only fair to the public that the provision be examined in this rulemaking. Accordingly, the agencies must carefully consider comments on this exemption, and should ensure that any final provision exempting waste treatment systems is consistent with the original intent of the regulatory provision.

[247] *W.Va. Coal Ass'n v. Reilly*, 728 F. Supp. 1276, 1289 (S.D. W.Va. 1989) (quoting 40 C.F.R. § 122.3 (1980)).

[248] *Id.* (quoting 45 Fed. Reg. 33,298 (May 19, 1980)).

[249] *Id.* (citing 45 Fed. Reg. 48,620 (July 21, 1980)).

[250] *Id.* at 1289-90 (deferring to EPA's interpretation that treatment ponds were regulated "impoundments," not excluded "waste treatment systems"). *See also* Memorandum from Marcia Williams, EPA Office of Solid Waste Director, to James H. Scarbrough, EPA Region IV Residuals Management Branch Chief, attachment B (Apr. 2, 1986) ("EPA applies a standard which treats newly created impoundments of waters of the U.S. as 'waters of the U.S.,' not as 'waste treatment systems designed to meet the requirements of the CWA,' whereas impoundments of 'waters of the U.S.' that have existed for many years and had been issued NPDES permits for discharges from such impoundments are 'wastewater treatment systems designed to meet the requirements of the CWA' and therefore are not 'waters of the U.S.'"), *available at* http://yosemite.epa.gov/osw/rcra.nsf/documents/4BD7508AD59EA15F852565DA006F0A63.

Unfortunately, over time, EPA and the Corps have reversed this interpretation, and now allow sources to use the regulatory exemption to treat new waste treatment facilities in protected waters as excluded from the Clean Water Act. Under the agencies' revised interpretation, a new impoundment of waters of the United States is able to qualify for the waste treatment system exclusion if it is established via a section 404 permit.[251] This position has since been upheld in litigation.[252]

We strongly oppose this approach – nothing is more inconsistent with the basic premise of the Clean Water Act and its foundational goal of eliminating discharges of pollutants into waterways[253] than allowing polluters to convert the nation's waters into waste dumps. The agencies should use the opportunity of this rulemaking to explicitly limit the application of the waste treatment systems exemption to pre-existing facilities.

V. THERE ARE SIMPLE ANSWERS TO MANY QUESTIONS POSED BY THE AGENCIES IN THEIR PROPOSAL.

The agencies' Federal Register notice raises a host of issues, including several specific questions, on which they seek public input. Our reactions to these inquiries are discussed in turn below.

A. Public Input About Tributaries

1. Request for comment on not treating waters without an ordinary high water mark as tributaries, even when they function as such.

The agencies request comment on whether features without an ordinary high water mark (OHWM) that contribute flow to downstream waters, such as wetlands and ponds, should be eligible to be considered tributaries, or if they should be treated exclusively as adjacent waters. The notice states:

> An alternate approach would be to clarify that wetlands that connect tributary segments are adjacent wetlands, and as such are jurisdictional waters of the United States under (a)(6). In this approach, a tributary would be defined as having a bed and bank and OHWM, and the upper limit of the tributary would be defined by the point where these features cease to be identifiable. *** The agencies request comment on this alternate approach, as well as any other suggestions commenters may have on how to clarify the

[251] Memorandum from LaJuana S. Wilcher, EPA Assistant Administrator, to Charles E. Findley, Director, Water Div., Region X, U.S. Army Corps of Eng'rs, on Clean Water Act Regulation of Mine Tailings Disposal (Oct. 2, 1992); *see also* State Program Requirements; Approval of Application to Administer the NPDES Program; Texas, 63 Fed. Reg. 51,164, 51,183-84 (Sept. 24, 1998); U.S. EPA, Guiding Principles for Constructed Treatment Wetlands at 16 (Oct. 2000), *available at* http://water.epa.gov/type/wetlands/constructed/upload/guiding-principles.pdf.
[252] *See Ohio Valley Envtl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177, 211-16 (4th Cir. 2009) (upholding the agencies' interpretation).
[253] 33 U.S.C. § 1251(a)(1) ("it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985").

definition of tributaries and provide a clear explanation of their lateral and upstream extent"[254]

We strongly disagree with treating features that function as tributaries as anything but. Historically, the OHWM was used to establish the spatial limits of flowing waters in the Corps' section 404 regulations,[255] but was not a defining characteristic for "waters of the United States" more broadly. The proposal elevates this feature as an essential component of the definition of "tributary" for all Clean Water Act programs.

In our judgment, the primary import of OHWM (and bed and banks) in the proposal is to reflect the agencies' intent that the rules apply only to real and permanent aquatic features (which includes waters that lack perennially flowing or standing water). That is, OHWM is an indicator of a geographic feature the shape of which is determined by the action over many years of hydrologic forces like flowing water. We support the goal of focusing these rules on recognized types of surface waters; doing so reflects the agencies' longstanding practice of distinguishing between permanent aquatic features and places where water temporarily collects, like puddles or sheet flow.

Viewed in this context, we urge the agencies not to require wetlands and ponds that function as tributaries to have an OHWM in order to be considered tributaries under the rule.[256] Rather, those features should continue be treated as tributaries, as in the proposed rule, and the definitions of various types of water bodies should include indicia of long-term hydrologic processes. For wetlands, for instance, the existing regulatory definition would suffice.

In addition to ignoring the functional role that tributary wetlands and ponds play, treating them only as adjacent waters could create a significant loophole in the rules. If tributary ponds were treated as adjacent waters, they would still be jurisdictional categorically, but wetlands adjacent to such ponds would not be categorically covered; instead, they could only be protected as "other waters."

2. "The agencies request comment on all aspects of the proposed definition of tributaries and in particular on whether and how this definition can be revised to provide increased clarity as to the distinction between jurisdictional tributaries, as defined, and non-jurisdictional features such as gullies, rills and non-wetland swales."[257]

[254] 79 Fed. Reg. at 22,203.
[255] 33 C.F.R. § 328.4(c).
[256] Indeed, we suggest that OHWM not be a threshold condition for flowing waters to be considered tributaries either. The SAB had similar advice, urging "EPA to reconsider the definition of tributaries because not all tributaries have ordinary high water marks. An ordinary high water mark may be absent in ephemeral streams within arid and semi-arid environments or low gradient landscapes where the flow of water is unlikely to cause an ordinary high water mark. The Board advises the agency to consider changing the wording in the definition to 'bed, bank, and other evidence of flow.'" SAB Rule Review at 2.
[257] 79 Fed. Reg. at 22,203.

We view this request for comment as an extension of the prior one. Again, we support the concept of including real aquatic features, and excluding those things that are not the result of the regular presence of water over a long period of time. Accordingly, where features that could be classified as "gullies," "rills," or "non-wetland swales" in fact are permanent aquatic features that actually convey water that reaches downstream navigable or interstate waters, they should be treated as tributaries and protected as such. The agencies have received some advice from the SAB to develop this distinction further; in its review of the Connectivity Report, the SAB differentiated between "erosional features like rills and gullies, which are initiated by human or natural disturbance, and longer-term, integrated headwater channels with more ecologically effective connectivity to downstream waters," and points EPA to studies that provide information "on the transition from gullies to headwater streams."[258]

B. *Public Input About "Adjacency"*

> 1. "The agencies seek comment on specific options for establishing additional precision in the definition of 'neighboring' through: explicit language in the definition that waters connected by shallow subsurface hydrologic or confined surface hydrologic connections to an (a)(1) through (a)(5) water must be geographically proximate to the adjacent water; circumstances under which waters outside the floodplain or riparian zone are jurisdictional if they are reasonably proximate; support for or against placing geographic limits on what waters outside the floodplain or riparian zone are jurisdictional; determining that only waters within the floodplain, only waters within the riparian area, or only waters within the floodplain and riparian area (but not waters outside these areas with a shallow subsurface or confined surface hydrologic connection) are adjacent; identification of particular floodplain intervals within which waters would be considered adjacent; and any other scientifically valid criteria, guidelines or parameters that would increase clarity with respect to neighboring waters."[259]

In general, we support the overarching approach the agencies have proposed for defining adjacency – considering waters to be "adjacent" if they are within the floodplain of a covered water, are in the covered water's riparian area, or are connected to the covered water by confined surface or shallow subsurface flow. The agencies have no reasonable basis for requiring a certain degree of proximity in order for a water body to qualify as "adjacent," or for disregarding shallow subsurface connections. Indeed, the Science Advisory Board expressly explained why doing so would be unreasonable:

> Importantly, the available science supports defining adjacency or determination of adjacency on the basis of functional relationships, not on how close an adjacent water is to a navigable water. The Board also notes that local shallow subsurface water sources

[258] SAB Connectivity Review at 31.
[259] 79 Fed. Reg. at 22,209.

and regional groundwater sources can strongly affect connectivity. Thus, the Board advises the EPA that adjacent waters and wetlands should not be defined solely on the basis of geographical proximity or distance to jurisdictional waters.[260]

With respect to defining floodplain by reference to a specified interval, we support incorporating a more standardized process into the rule and relying less on the judgment of field staff. Because the SAB points out that important aspects of physical connectivity -- such as storage, peak flow attenuation, and sediment and wood transport and/or deposition -- occur due to low-frequency flooding and occur "on a decadal or centennial return interval,"[261] we suggest that the 100-year floodplain be seriously considered as a component of defining adjacency. We understand, however, that existing Federal Emergency Management Agency maps are both incomplete and in many places inaccurate, such that they should not be the conclusive basis for identifying waters' floodplains; instead, the agencies' definition should encourage the use of all available and reliable evidence to identify the extent of the 100-year floodplain.

C. Public Input About "Other Waters"

1. Request for comment on whether agencies should "[d]etermine by rule that 'other waters' are similarly situated in certain areas of the country."[262]

As these comments discuss in detail above, the available evidence readily supports a conclusion that certain kinds of "other waters" that are prevalent in particular parts of the country significantly impact downstream waters' physical, chemical, and biological integrity and therefore must be protected categorically as "waters of the United States."

Moreover, we support, in addition to – not in place of – finding the categories of water bodies listed above to be jurisdictional by rule, the agencies' proposal to assess the combined effect of "other waters" in several identified ecoregions, and to find such waters to be jurisdictional by rule.[263]

2. Request for comment on whether agencies should "[d]etermine by rule that certain additional subcategories of waters would be jurisdictional rather than addressed with a case-specific analysis, and that other subcategories of waters would be non-jurisdictional."[264]

Although the science supports a finding that many kinds of "other waters" have significant downstream effects, it does not support the conclusion that any category of waters lacks such relationship to covered waters. The record of this rulemaking contains no support of which we are aware that specific categories could not possibly significantly impact water quality in downstream waters. For this reason, and especially because "the science continues to

[260] SAB Rule Review at 2-3.
[261] SAB Connectivity Review at 41.
[262] 79 Fed. Reg. at 22,215.
[263] *Id.*
[264] *Id.* at 22,216.

develop," the SAB cautioned EPA not to make categorical exclusions, saying, "the science does not support excluding groups of 'other waters' (or subcategories of them, e.g., Great Plains playa lakes) that may influence the physical, chemical and biological integrity of downstream waters."[265]

3. Request for comment on whether the agencies should "determine that no 'other waters' are similarly situated, and all significant nexus analyses would be made on a case-specific basis for each individual 'other water'…."[266]

We do not support this approach. In the first instance, determining that no "other waters" are similarly situated is simply counterfactual; we know from the literature, and the SAB confirms, that many types of other waters – which, again, we discuss in detail above – are located in similar settings and perform similar functions. Accordingly, it would be arbitrary and capricious to make a determination that there are not similarly situated other waters.

4. Request for comment on "all 'other waters' in a single point of entry watershed being evaluated as a single landscape unit with regard to their effect on traditional navigable waters, interstate waters, and the territorial seas."[267]

Analyzing all the types of "other waters" together for a given "single point of entry watershed" basis seems to us to be a reasonable addition to the method discussed above, namely, protecting certain kinds of "other waters" in particular geographic areas categorically. That is, if there is not today a robust scientific record about the impacts of certain kinds of "other waters" in a particular region, such that those waters might be categorically protected, it would then be appropriate to examine whether all of the "other waters" in single point of entry watersheds in that region have significant downstream impacts. To be clear, however, this approach is not an adequate substitute for making the categorical determinations we have urged.

D. *Public Input About Waters that are not "Waters of the United States"*

1. "The agencies specifically seek comment on the appropriate flow regime for a ditch excavated wholly in uplands and draining only uplands to be covered by the exclusion in paragraph (b)(3). In particular, the agencies seek comment on whether the flow regime in such ditches should be less than intermittent flow or whether the flow regime in such ditches should be less than perennial flow as proposed."[268]

[265] SAB Rule Review at 3.
[266] 79 Fed. Reg. at 22,217.
[267] *Id.* at 22,217.
[268] *Id.*at 22,219.

As discussed above, we reject the premise that "ditches" should be treated specially under these rules. The decision to exclude some man-made tributaries without any scientific basis for distinguishing between them and other tributaries – rather than the particular flow regime that the exclusion uses – should be changed in the final rule.

VI. THE AGENCIES MUST DO A BETTER JOB AT DOCUMENTING JDS AND NJDS AND MAKING THAT INFORMATION READILY AVAILABLE TO ENSURE TRANSPARENCY AND ACCOUNTABILITY.

It is critically important, with respect to any type of water body that is not categorically protected (or excluded) under the final rule, that the federal agencies, interested groups, and the public have ready access to as much information as possible and practicable about jurisdictional determinations (both those asserting and those declining to assert jurisdiction). The agencies should learn from and correct numerous problems that developed in the last decade-plus of implementing some form of case-by-case review.

A. Corps Districts Must Post JD/NJD Forms on Their Websites in a Timely and Consistent Manner

Key to the ability of the public to watchdog and understand the actions of the EPA and Corps is the regular posting by the Corps districts of the jurisdictional determination forms. RGL 07-01 specifies that completed jurisdictional forms "shall be posted within 30-days of completion,"[269] but it is difficult to discern whether this is followed in practice without monitoring district websites regularly. We reviewed a sampling of websites, and it appears as though some districts may not be following this direction. For instance, as of November 7, the Omaha District had no determinations posted for South Dakota dated later than June 26, even though there were multiple determinations posted for both May and June.[270] Likewise, there is not a single determination posted for 2014 for all of New England.[271]

It is critically important that Corps and EPA headquarters ensure that jurisdictional decisions are publicly available in a timely way. All districts should be required to post all

[269] U.S. Army Corps of Eng'rs, Regulatory Guidance Letter No. 07-01, Practices for Documenting Jurisdiction under Sections 9 & 10 of the Rivers & Harbors Act (RHA) of 1899 and Section 404 of the Clean Water Act (CWA), at 7 (June 5, 2007), available at http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl07-01.pdf. Although some aspects of this RGL were updated by RGL 08-02, this website posting provision was not. *See* U.S. Army Corps of Eng'rs, Regulatory Guidance Letter No. 08-02, Jurisdictional Determinations (June 26, 2008), available at http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08-02.pdf.

[270] Omaha District, South Dakota Jurisdictional Determination, available at http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/SouthDakota/JurisdictionalDetermination.aspx. We recognize that this could in fact represent when determinations occurred for South Dakota in this district; indeed, we observe that the same district has posted determinations from Nebraska dated as recently as October 24. *See* U.S. Army Corps of Eng'rs, Omaha District, Nebraska Jurisdictional Determination, available at http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/Nebraska/JurisdictionalDetermination.aspx.

[271] *See* U.S. Army Corps of Eng'rs, New England District, Jurisdictional Determinations by State, available at http://www.nae.usace.army.mil/Missions/Regulatory/JurisdictionalLimits/JurisdictionalDeterminations.aspx

completed determinations at least once a week; there is no point – and little or no workload savings – to posting only monthly compared to weekly.[272]

B. The Corps Should Keep Jurisdictional Determinations Available On-Line for Five Years.

We do not support, and urge the reform of, the agencies' current policy to allow jurisdictional determinations – which are good for up to five years[273] – to be removed from Corps' websites after being posted for only three months.[274] Although not all districts remove determinations quickly, our review of districts' websites indicates that several do not post the last five years of determinations, whereas some districts today responsibly post forms going back many years. At a minimum, forms should remain available on Corps websites for the five-year period of time in which these determinations are in effect, which is typically five years.[275]

C. The Agencies Need a System to Track Which Water Bodies Have Been the Subject of an Approved JD.

The proposed rule does not include any mechanism by which it will memorialize, and incorporate into subsequent decisions, case-by-case determinations that particular water bodies have a significant nexus with downstream waters and thus are covered by the law. It is essential that the agencies establish such a process. Compiling, maintaining, and making public a list of waters that have been found to be jurisdictional using the case-by-case approach would help identify which other waters – ones that are "similarly-situated" and in the same region – must also be considered to be covered going forward. Given that the agencies indicate that finding types of water bodies to be "similarly situated" (and therefore that their impacts on downstream waters can be aggregated) will result in all such waters in a single point of entry watershed being found to have a significant nexus,[276] a JD that concludes a particular water body is similarly situated to others in a watershed and they collectively are found to have a significant nexus is effectively a JD for all of those waters. For administrative convenience and consistency, the agencies should identify the categories of such waters and the relevant watersheds publicly, such that any subsequent determinations in the watershed need only refer to the prior determination.

The agencies should also consider incorporating into the final rule a provision that authorizes the EPA Regional Administrator that oversees a given area to find that a certain

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[272] Some districts seem to have no problem posting JD forms promptly. *See, e.g.* U.S. Army Corps of Eng'rs, Seattle District, Jurisdictional Determinations, available at http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/JurisdictionalDeterminations.aspx (as of November 7, most recent determination dated October 23).

[273] *See* U.S. Army Corps of Eng'rs, Regulatory Guidance Letter No. 08-02, Jurisdictional Determinations, at 2 (June 26, 2008) (JDs "can be relied upon by a landowner, permit applicant, or other 'affected party' … who receives an approved JD for five years (subject to certain limited exceptions explained in RGL 05-02)"), available at http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08-02.pdf.

[274] U.S. Army Corps of Eng'rs, Regulatory Guidance Letter No. 07-01, Practices for Documenting Jurisdiction under Sections 9 & 10 of the Rivers & Harbors Act (RHA) of 1899 and Section 404 of the Clean Water Act (CWA), at 7 (June 5, 2007), available at http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl07-01.pdf.

[275] This should not be difficult, and some districts do so already. *See, e.g.*, U.S. Army Corps of Eng'rs, Vicksburg District, Approved Jurisdictional Determinations, available at http://www.mvk.usace.army.mil/Missions/Regulatory/JurisdictionalDeterminations/ApprovedJDs.aspx.

[276] 79 Fed. Reg. at 22,215.

category of other waters prevalent in the region has a significant nexus to navigable and/or interstate waters and therefore individual waters in that category are "waters of the United States." We recommend that this process provide for public notice of, and comment on, a proposed determination, and that final determinations be reflected as additions to the regulatory definition of categorically protected waters, perhaps via a periodically-updated appendix in the Code of Federal Regulations.[277]

D. The Format for Documenting JDs and NJDs is Outdated and of Little Use to the Public, Regulated Entities, and Practitioners, and Should be Updated.

In 2014, it is remarkable that jurisdictional determinations are maintained in an extremely user-unfriendly format. Standard practice today is for JD forms to be converted into Adobe Acrobat files and then posted (for varying lengths of time, as noted above) on individual districts' websites. As a result, there is no unified public database reflecting where decisions have been made, what resources they affect, and the rationale for different decisions. It is therefore essentially impossible to analyze these decisions meaningfully, much less use these decisions to quantitatively assess the impact on the nation's waters. The agencies should overhaul the current approach and require Corps' district personnel (and, where applicable, EPA field staff) to use a common, publicly-accessible, database. Such a tool will enable concerned citizens, resource managers, and others to assess whether similar waters are being treated similarly across the country, track the amount of resources found non-jurisdictional (and therefore more likely to receive pollutant discharges without benefit of pollution control officials' review), and consider whether to make policy or regulatory changes to adequately protect important resources.

We recognize that the agencies' goal with the present rulemaking is to dramatically reduce the number of case-by-case determinations that are necessary by developing categorical inclusions and exclusions. However, it seems unlikely that the agencies' final rules will be entirely categorical; although we would support rules that categorically included the resources covered prior to the Supreme Court-induced confusion, we would not support categorically exempting any types of waters not previously excluded.[278] If the agencies do not pursue a comprehensive approach to categorical inclusions, therefore, they will continue to make case-by-case determinations, and these should be memorialized in a useful format.

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[277] Please note that we do not think that including a process to add protected categories later is a substitute for making that determination in this rulemaking where the evidence supports it. We would also strongly oppose relying on the adoption of a provision allowing the agencies to add new categories as a reason today to *exclude* any categories of water bodies. The agencies indicate that they may be considering the approach of excluding waters that are not categorically protected, and allowing for later additions. *See id.* at 22,217 ("If waters are categorized as non-jurisdictional because of a lack of science available today, the agencies request comment on how to best accommodate evolving science in the future that could indicate a significant nexus for these 'other waters.' Specifically, the agencies request comment as to whether this should be done through subsequent rulemaking, or through some other approach, such as through a process established in this rulemaking.").

[278] Nor could such an approach reasonably be squared with the scientific evidence before the agency. As the Science Advisory Board stated in reviewing the proposed rule, "The Board notes … that the existing science does not support *excluding* groups of 'other waters' or subcategories thereof." Letter from Dr. David T. Allen, Chair Science Advisory Board, to Gina McCarthy, Administrator, U.S. EPA, at 3 (Sept. 30, 2014) (emphasis in original), available at http://yosemite.epa.gov/sab/sabproduct.nsf/0/518D4909D94CB6E585257D6300767DD6/$File/EPA-SAB-14-007+unsigned.pdf.

* * *

In conclusion, we urge the agencies to finalize this proposed rule, with the strengthening changes described above, without delay. If you have any questions about this submission, please contact Jon Devine at NRDC at (202) 289-2361. Thank you in advance for considering our views.

Sincerely,

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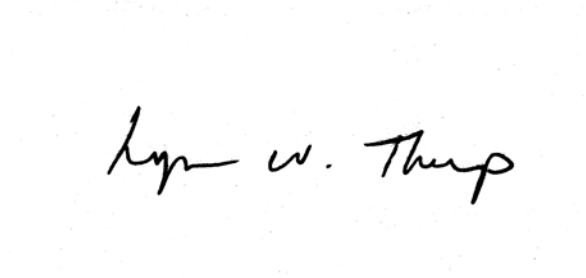

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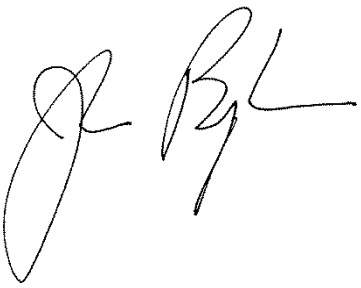

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