distinguish between human-made or human-altered tributaries and natural tributaries. This construction is consistent with the text of the statute and science. Most obviously, such a distinction would render superfluous section 404's exception for "the discharge of dredged or fill material . . . for the . . . maintenance of drainage ditches," section 404(f)(1)(C), because if human-made or human-altered tributaries were not included, drainage ditches would not be covered in the first place. More broadly, many of the nation's urban waterways are channelized, and the Clean Water Act has long been understood to encompass "natural, modified, or constructed" tributaries of other covered waters. 80 FR 37078 (June 29, 2015). For example, many of the streams in Houston, Texas, have been channelized, culverted, or otherwise altered over time, in part for flood control purposes, and the Clean Water Act protects many of these human-modified streams. Removing the Clean Water Act's protections for these tributaries could increase contributions of nutrients, sediment, and other pollutants downstream to paragraph (a)(1) waters, such as the Trinity River. Such an approach would also affect millions of miles of other such tributaries, undermining the integrity of paragraph (a)(1) waters throughout the country.

Moreover, the Clean Water Act's specialized definition of "navigable waters" does not turn on any such distinctions between natural and human-made or -altered tributaries, which have no bearing on a tributary's capacity to carry water (and pollutants) to traditional navigable waters, the territorial seas, or interstate waters. *See, e.g.,* Technical Support Document section III.A.iv (explaining that manmade ditches "perform many of the same functions as natural tributaries," including "convey[ing] water that carries nutrients, pollutants, and other constituents, both good and bad, to downstream traditional navigable waters, the territorial seas, and interstate waters"). Such a distinction would also be inconsistent with *Rapanos.* That decision addressed consolidated cases involving wetlands connected to traditional navigable waters by "ditches or man-made drains." *Rapanos,* 547 U.S. at 729 (plurality opinion). The *Rapanos* plurality concluded that the cases should be remanded for the lower courts to determine whether the channels at issue satisfied the plurality's jurisdictional standard, and those further lower-court proceedings would have been superfluous if the manmade character of the ditches and drains had precluded their coverage as "waters of the United States."

As discussed below and further in section III.A of the Technical Support Document, the best available science supports the 1986 regulations' conclusions, and the agencies' construction of the Clean Water Act in this rule, about the importance of tributaries to the water quality of downstream paragraph (a)(1) waters: tributaries provide natural flood control, help sustain flow downstream, recharge groundwater, trap sediment, store and transform pollutants, decrease high levels of chemical contaminants, recycle nutrients, create and maintain biological diversity, and sustain the biological productivity of downstream rivers, lakes, and estuaries.

ii. The Agencies' Longstanding Interpretation of Adjacent Wetlands as "Waters of the United States" Is a Reasonable Foundation for This Rule

For more than four decades, the agencies have construed the "waters of the United States" to include wetlands adjacent to other jurisdictional waters. Wetlands, such as swamps, bogs, marshes, and fens, are "transitional areas between terrestrial and aquatic ecosystems" characterized by sustained inundation or saturation with water. Science Report at 2–5. Wetlands play a critical role in regulating water quality. Among other things, they provide flood control and trap and filter sediment and other pollutants that would otherwise be carried to downstream waters. *See* National Research Council, *Wetlands: Characteristics and Boundaries* 35, 38 (1995) (NRC Report, *available at https://nap.nationalacademies.org/catalog/4766/wetlands-characteristics-and-boundaries;* Technical Support Document section III.B.

The Corps published regulations to implement the section 404 permitting program in 1974. 39 FR 12115 (April 3, 1974). At that time, the Corps took the view that for purposes of section 404 "navigable waters" was an established term of art for waters that are subject to Congress's power to regulate interstate channels of commerce, and that the term should be given that meaning in the Clean Water Act—notwithstanding the specialized definition of "navigable waters" in the Act. *Id.* The Corps therefore asserted jurisdiction under section 404 only over the waters subject to section 10 of the Rivers and Harbors Act of 1899. *Id.* at 12119.

Reviewing courts, members of Congress, and EPA disagreed with the Corps' initial approach. *See, e.g., United States* v. *Ashland Oil & Transp. Co.,* 504 F.2d 1317, 1325 (6th Cir. 1974); H.R. Rep. No. 1396, 93d Cong., 2d Sess. 23–27 (1974). In fact, EPA had previously promulgated a rule defining "waters of the United States" far more broadly than the Corps' regulations. 38 FR 13528 (May 22, 1973). Ultimately, the Corps was ordered to adopt new regulations recognizing the agency's "full regulatory mandate." *NRDC, Inc.* v. *Callaway,* 392 F. Supp. 685, 686 (D.D.C. 1975).

The Corps responded by broadening its definition of "navigable waters" in a phased approach under which all of the waters in the final regulation were "waters of the United States," but the Corps would begin regulating activities within each type of "waters of the United States" in phases: Phase I, which was effective immediately, covered "coastal waters and coastal wetlands contiguous or adjacent thereto or into inland navigable waters of the United States [a term for waters protected under the Rivers and Harbors Act] and freshwater wetlands contiguous or adjacent thereto"; Phase II, effective after July 1, 1976, covered "primary tributaries, freshwater wetlands contiguous or adjacent to primary tributaries, and lakes"; and Phase III, effective after July 1, 1977, covered "discharges . . . into any navigable water" including intrastate lakes and rivers and their adjacent wetlands. 40 FR 31320, 31324, 31326 (July 25, 1975). The Corps defined "adjacent" to mean "bordering, contiguous, or neighboring," and specified that "[w]etlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are 'adjacent wetlands.'" 42 FR 37122, 37144 (July 19, 1977). The regulations also defined "wetlands" to mean "those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." *Id.* The agencies have thus interpreted the term "waters of the United States" to include wetlands since at least 1975.[47]

[47] The agencies' interpretation of "waters of the United States" as including wetlands is consistent not only with the history and text of Clean Water Act section 404(g), but also with other parts of the statute and of the United States Code. For example, in the Lake Champlain Basin Program, Congress referred to "streams, rivers, lakes, and other bodies of water, *including wetlands.*" 33 U.S.C. 1270(g)(2) (emphasis added). Congress has also referred to "streams, rivers, *wetlands, other waterbodies,* and riparian areas," 33 U.S.C. 2336(b)(2) (emphasis added), and defined "coastal waters" to mean the waters of the Great Lakes "including" portions of other "bodies of water" with certain features, "including wetlands," *id.* at 2802(5).

Reacting to the Corps' broadened definition, leading up to the 1977 Amendments, Congress considered proposals to limit the geographic reach of section 404. ''In both Chambers, debate on the proposals to narrow the definition of navigable waters centered largely on the issue of wetlands preservation.'' *SWANCC,* 531 U.S. at 170. A version of that legislation, passed by the House, would have redefined ''navigable waters'' for purposes of section 404 to mean a limited set of traditional navigable waters and their adjacent wetlands. H.R. 3199, 95th Cong. section 16 (1977). But many legislators objected to the proposed changes. When Congress rejected the attempt to limit the geographic reach of section 404, it was well aware of the jurisdictional scope of EPA and the Corps' definition of ''waters of the United States.'' For example, Senator Baker stated:

> Interim final regulations were promulgated by the [C]orps [on] July 25, 1975. . . . Together the regulations and [EPA] guidelines established a management program that focused the decision-making process on significant threats to aquatic areas while avoiding unnecessary regulation of minor activities. On July 19, 1977, the [C]orps revised its regulations to further streamline the program and correct several misunderstandings. . . .
>
> 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.
>
> Earlier jurisdictional approaches under the [Rivers and Harbors Act] established artificial and often arbitrary boundaries . . . .

123 Cong. Rec. 26,725 (1977). Legislators were concerned the proposed changes were an ''open invitation'' to pollute waters. *Id.* (remarks of Sen. Hart); *see also, e.g., id.* at 26,714–26,716. The proposal was ultimately voted down on the Senate floor. *Id.* at 26,728; *cf.* S. Rep. No. 370, 95th Cong., 1st Sess. 10 (1977) (hereinafter, ''1977 Senate Report''); *Riverside Bayview,* 474 U.S. at 136–137 (noting that ''efforts to narrow the definition of 'waters' were abandoned; the legislation as ultimately passed, in the words of Senator Baker, '[retained] the comprehensive jurisdiction over the Nation's waters'' (citation omitted)). Federal preservation of wetlands was at the heart of the debate over passage of the 1977 Act, with good reason. *See* 1977 Senate Report at 10 (''There is no question that the systematic destruction of the Nation's wetlands is causing serious, permanent ecological damage. The wetlands and bays, estuaries and deltas are the Nation's most biologically active areas. They represent a principal source of food supply. They are the spawning grounds for much of the fish and shellfish which populate the oceans, and they are passages for numerous [ ] game fish. They also provide nesting areas for a myriad of species of bird and wildlife. The unregulated destruction of these areas is a matter which needs to be corrected and which implementation of section 404 has attempted to achieve.''). Earlier Federal and State policy that encouraged filling wetlands had led to destruction of roughly 117 million acres of wetlands in the contiguous United States, or more than half the original total. *See* T.E. Dahl & Gregory J. Allord, ''History of Wetlands in the Conterminous United States,'' in *National Water Summary on Wetland Resources* at 19 (1996, *available at https://pubs.usgs.gov/wsp/2425/report.pdf*).

Congress instead modified the Clean Water Act in other ways to respond to concerns about the scope of Federal authorities. Congress exempted certain agricultural and silvicultural activities from the section 404 permitting program. *See* 1977 Act section 67(b), 91 Stat. 1600 (33 U.S.C. 1344(f)(1)(A)). In addition, Congress authorized the Corps to issue general permits to streamline the permitting process. *Id.* (33 U.S.C. 1344(e)(1)). And importantly for understanding the scope of ''waters of the United States,'' Congress modified section 404 in a way that incorporated into the statutory text an explicit endorsement of the Corps' regulation defining ''waters of the United States,'' including its inclusion of adjacent wetlands. Specifically, the 1977 Act section 67(b), 91 Stat. 1601, establishing section 404(g), allowed Tribes and States to assume responsibility for the issuance of section 404 permits. As Congress explained in the legislative history, under section 404(g) States could administer a permitting program for the discharge of dredged or fill material into ''phase II and III waters'' following EPA approval, but the Corps would retain jurisdiction over ''those waters defined as the phase I waters in the Corps . . . 1975 regulations, with the exception of waters considered navigable solely because of historical use.'' 123 Cong. Rec. 38,969 (December 15, 1977); H.R. Conf. Rep. No. 830, 95th Cong., 1st Sess. 101 (1977), *reprinted in* 3 Legis. History 1977, at 185, 285. Accordingly, through section 404(g), Congress demonstrated its understanding of the Corps' regulations and endorsed the scope of their coverage—allowing States to assume authority to administer the Clean Water Act as it pertained to the waters contained in phase II and III of the Corps' regulations (Phase II, effective after July 1, 1976, covered ''primary tributaries, freshwater wetlands contiguous or adjacent to primary tributaries, and lakes'' and Phase III, effective after July 1, 1977, covered ''discharges . . . into any navigable water'' including intrastate lakes and rivers and their adjacent wetlands. 40 FR 31320, 31324, 31326 (July 25, 1975)), and reserving for the Corps alone authority over the waters contained in phase I of the Corps' regulations.

With respect specifically to the inclusion of adjacent wetlands, Congress was explicit in the text of the Clean Water Act. The text of section 404(g) authorizes States and Tribes to administer the section 404 permitting program covering ''the discharge of dredged or fill material into the navigable waters (other than those waters which are presently used, or are susceptible to use in their natural condition or by reasonable improvement as a means to transport interstate or foreign commerce . . . *including wetlands adjacent thereto*).'' 33 U.S.C. 1344(g)(1) (emphasis added); *see* 33 U.S.C. 1377(e) (extension to Tribes). The italicized reservation of authority to the Corps in section 404(g) presupposed that ''wetlands adjacent'' to a subset of traditional navigable waters were subject to the section 404 program, since otherwise the exclusion of those wetlands from the Tribes' and States' potential permitting authority would have been superfluous. Other language in the 1977 legislative record confirms that understanding. *See* 1977 Senate Report 10 (stating that committee wished to ''maintain[ ]'' coverage of wetlands); H.R. Conf. Rep. No. 830, 95th Cong., 1st Sess. 98, 104 (1977) (stating that the Corps will ''continue'' to exercise section 404 jurisdiction over ''adjacent wetlands'').

Moreover, with respect to *which* wetlands are adjacent, by using the pre-existing term ''adjacent'' wetlands from the Corps' 1977 regulations, Congress signaled its intent to incorporate the Corps' regulatory conception of adjacency. ''When a statutory term is 'obviously transplanted from another legal source,' it 'brings the old soil with it.' '' *Taggart* v. *Lorenzen,* 139 S. Ct. 1795, 1801 (2019) (citation omitted). Here, that soil includes the full breadth of the agencies' definition of ''adjacent'': bordering, contiguous, or neighboring, as well as wetlands behind a berm or

barrier. That definition accords with the term's plain meaning. Contemporaneous dictionaries defined the term ''adjacent'' in ways that do not require direct abutment. *See Black's Law Dictionary* at 62 (rev. 4th ed. 1968) (''Lying near or close to; sometimes, contiguous; neighboring. Adjacent implies that the two objects are not widely separated, though they may not actually touch[.]'' (capitalization altered; citation and emphasis omitted)); The *American Heritage Dictionary of the English Language* at 16 (1975) (''Close to; next to; lying near; adjoining.''); *Webster's New International Dictionary of the English Language* at 32 (2d ed. 1958) (''Lying near, close, or contiguous; neighboring; bordering on.'' (emphasis omitted)).

Congress has on a number of additional occasions responded to concerns about the breadth of the scope of Federal authorities not by narrowing the scope of ''waters of the United States,'' but by excluding particular types and sources of discharges of pollutants from the NPDES program or from Clean Water Act jurisdiction altogether. For example, the 1987 Water Quality Act (WQA) added section 402(l)(2) to the Clean Water Act. This new section prohibits EPA and the states from requiring NPDES permits for uncontaminated stormwater discharges from oil and gas exploration, production, processing or treatment operations, or transmission facilities. Later, section 323 of the Energy Policy Act of 2005 added a new provision to Clean Water Act section 502 defining the term ''oil and gas exploration, production, processing, or treatment operations or transmission facilities.'' The 1987 WQA also enacted a new section 402(p) of the Act that established a comprehensive new program for stormwater regulation. In that section, Congress made clear that only some stormwater point source discharges need NPDES permit coverage—those from industrial activity, from large and medium municipalities, and that EPA or a State designates by rulemaking or adjudication to protect water quality or because the discharges contribute to violations of water quality standards or are significant contributors of pollutants. Congress has also taken numerous actions to amend the Clean Water Act to address discharges from vessels. The 1972 version of the Act excluded ''sewage from vessels'' from the definition of ''pollutant'' thus exempting it from the permitting regime in favor of regulatory standards of performance. *See* 33 U.S.C. 1322(b), 1362(6). In 1996, Congress similarly excluded most discharges from vessels of the Armed Forces and tasked EPA and the Department of Defense to jointly promulgate uniform national discharge standards instead. *See* 33 U.S.C. 1322(n), 1362(6). In 2008, Congress passed the Clean Boating Act, which exempted discharges incidental to the normal operation of recreational vessels of all sizes from Clean Water Act permitting requirements, in favor of EPA regulations. *See* 33 U.S.C. 1322(o)(1)(B); *see also* 33 U.S.C. 1342(r). And in 2018, Congress enacted the Vessel Incidental Discharge Act which exempted from NPDES routine discharges from many other types of vessels including small vessels, fishing vessels, and commercial vessels larger than 79 feet. *See* 33 U.S.C. 1322(p)(9)(C)(ii).

Case law also supports the agencies' construction of the Clean Water Act to cover adjacent wetlands as defined by the agencies. In *Riverside Bayview,* the Supreme Court considered the ''language, policies, and history'' of the Clean Water Act, including the amendments in the 1977 Act, and unanimously upheld the Corps' exercise of Clean Water Act jurisdiction over such adjacent wetlands. 474 U.S. at 139. The Court held that the Corps' regulation defining ''the waters of the United States'' to include wetlands adjacent to navigable waters ''is valid as a construction'' of the Clean Water Act. *Id.* at 131. The Court first observed that ''between open waters and dry land may lie shallows, marshes, mudflats, swamps, bogs—in short, a huge array of areas that are not wholly aquatic but nevertheless fall far short of being dry land.'' *Id.* at 132. To administer the statute, the Corps therefore ''must necessarily choose some point at which water ends and land begins.'' *Id.* The Court further explained that, in drawing that jurisdictional line, the Corps may take into account ''the evident breadth of congressional concern for protection of water quality and aquatic ecosystems.'' *Id.* at 133. It quoted with apparent approval the Corps' statement that ''Federal jurisdiction under Section 404 must include any adjacent wetlands that form the border of or are in reasonable proximity to other waters of the United States, as these wetlands are part of this aquatic system.'' *Id.* at 134 (quoting 42 FR 37128, July 19, 1977). The Court concluded that ''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.'' *Id.*

The Court also viewed the 1977 Act as specifically approving the Corps' assertion of jurisdiction over adjacent wetlands—as considering those wetlands to be ''waters'' themselves. *Id.* at 137–139. The Court observed that ''the scope of the Corps' asserted jurisdiction over wetlands was specifically brought to Congress' attention, and Congress rejected measures designed to curb the Corps' jurisdiction in large part because of its concern that protection of wetlands would be unduly hampered by a narrowed definition of 'navigable waters.''' *Id.* at 137. The Court also cited section 404(g)(1) as express textual evidence ''that the term 'waters' included adjacent wetlands.'' *Id.* at 138.

Congress had good reason to approve the inclusion of adjacent wetlands within the ''waters of the United States.'' In the 1986 regulations, the agencies determined that wetlands adjacent to navigable waters generally play a key role in protecting and enhancing water quality, explaining: ''Water moves in hydrologic cycles, and the pollution of this part of the aquatic system, regardless of whether it is above or below an ordinary high water mark, or mean high tide line, will affect the water quality of the other waters within that aquatic system. For this reason, the landward limit of Federal jurisdiction under Section 404 must include any adjacent wetlands that form the border of or are in reasonable proximity to other waters of the United States, as these wetlands are part of this aquatic system.'' 42 FR 37128 (July 19, 1977); *see also* 38 FR 10834. *See* section IV.C.8.b of this preamble for further discussion of the definition of ''adjacent.''

As discussed below and further in section III.B of the Technical Support Document, the best available science supports the 1986 regulations' conclusion that adjacent wetlands are part of the aquatic ecosystem, and the agencies' construction of the Clean Water Act in this rule, that adjacent wetlands that meet the relatively permanent standard or the significant nexus standard affect the chemical, physical, and biological integrity of paragraph (a)(1) waters by performing essential functions, including providing valuable flood control and water quality functions such as interruption and delay of the transport of water-borne contaminants over long distances, retention of sediment, prevention and mitigation of drinking water contamination, and assurance of drinking water supply. As Congress understood when it rejected efforts to narrow jurisdiction over wetlands in

1977 and the Supreme Court recognized in *Riverside Bayview,* allowing all adjacent wetlands to be filled without any permitting requirements would deprive interconnected aquatic systems of those benefits and thereby threaten the integrity of traditional navigable waters, the territorial seas, and interstate waters. Wetlands are recognized as "among the most important ecosystems on Earth." [48] Among many other public benefits, wetlands play an "integral role" in maintaining the nation's "water supply and quality." 16 U.S.C. 3901(a)(1). "Research has demonstrated repeatedly that natural wetlands enhance water quality." [49] Through chemical and biological processes, wetlands trap and filter sediment, nutrients, and other pollutants that would otherwise be carried into downstream waters.[50] For example, wetlands conservation is a crucial feature of the New York City municipal water system, which provides high quality drinking water to millions of people through watershed protection. New York protects adjacent wetlands of its source waters rather than investing in extensive and costly treatment. Wetlands also provide "cost-effective flood control," [51] capturing overflow from rivers and streams during times of high precipitation or snowmelt.[52] For example, during Hurricane Sandy in 2012, wetlands are estimated to have helped prevent $625 million in damage by protecting properties from flooding.[53]

iii. It Is Reasonable for the Agencies To Continue To Include a Provision To Cover Certain Waters That Do Not Fall Within Other Jurisdictional Provisions

For more than 45 years the agencies' regulations have included a provision to address waters that did not fall within the categories it established, such as tributaries and adjacent wetlands, because such waters could have effects on water quality and on interstate commerce. 42 FR 37128 (July 19, 1977). This rule substantially revises this provision by establishing that intrastate lakes and ponds, streams, or wetlands not identified elsewhere in the rule may be determined to be "waters of the United States" if they meet either the relatively permanent standard or the significant nexus standard. Therefore, under this rule the agencies conclude that it is not appropriate to assert jurisdiction over non-navigable, intrastate waters based solely on whether the use, degradation, or destruction of the water could affect interstate or foreign commerce. *See* section IV.C.6 of this preamble for further discussion of the changes related to this provision. This rule replaces the interstate commerce test with the relatively permanent standard and the significant nexus standard.

For more than four decades, the agencies' regulations defining "waters of the United States" have included provisions authorizing case-specific determinations of jurisdiction over waters that did not fall within the other jurisdictional provisions of the definition. The Corps' 1975 interim final regulations addressed both "intrastate lakes, rivers, and streams that are used by interstate recreational travelers, for the removal of fish sold in commerce, for interstate industrial commercial purposes, or for the production of agricultural commodities sold in commerce," and "other waters that the District Engineer determines necessitate regulation for protection of water quality." 40 FR 31320, 31324 (July 25, 1975). As discussed above, Congress was well-aware of the scope of the Corps' regulations when adopting the 1977 Act.

The rule properly authorizes case-specific consideration of certain waters not covered by the categories established in the rule. As discussed below and further in section IV.D of the Technical Support Document, the best available science shows that some of these waters—such as depressional wetlands, open waters, and peatlands—can provide important hydrologic (*e.g.,* flood control), water quality, and habitat functions which can have effects on larger rivers, lakes, and estuaries, including paragraph (a)(1) waters. The functions that intrastate lakes and ponds, streams, and wetlands not identified in paragraphs (a)(1) through (4) of this rule (*i.e.,* paragraph (a)(5) waters) can provide to paragraph (a)(1) waters include storage of floodwater, recharge of ground water that sustains river baseflow, retention and transformation of nutrients, metals, and pesticides, export of organisms to paragraph (a)(1) waters, and habitats needed for aquatic and semi-aquatic species that also utilize paragraph (a)(1) waters. In addition, the agencies have never stated that the waterbody-specific categories alone identify every jurisdictional water under the Clean Water Act because in an area as vast and varied as the United States, it is not possible to create an exhaustive list of waters that provide these critical functions to paragraph (a)(1) waters. Indeed, a clear example of waters that do not fall within any of the categories are some lakes and ponds near jurisdictional tributaries or paragraph (a)(1) waters. They are not wetlands (so do not fall within the adjacent wetlands category), and many are not tributaries, but they are very likely to meet either the relatively permanent standard or the significant nexus standard. A lake that is not a tributary and is not a wetland may have a continuous surface connection to a traditional navigable water. It would not make sense to exclude such a lake from jurisdiction as it would have many of the same effects on the traditional navigable water as an adjacent wetland with the same continuous surface connection. Likewise, a lake that is not a tributary and is not a wetland may be near a jurisdictional tributary and significantly affect a paragraph (a)(1) water by providing similar functions as an adjacent wetland. Absent paragraph (a)(5) of this rule, these lakes would meet either the relatively permanent standard or the significant nexus standard, but would not fall within any of the categories of waters established by the definition. Thus, where waters do not fall within one of the more specific categories identified in paragraph (a)(1) through (4) of this rule, the rule provides for such waters to be evaluated for jurisdiction under paragraph (a)(5) and to be jurisdictional if they meet either standard.

c. The Best Available Science Demonstrates That This Rule Properly Advances the Objective of the Clean Water Act

This rule is informed by the best available science on the functions provided by waters, including wetlands, that are important for the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, and interstate waters. The scientific literature extensively illustrates the effects tributaries, adjacent wetlands, as well as intrastate lakes and ponds, streams, and wetlands can and do have on the integrity of traditional navigable waters, the territorial seas, and interstate waters. The relevant science on the relationship and effects of streams, wetlands, and open waters (such as lakes and ponds)

[48] William J. Mitsch & James G. Gosselink, Wetlands (5th ed.) at 3 (2015).

[49] National Research Council, Wetlands: Characteristics and Boundaries ("NRC Report") at 38 (1995).

[50] Virginia Carter, "Wetlands Hydrology, Water Quality, and Associated Functions," in *National Water Summary, supra,* at 44–45; Science Report at ES–2 to ES–4.

[51] Carter, *supra* note 5050, at 44.

[52] *See, e.g.,* NRC Report at 35; Mitsch & Gosselink, *supra,* at 539–541; Science Report at ES–2 to ES–4.

[53] Narayan, Siddharth, et al. 2017. The Value of Coastal Wetlands for Flood Damage Reduction in the Northeastern USA. *Scientific Reports* 7: 9463; Technical Support Document section II.C.

on larger downstream waters has continued to advance in recent years and confirms the agencies' longstanding view that these waters should be assessed for jurisdiction under the Clean Water Act. The Science Report synthesized the peer-reviewed science regarding connectivity and effects of streams, wetlands, and open waters to larger downstream waters. Since the release of the Science Report, additional published peer-reviewed scientific literature has strengthened and supplemented the report's conclusions. The agencies have summarized and provided an update on more recent literature and scientific support for this section in the Technical Support Document section I.C. *See also* Technical Support Document section III. This section summarizes the best available science in support of the longstanding categories of the 1986 regulation, and in support of this rule and the agencies' conclusion that this rule advances the objective of the Clean Water Act. This section reflects the scientific consensus on the strength of the effects that tributaries, adjacent wetlands, and paragraph (a)(5) waters can and do have on traditional navigable waters, the territorial seas, and interstate waters. Note that for purposes of this final rule, the agencies have not made a categorical determination that all tributaries, adjacent wetlands, and paragraph (a)(5) waters significantly affect paragraph (a)(1) waters. *See* section IV.A.3.a.iii (discussing the final rule's reliance on a case-specific approach to assessing jurisdiction for certain types of waters) of this preamble.

As the agencies charged with construing the statute, EPA and the Corps must develop the outer bounds of the scope of the Clean Water Act. Congress chose to delegate this authority to the expert agency focused on environmental protection and, for the section 404 program, to the agency with extensive permitting experience for discharges to water. In section 501(a) of the Clean Water Act, Congress explicitly delegated regulatory authority to EPA: "The Administrator is authorized to prescribe such regulations as are necessary to carry out his functions under this Act." The Supreme Court in *Riverside Bayview* recognized this decision by Congress and deferred to the agencies' scientific expertise and judgement, finding that "[i]n 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." 474 U.S. at 134. Science alone cannot dictate where to draw the line defining "waters of the United States," but science is critical to understanding what scope of jurisdiction furthers Congress's objective to restore and maintain the chemical, physical, and biological integrity of the nation's waters: only by relying upon scientific principles to understand the way waters affect one another can the agencies know whether they are achieving that objective. Because the definition of "waters of the United States" should advance the objective of the Clean Water Act and that objective is focused on restoring and maintaining water quality, the best available science informs this rule. *See* section IV.A.2 of this preamble; *see also* section IV.B.3 of this preamble for the agencies' conclusion that the 2020 NWPR was inconsistent with the best available science in important ways.

i. Tributaries Can Provide Functions That Restore and Maintain the Chemical, Physical, and Biological Integrity of Downstream Traditional Navigable Waters, the Territorial Seas, and Interstate Waters

Tributaries play an important role in the transport of water, sediments, organic matter, nutrients, and organisms to downstream paragraph (a)(1) waters. *See* Technical Support Document section III.A. Tributaries slow and attenuate floodwaters; provide functions that help maintain water quality; trap and transport sediments; transport, store, and modify pollutants; and sustain the biological productivity of downstream paragraph (a)(1) waters. Indeed, the Supreme Court has recognized the importance of the physical integrity of upstream tributaries in overcoming sedimentation hazards to navigation. *United States* v. *Rio Grande Dam & Irrigation Co.,* 174 U.S. 690 (1899). Tributaries can provide these functions whether they are natural, modified, or constructed and regardless of their flow regime.

All tributary streams, including perennial, intermittent, and ephemeral streams, are chemically, physically, and biologically connected to larger downstream waters via channels and associated alluvial deposits where water and other materials are concentrated, mixed, transformed, and transported. The agencies note that while the Science Report concluded such tributary streams were so connected, the significant nexus standard is distinct from this scientific conclusion, and the agencies are not in this rule concluding that all tributary streams categorically meet the significant nexus standard. Streams, even where seasonally dry, are the dominant source of water in most rivers, rather than direct precipitation or groundwater input to mainstem river segments. Within stream and river networks, headwater streams make up most of the total channel length. The smallest streams represent an estimated three-quarters of the total length of stream and river channels in the United States.[54] Because of their abundance and location in the watershed, small streams offer the greatest opportunity for exchange between the water and the terrestrial environment.

In addition, compared with the humid regions of the country, stream and river networks in arid regions have a higher proportion of channels that do not flow perennially. For example, in Arizona, most of the stream channels—96% by length—are classified as ephemeral or intermittent. The functions that streams provide to benefit downstream waters occur even when streams do not flow constantly. For example, ephemeral headwater streams shape larger downstream river channels by accumulating and gradually or episodically releasing stored materials such as sediment and large woody debris.[55] Due to the episodic nature of flow in ephemeral and intermittent channels, sediment and organic matter can be deposited some distance downstream in the arid Southwest in particular, and then moved farther downstream by subsequent precipitation events. Over time, sediment and organic matter continue to move downstream and influence larger downstream waters. These materials help structure downstream river channels by slowing the flow of water

[54] The actual proportion may be much higher because this estimate is based on the stream networks shown on the U.S. Geological Survey (USGS) National Hydrography Dataset, which does not show all headwater streams.

[55] Videos of ephemeral streams flowing after rain events in the Southwest highlight how effective ephemeral streams can be in transporting woody debris (*e.g.,* tree branches) and sediment downstream during the rainy season. *See, e.g.,* U.S. Department of Agriculture, Agricultural Research Service, *Multiflume Runoff Event August 1, 1990, https://www.tucson.ars.ag.gov/unit/WGWebcam/WalnutGulchWebcam.htm;* U.S. Geological Survey, *Post-fire Flash Flood in Coronado National Memorial, Arizona* (August 25, 2011), *https://www.youtube.com/watch?v=qJ8JxBZt6Ws;* Santa Clara Pueblo Fire/Rescue/EMS Volunteer Department, Greg Lonewolf, *#4 Santa Clara Pueblo Flash Flood Event 01 Sept 2013* (April 14, 2017), *https://www.youtube.com/watch?v=nKOQzkRi4BQ;* Rankin Studio, *Amazing Flash Flood/Debris Flow Southern Utah HD* (July 19, 2019), *https://www.youtube.com/watch?v=_yCnQuILmsM.*

through channels and providing substrate and habitat for aquatic organisms.

Stream and wetland ecosystems also process natural and human sources of nutrients, such as those found in leaves that fall into streams and those that may flow into creeks from agricultural fields. Some of this processing converts the nutrients into more biologically useful forms. Other aspects of the processing store nutrients, thereby allowing their slow and steady release and preventing the kind of short-term glut of nutrients that can cause algal blooms in downstream rivers or lakes. Small streams and their associated wetlands play a key role in both storing and modifying potential pollutants, ranging from chemical fertilizers to rotting salmon carcasses, in ways that maintain downstream water quality. Inorganic nitrogen and phosphorus, the main chemicals in agricultural fertilizers, are essential nutrients not just for plants, but for all living organisms. However, in excess or in the wrong proportions, these chemicals can harm natural systems and humans. Larger rivers process excess nutrients much more slowly than smaller streams. Loss of nutrient retention capacity in headwater streams is known to cause higher concentrations and loads of nitrogen and phosphorus in downstream waterbodies. In freshwater ecosystems, eutrophication, the enriching of waters by excess nitrogen and phosphorus, sets off a chain reaction of events that reduces water quality in streams, lakes, estuaries, and other downstream waterbodies. The excess nutrients lead to the overabundance of algae and aquatic plants. Too much algae clouds previously clear streams, such as those favored by trout. Algal blooms not only reduce water column visibility, but the microbial decay of algal blooms reduces the amount of oxygen dissolved in the water, and therefore the amount available to aquatic life, sometimes to a degree that causes fish kills. Fish are not the only organisms harmed by eutrophication: some of the algae species that grow in eutrophic waters generate tastes and odors or are toxic—a clear problem for stream systems, reservoirs, and lakes that supply drinking water for municipalities or that are used for swimming and other contact-recreational purposes. Algal blooms driven by excess nutrients also can injure people and animals, as toxins can kill native fish and other wildlife, and endanger human health. Algal blooms can also lead to beach closures. The overabundance of plant growth and alterations in water chemistry that occur in eutrophic waters also changes the composition of natural communities of aquatic ecosystems.

Recycling organic carbon contained in dead plants and animals is another crucial function provided by headwater streams and wetlands. Ecological processes that transform inorganic carbon into organic carbon and recycle organic carbon are the basis for every food web on the planet. In freshwater ecosystems, much of the recycling happens in small streams and wetlands, where microorganisms transform everything from leaf litter and downed logs to dead salamanders into food for other organisms in the aquatic food web. Like nitrogen and phosphorus, carbon is essential to life but can be harmful to freshwater ecosystems if it is present in excess or in the wrong chemical form. If all organic material received by headwater streams and wetlands went directly downstream, the glut of decomposing material could deplete oxygen in downstream rivers, thereby damaging and even killing fish and other aquatic life. The ability of headwater stream ecosystems to transform organic matter into more usable forms helps maintain healthy downstream ecosystems.

Microorganisms in headwater stream systems use leaf litter and other decomposing matter for food and, in turn, become food for other organisms. For example, fungi that grow on leaf litter become nutritious food for aquatic insects that make their homes on the bottom of streams, including mayflies, stoneflies, and caddisflies. These animals provide food for larger animals, including birds such as flycatchers and fish such as trout. The health and productivity of downstream traditional navigable waters, the territorial seas, and interstate waters depend in part on processed organic carbon delivered by upstream headwater systems.

To be clear, the agencies recognize that *SWANCC* held that the use of an abandoned sand and gravel pit by migratory birds was not by itself a sufficient basis for the exercise of Federal regulatory authority under the Clean Water Act. Consideration of biological functions does not constitute an assertion of jurisdiction over a water based solely on its use by migratory birds. Rather, the agencies consider biological functions for purposes of significant nexus determinations under this rule only to the extent that the functions provided by tributaries, adjacent wetlands, and paragraph (a)(5) waters significantly affect the biological integrity of the traditional navigable waters, the territorial seas, or interstate waters. For example, salmon are a critical component of the biological integrity in certain paragraph (a)(1) waters, and they provide one of the clearest illustrations of biological connectivity. To protect Pacific and Atlantic salmon in traditional navigable waters (and their associated commercial and recreational fishing industries), headwater streams must be protected because Pacific and Atlantic salmon require both freshwater and marine habitats over their life cycles and therefore migrate along river networks. Many Pacific salmon species spawn in headwater streams, where their young grow for a year or more before migrating downstream, live their adult life stages in the ocean, and then migrate back upstream to spawn. Even where they do not provide direct habitat for salmon themselves, ephemeral streams may contribute to the habitat needs of salmon by supplying sources of cold water that these species need to survive (*i.e.,* by providing appropriate physical conditions for cold water upwelling to occur at downstream confluences), transporting sediment that supports fish habitat downstream, and providing and transporting food for juveniles and adults downstream. These species thereby create a biological connection along the entire length of the river network, demonstrating how the upstream ephemeral waters can help to maintain the biological integrity of the downstream traditional navigable water. Many other species of anadromous fish (fish that are born in freshwater, spend most of their lives in saltwater, and return to freshwater to spawn) like certain lamprey, species of catadromous fish (fish that breed in the ocean but that spend most of their lives in freshwater) like American eels, and freshwater fish like rainbow trout and brook trout also require small headwater streams to carry out life cycle functions. *See* Technical Support Document sections III.A.iii and III.E.iv.

ii. Adjacent Wetlands Can Provide Functions That Restore and Maintain the Chemical, Physical, and Biological Integrity of Traditional Navigable Waters, the Territorial Seas, and Interstate Waters

Adjacent wetlands provide valuable flood control and water quality functions that affect the chemical, physical, and biological integrity of paragraph (a)(1) waters including interruption and delay of the transport of water-borne contaminants over long distances; retention of sediment; retention and slow release of flood waters; and prevention and mitigation of drinking water contamination and assurance of drinking water supply. *See*

Technical Support Document section III.B. The agencies note that, while the Science Report concluded such adjacent wetlands were so connected, the significant nexus standard is distinct from this scientific conclusion, and the agencies are not concluding in this rule that all adjacent wetlands categorically meet the significant nexus standard.

Because adjacent wetlands retain sediment and augment streamflow via the gradual release of groundwater, stormwater, or water flowing just beneath the soil surface, wetland loss correlates with increased need for dredging and unpredictability of adequate streamflow for navigation. Headwater wetlands are located where erosion risk is highest and are therefore best suited to recapture and stabilize manageable amounts of sediment that might enter traditional navigable waters, the territorial seas, or interstate waters. Adjacent wetlands naturally serve to recapture and stabilize sediment carried by streams and rivers in times when flood flow distributes water across a floodplain.

Adjacent wetlands affect the integrity of paragraph (a)(1) waters by retaining stormwater and slowly releasing floodwaters that could otherwise negatively affect the condition or function of those paragraph (a)(1) waters. The filling or draining of wetlands, including those that are close to the stream network, reduces water storage capacity in a watershed and causes runoff from rainstorms to overwhelm the remaining available water conveyance system. The resulting stream erosion and channel downcutting impair water quality and quickly drain the watershed as surface water leaves via incised (deeper) channels. Disconnecting the incised channel from the wetlands leads to more downstream flooding. As the adjacent wetlands remain disconnected, riparian vegetation and wetland functions are reduced. Moreover, because less water is available in groundwater and wetlands for slow release to augment streamflow during dry periods, the filling or draining of wetlands can make the timing and extent of navigability on some waterways less predictable during dry periods. Therefore, intact adjacent wetlands, including headwater wetlands, can contribute to maintaining navigability on the nation's rivers and harbors and can reduce flooding in paragraph (a)(1) waters.

Wetlands adjacent to tributaries of navigable waters, the territorial seas, and interstate waters can also help promote improvements in drinking water supply and quality. Over 228 million people are served by nearly 15,000 public water systems using surface water such as streams, rivers, lakes, tributaries, and surface-water storage impoundments as a primary source of water.[56] An estimated 61% of water withdrawn for public water supply came from surface water sources in 2015.[57] Adjacent wetlands have an important role in mitigating the risk of contamination to sources of drinking water, and in water quality generally, due to their strategic location as buffers for other waterbodies and their filtration of surface water. Retention of water and its associated constituents by wetlands allows the biochemical uptake and/or breakdown of contaminants and the destruction of pathogens. The water retention capacity of adjacent wetlands also allows for the storage and gradual release of surface waters that may supply public water system intakes during times of drought. In either case, this retention substantially improves both the supply and quality of drinking water.

Though drinking water supplied through public water supplies is regulated by the Safe Drinking Water Act, many water suppliers also rely on source water protection efforts under the Clean Water Act, as the quality of the drinking water source is dependent on the protection of its upstream waters. Conserving wetlands in source water protection areas can help protect water quality, recharge aquifers, and maintain surface water flow during dry periods. For example, wetlands conservation is a crucial feature of the low-cost New York City municipal water system, which provides high-quality drinking water to millions of people through watershed protection, including of adjacent wetlands, of its source waters rather than extensive treatment.

Discharge of agricultural, industrial, sanitary, or other waste into any surface water may pose a public health risk downstream. For example, excessive upstream discharge may overwhelm a public water system filtration unit, allowing microbial pathogens into the drinking water system. EPA's Science Advisory Board cited drinking water contamination by pathogens as one of the most important environmental risks.[58] Moreover, drinking water treatment to address microbial pathogens has little effect on many toxic chemicals, metals, and pesticides discharged into streams, drainage ditches, canals, or other surface waters.

In sum, adjacent wetlands can provide a variety of functions to paragraph (a)(1) waters. Based on the importance of these functions to paragraph (a)(1) waters, the agencies' interpretation of the Clean Water Act to protect adjacent wetlands where those adjacent wetlands meet either the relatively permanent standard or the significant nexus standard reflects proper consideration of the objective of the Act and the best available science.

iii. Intrastate Lakes and Ponds, Streams, or Wetlands Not Identified in Paragraphs (a)(1) Through (4) of This Rule Can Provide Functions That Restore and Maintain the Chemical, Physical, and Biological Integrity of Traditional Navigable Waters, the Territorial Seas, and Interstate Waters

Intrastate lakes and ponds, streams, or wetlands not identified in paragraphs (a)(1) through (4) of the rule—examples of which could include, but are not limited to, prairie potholes, playa lakes, and vernal pools—can provide important functions that affect the chemical, physical, and biological integrity of paragraph (a)(1) waters. *See* Technical Support Document section III.D. The agencies note that while the Science Report concluded such intrastate lakes and ponds, streams, and wetlands can provide these functions, the significant nexus standard is distinct from this scientific conclusion, and the agencies are not concluding in this rule that all intrastate lakes and ponds, streams, and wetlands categorically meet the significant nexus standard. These functions are particularly valuable when considered cumulatively across the landscape or across different watershed or sub-watershed scales. They are similar to the functions that adjacent wetlands provide, including water storage to control streamflow and mitigate downstream flooding; interruption and delay of the transport of water-borne pollutants (such as excess nutrients and contaminants) over long distances; and retention of sediment. These functions can be important to the physical integrity of paragraph (a)(1) waters. For non-

[56] EPA data from 2022 Third Quarter Safe Drinking Water Information System/Federal Version.

[57] Comments submitted by Association of Metropolitan Water Agencies at 2 (February 4, 2022) (Docket ID No. EPA–HQ–OW–2021–0602–0252), *https://www.regulations.gov/comment/EPA-HQ-OW-2021-0602-0252* (citing Dieter, C.A., Maupin, M.A., Caldwell, R.R., Harris, M.A., Ivahnenko, T.I., Lovelace, J.K., Barber, N.L., and Linsey, K.S., 2018, *Estimated use of water in the United States in 2015:* U.S. Geological Survey Circular 1441. Retrieved from *https://pubs.usgs.gov/circ/1441/circ1441.pdf*).

[58] U.S. Environmental Protection Agency/Science Advisory Board. 1990. Reducing Risk: Setting Priorities and Strategies for Environmental Protection. SAB–EC–90–021. *https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=2000PNG1.TXT.*

floodplain wetlands and open waters lacking a channelized surface or regular shallow subsurface connection, generalizations from the available literature about their specific effects on downstream waters are difficult because information on both function and connectivity is needed. Accordingly, a case-specific analysis of their effects on paragraph (a)(1) waters is appropriate from both a scientific and policy perspective.

For example, oxbow lakes and other lakes and ponds that are in close proximity to the stream network, that are located within floodplain or riparian areas, or that are connected via surface and shallow subsurface hydrology to the stream network or to other "waters of the United States" perform critical chemical, physical, and biological functions that affect paragraph (a)(1) waters. Like adjacent wetlands, these waters individually and collectively affect the integrity of paragraph (a)(1) waters by acting as sinks that retain floodwaters, sediments, nutrients, and contaminants that could otherwise negatively impact the condition or function of those paragraph (a)(1) waters. They also provide important habitat for aquatic species that utilize both the lake and pond and the nearby paragraph (a)(1) water to forage, breed, and rest.

Intrastate lakes and ponds, streams, and wetlands not identified in paragraphs (a)(1) through (4) of the rule span the gradient of connectivity identified in the Science Report. They can be open waters located in the riparian area or floodplain of traditional navigable waters, the territorial seas, and interstate waters (*e.g.,* oxbow lakes) and otherwise be physically proximate to the stream network (similar to adjacent wetlands) or they can be open waters or wetlands that are fairly distant from the network. They can also be connected to paragraph (a)(1) waters through biological connections, such as through the movement of aquatic and semi-aquatic species for habitat or other lifecycle needs and can serve as sources of food for larger aquatic and semi-aquatic animals that live in paragraph (a)(1) waters. *See* section III.D of the Technical Support Document. These waters can also provide additional functions such as storage and mitigation of peak flows, natural filtration by biochemical uptake and/or breakdown of contaminants, and, in some locations, high volume aquifer recharge that contributes to the baseflow in paragraph (a)(1) waters. The strength of functions provided by intrastate lakes and ponds, streams, and wetlands that are evaluated under paragraph (a)(5) on paragraph (a)(1) waters will vary depending on the type and degree of connection (*i.e.,* from highly connected to highly isolated) to paragraph (a)(1) waters and landscape features such as proximity to stream networks and to such waters with similar characteristics that function together to influence paragraph (a)(1) waters.

Since the publication of the Science Report in 2015, the published literature has expanded scientific understanding and quantification of the functions of these waters that affect the integrity of larger waters, including traditional navigable waters, the territorial seas, and interstate waters, particularly in the aggregate. More recent literature (*i.e.,* 2014-present, as some literature from 2014 and 2015 may not have been included in the Science Report) has determined that non-floodplain wetlands can have demonstrable hydrologic and biogeochemical downstream effects, such as decreasing peak flows, maintaining baseflows, and performing nitrate removal, particularly when considered cumulatively.

Some intrastate lakes and ponds, streams, and wetlands not identified in paragraphs (a)(1) through (4) can, in certain circumstances, have strong chemical, physical, or biological connections to and effects on paragraph (a)(1) waters. However, some intrastate lakes and ponds, streams, and wetlands not identified in paragraphs (a)(1) through (4) of this rule do not have significant effects on paragraph (a)(1) waters because of their distance from paragraph (a)(1) waters, their landscape position, climatological variables, or other factors. The effect of distance on a significant nexus analysis, for example, may vary based on the characteristics of the aquatic resources being evaluated and other factors affecting the strength of their connectivity to paragraph (a)(1) waters. Waters are less likely to have a significant nexus if they are located outside of the riparian area or floodplain, lack a confined surface or shallow subsurface hydrologic connection to jurisdictional waters, or exceed the minimum distances necessary for aquatic species that cannot disperse overland to utilize both the subject waters[59] and the waters in the broader tributary network. However, sometimes it is their lack of a hydrologic surface connection that contributes to the important effect that they have on paragraph (a)(1) waters; for example, depressional non-floodplain wetlands lacking surface outlets can function individually and cumulatively to retain and transform nutrients, retain sediment, provide habitat, and reduce or attenuate downstream flooding, depending on site-specific conditions such as landscape characteristics (*e.g.,* slope of the terrain or permeability of the soils). Justice Kennedy's insight that "[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" is consistent with the science. *See Rapanos,* 547 U.S. at 786 (Kennedy, J., concurring in the judgment).

Based on the functions that can be provided by intrastate lakes and ponds, streams, and wetlands not identified in paragraphs (a)(1) through (4) to traditional navigable waters, the territorial seas, and interstate waters, assessing these waters to determine whether they meet either the relatively permanent standard or the significant nexus standard reflects proper consideration of the objective of the Clean Water Act and the best available science.

3. The Scope of This Rule Is Limited Consistent With the Law, the Science, and Agency Expertise

In this rule, the agencies are exercising their authority to construe "waters of the United States" to mean the waters defined by the familiar 1986 regulations with amendments to reflect the agencies' interpretation of the statutory limits on the scope of the "waters of the United States." This construction is supported by consideration of the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court decisions, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining "waters of the United States." This rule's limitations are based on the agencies' conclusion that the significant nexus standard is consistent with the statutory text and legislative history, advances the objective of the Clean Water Act, is informed by the scientific record and Supreme Court case law, and appropriately considers the policies of the Act. The agencies have also determined that the relatively permanent standard should be included in the rule because, while it identifies only a subset of the "waters of the

[59] In this preamble, the agencies use "subject waters" to mean the water or waters being assessed for jurisdiction. "Subject waters evaluated pursuant to the significant nexus standard" means the water either alone or in combination with similarly situated waters in the region.

United States,'' it provides important efficiencies and additional clarity for regulators and the public.

This section of the preamble first explains the agencies' conclusion that utilization of both the relatively permanent standard and the significant nexus standard gives effect to the Clean Water Act's text, including its objective as well as its limitations. The significant nexus standard is consistent with the text, objective, and legislative history of the Clean Water Act, as well as relevant Supreme Court case law and the best available science. The relatively permanent standard is administratively useful as it more readily identifies a subset of waters that will virtually always significantly affect paragraph (a)(1) waters, but standing alone the standard is insufficient to meet the objective of the Clean Water Act. This section also explains that fact-based standards for determining Clean Water Act jurisdiction are appropriate and not unusual under the Act. The agencies have the discretion to consider defining waters as jurisdictional on a categorical basis where scientifically and legally justified (for example in this rule, paragraph (a)(1) waters and their adjacent wetlands) or on a case-specific, fact-based approach (for example, in this rule, tributaries and their adjacent wetlands that meet the relatively permanent standard or significant nexus standard). Finally, this section explains how this rule reflects full and proper consideration of the water quality objective in section 101(a) and the policies relating to responsibilities and rights of Tribes and States under section 101(b) of the Clean Water Act. Based on these considerations, the agencies have concluded that the significant nexus standard in this rule is the best interpretation of section 502(7) of the Act.

a. The Limitations Established by This Rule Advance the Objective of the Clean Water Act

This rule's utilization of both the relatively permanent standard and the significant nexus standard gives effect to the Clean Water Act's text and environmentally protective objective as well as its limitations. *See Rapanos,* 547 U.S. at 767–69 (Kennedy, J., concurring in the judgment) (observing ''the evident breadth of congressional concern for protection of water quality and aquatic ecosystems'' and referring to the Clean Water Act as ''a statute concerned with downstream water quality'' (citations omitted)); *Riverside Bayview,* 474 U.S. at 133 (''Congress chose to define the waters covered by the Act broadly.''). The agencies, however, have concluded that it is the significant nexus standard that advances the objective of the Clean Water Act because it is linked to effects on the water quality of paragraph (a)(1) waters while also establishing an appropriate limitation on the scope of jurisdiction by requiring that those effects be significant. The relatively permanent standard is administratively useful as it more readily identifies a subset of waters that will virtually always significantly affect paragraph (a)(1) waters, but, exclusive reliance on the standard for all determinations is inconsistent with the text of the statute and Supreme Court precedent and is insufficient to advance the objective of the Clean Water Act.

With this rule, the agencies conclude that if a water meets either the relatively permanent standard or the significant nexus standard, it falls within the protections established by the Clean Water Act. As discussed earlier, this rule is not based on an application of the *Marks* test for interpreting Supreme Court decisions; rather, with this rule, the agencies are interpreting the scope of the definition of ''navigable waters,'' informed by relevant Supreme Court precedent, but also based on the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining ''waters of the United States.''

This section first discusses why the significant nexus standard is consistent with the text, objective, and legislative history of the Clean Water Act, as well as relevant Supreme Court case law and the best available science; then explains why the relatively permanent standard is administratively useful but on its own is insufficient; and, finally, explains that fact-based standards for determining Clean Water Act jurisdiction are appropriate and not unique to the definition of ''waters of the United States.''

i. The Significant Nexus Standard Is Consistent With the Text and Objective of the Clean Water Act, Legislative History, Case Law, and the Best Available Science

The significant nexus standard, as the agencies have established it in this rule, is the best interpretation of the Clean Water Act because it is consistent with the text, including the Act's statutory objective and statutory structure, the legislative history and case law, and is supported by the best available science. The standard is consistent with the plain language of the Act's objective because it is based upon effects on the water quality of paragraph (a)(1) waters and limits the scope of jurisdiction based on the text of that objective. Moreover, protection of waters that significantly affect the paragraph (a)(1) waters—*i.e.,* traditional navigable waters, the territorial seas, and interstate waters—is consistent with the scope of Commerce Clause authority that the Supreme Court in *SWANCC* concluded that Congress was exercising, while also fulfilling Congress's intent in exercising that authority in enacting the Clean Water Act.

The significant nexus standard effectuates the text of Clean Water Act section 502(7), which defines ''navigable waters'' as ''the waters of the United States, including the territorial seas.'' The standard is properly focused on protecting paragraph (a)(1) waters, which are the foundation of the Clean Water Act: traditional navigable waters (which ''navigable waters'' clearly invokes but is not limited to); ''the territorial seas'' (which are explicitly listed in section 502(7)); and interstate waters (which are unambiguously waters ''of the United States,'' as they are waters of the ''several States,'' U.S. Const. section 8). Further, each of the rule's provisions identifies an aquatic resource that meets the definition of ''water'' or ''waters'' in either the *Rapanos* plurality's preferred dictionary or the dictionary most contemporaneous with the passage of the Clean Water Act. *See* section IV.A.3.a.ii of this preamble for discussion of the plurality's dictionary-based analysis. The first definition of ''water'' within Webster's Second (1.a. of the definition) is ''[t]he liquid which descends from the clouds in rain and which forms rivers, lakes, seas, etc.,'' Webster's New International Dictionary 2882 (2d ed. 1954). The definition of ''waters,'' plural, in the most contemporaneous Webster's, is: ''the water occupying or flowing in a particular bed.'' Webster's Third New Intl. (1966). Even the *Rapanos* plurality's preferred definition includes ''water as found in 'streams,' '' ''water '[a]s found in streams and bodies forming geographical features such as oceans, rivers, [and] lakes,' or 'the flowing or moving masses, as of waves or floods, making up such streams or bodies.' '' *Rapanos,* 547 U.S. at 732–33 (quoting Webster's New International Dictionary 2882, definition 2.c). Traditional navigable waters; interstate waters; the territorial seas; impoundments of waters; tributaries; adjacent wetlands; and intrastate lakes and ponds, streams, and wetlands are ''water'' or ''waters'' under these definitions, as identified by hydrologists

and other scientists, and in practice. Moreover, with respect to whether wetlands are waters, that question has already been resolved by both science and a unanimous Supreme Court in *Riverside Bayview.* 474 U.S. at 137–39. The requirement that a significant nexus exist between upstream waters, including wetlands, and ''navigable waters in the traditional sense'' thus clearly advances Congress's stated objective in the Act while fulfilling ''the need to give the term 'navigable' some meaning.'' *Rapanos,* 547 U.S. at 779 (Kennedy, J., concurring in the judgment). *See also* section IV.C.2.b.iii of this preamble for discussion of the Clean Water Act's jurisdiction over interstate waters. Finally, the text and focus of the rule's significant nexus standard are derived from and designed to advance the text of the first sentence in the statute setting forth the Act's sole statutory objective: ''to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.'' *See* 33 U.S.C. 1251(a).

As noted above, a statute must be interpreted in light of the purposes Congress sought to achieve. *See, e.g., Gen. Dynamics Land Sys., Inc.* v. *Cline,* 540 U.S. 581 (2004). Thus, the agencies must consider the objective of the Clean Water Act to ''restore and maintain the chemical, physical, and biological integrity of the Nation's waters'' in interpreting the scope of the statutory term ''waters of the United States.'' *See* 33 U.S.C. 1251(a). This consideration is particularly important where, as here, Congress used specific language in the definitions in order to meet the objective of the Act and the definition of ''waters of the United States'' is fundamental to meeting the objective of the Act. *See* section IV.A.2 of this preamble. Congress was focused on water quality when it enacted the Clean Water Act and established the Act's objective, and the significant nexus standard is derived from the objective of the Act to protect the water quality of the paragraph (a)(1) waters. The significant nexus standard is consistent with foundational scientific understanding about aquatic ecosystems: waters can significantly affect the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters. Therefore, assessing the effects that waters have on paragraph (a)(1) waters when considered, alone or in combination with other similarly situated waters in a region, is the best means of identifying those waters that must be protected in order to advance the objective of the Clean Water Act.

The agencies have also considered the statute as a whole in construing the scope of ''waters of the United States.'' The comprehensive nature of the Clean Water Act and its pronounced change in approach from precursor water protection statutes is evident throughout the statute, and the agencies have considered the text of those provisions in defining ''waters of the United States.'' One of the Clean Water Act's principal tools in protecting the integrity of the nation's waters is section 301(a), which prohibits ''the discharge of any pollutant by any person'' without a permit or other authorization under the Act. Other substantive provisions of the Clean Water Act that use the term ''navigable waters'' and are designed to meet the statutory objective include the section 402 permit program, the section 404 dredged and fill permit program, the section 311 oil spill prevention and response program, the section 303 water quality standards and total maximum daily load programs, and the section 401 Tribal and State water quality certification process. Each of these programs is designed to protect water quality and, therefore, further the objective of the Clean Water Act. The agencies have also carefully considered the Act's policies regarding the responsibilities and rights of Tribes and States. *See* section IV.A.3.b of this preamble. The agencies have thus construed ''waters of the United States'' to include waters that meet the significant nexus standard based on the text of the Clean Water Act's interlocking provisions designed to restore and maintain the chemical, physical, and biological integrity of the nation's waters.

A significant nexus analysis is also consistent with the framework scientists apply to assess a river system—examining how the components of the system (*e.g.,* wetlands or tributaries), alone or in the aggregate (in combination), in a region, contribute and connect to a river (significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters). Indeed, the significant nexus standard in this rule reflects the analysis in the Science Report by describing the components of a river system and watershed; the types of chemical, physical, and biological connections that link those components; the factors that influence connectivity and associated effects at various temporal and spatial scales; and methods for assessing downstream effects. The structure and function of rivers are highly dependent on the constituent materials stored in and transported through them. Most of these materials originate from either the upstream river network or other components of the river system, including wetlands, and then are transported to the river by water movement or other mechanisms. Further, the significant nexus standard is supported by the Science Report's discussion of connectivity, a foundational concept in hydrology and freshwater and marine ecology. *See also* Technical Support Document sections I.A.ii and III.E.

Connectivity is the degree to which components of a system are joined or linked by various transport mechanisms and is determined by the characteristics of both the physical landscape and the biota of the specific system. Connectivity serves to demonstrate the ''nexus'' between upstream waterbodies and traditional navigable waters, the territorial seas, or interstate waters, and variations in the degree of connectivity influence the range of functions provided by streams, wetlands, and open waters and are critical to the integrity and sustainability of paragraph (a)(1) waters. For example, connections with low values of one descriptor can have important downstream effects when considered in context of other types of connections (*e.g.,* a stream with low-duration flow during a flash flood can transfer large volumes of water and woody debris downstream, affecting the integrity of a paragraph (a)(1) water). Indeed, the seasonal or longer-term absence of surface connections can provide numerous functions that contribute to the chemical, physical, and biological integrity of paragraph (a)(1) waters: these wetlands can attenuate stormflow; increase baseflow; be a source of carbon and organic matter; and be a sink for sediment, nitrate, and other constituents that degrade water quality. While the scientific literature does not use the term ''significant'' in the same manner used by the Supreme Court, the literature does provide information on the strength of upstream effects on the chemical, physical, and biological functioning of the downstream waterbodies. The analysis in the literature permits the agencies to judge when an effect is significant such that a water, either alone or in combination with similar waters, should be protected by the Clean Water Act in order to meet the objective of the Act. The Science Report presents evidence of connections for various categories of waters, evaluated singly or in combination, which affect downstream waters and the strength of those effects. The

connections and mechanisms discussed in the Science Report include transport of physical materials and chemicals such as water, wood, sediment, nutrients, pesticides, and metals (*e.g.,* mercury); functions that streams, wetlands, and open waters perform, such as storing and cleansing water; and movement of organisms. Again, the significant nexus standard, under which waters are assessed alone or in combination for the functions they provide to paragraph (a)(1) waters, is consistent with the foundational scientific framework and concepts of hydrology.

The agencies' use of scientific principles to determine the scope of ''waters of the United States'' is consistent with the Supreme Court's approach in *Maui.* The Court in that case also looked to scientific principles to inform its interpretation of the Clean Water Act's jurisdictional scope, noting: ''[m]uch water pollution does not come from a readily identifiable source. Rainwater, for example, can carry pollutants (say, as might otherwise collect on a roadway); it can pollute groundwater, and pollution collected by unchanneled rainwater runoff is not ordinarily considered point source pollution.'' *Maui,* 140 S. Ct. at 1471 (citing the definition of ''water pollution'' from 3 Van Nostrand's Scientific Encyclopedia, at 5801). The Court then enumerated a series of factors, many of which are scientifically based, relevant to determining whether a discharge is jurisdictional under the Clean Water Act, including the nature of the material through which the pollutant travels and the extent to which the pollutant is diluted or chemically changed as it travels. *Id.* at 1476–77.

In carefully considering the text and objective of the Clean Water Act and the best available science, this rule's incorporation of the significant nexus standard is also consistent with the legislative history of the Clean Water Act. The Supreme Court has noted that ''some Members of this Court have consulted legislative history when interpreting *ambiguous* statutory language.'' *Bostock* v. *Clayton Cnty., Ga.,* 140 S. Ct. 1731, 1749 (2020) (emphasis in original). In *Bostock,* the Court stated further that ''while legislative history can never defeat unambiguous statutory text, historical sources can be useful for a different purpose: Because the law's ordinary meaning at the time of enactment usually governs, we must be sensitive to the possibility a statutory term that means one thing today or in one context might have meant something else at the time of its adoption or might mean something different in another context. And we must be attuned to the possibility that a statutory phrase ordinarily bears a different meaning than the terms do when viewed individually or literally. To ferret out such shifts in linguistic usage or subtle distinctions between literal and ordinary meaning, this Court has sometimes consulted the understandings of the law's drafters.'' *Id.* at 1750.

Bills introduced in 1972 in both the House of Representatives and the Senate defined ''navigable waters'' as ''the navigable waters of the United States.'' *See* 2 Environmental Policy Div., Library of Congress, *Legislative History of the Water Pollution Control Act Amendments of 1972* at 1069, 1698 (1973). The House and Senate Committees, however, expressed concern that the definition might be given an unduly narrow reading. Thus, the House Report observed: ''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.'' H.R. Rep. No. 92–911, at 131 (1972).

The Senate Report stated that ''[t]hrough 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 discharge of pollutants be controlled at the source.'' S. Rep. No. 92–414, at 77 (1971). The Conference Committee deleted the word ''navigable'' from the definition of ''navigable waters,'' broadly defining the term to include ''the waters of the United States.'' The Conference Report explained that the definition was intended to repudiate earlier limits on the reach of Federal water pollution efforts: ''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.'' S. Conf. Rep. No. 92–1236, at 144 (1972). The significant nexus standard thus fulfills Congress's intent that the scope of the term ''navigable waters'' be broader than the limitations of earlier water pollution control statutes and agency determinations under them (section 10 waters and their tributaries, for example, under the Rivers and Harbors Act of 1899). And, because the significant nexus standard is focused on protecting waters to meet the objective of the Act, it also comports with congressional intent.

The significant nexus standard is also consistent with prior Supreme Court decisions and with every circuit decision that has gleaned a rule of law from that precedent. For example, in *Riverside Bayview,* the Court deferred to the agencies' interpretation: ''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.'' 474 U.S. at 134. Indeed, the Court in *Riverside Bayview* concluded that ''significant effects'' is the relevant basis for asserting jurisdiction over adjacent wetlands: ''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.'' *Id.* at 135 n.9. In *Rapanos,* Justice Kennedy—referencing the Court in *Riverside Bayview*—stated that ''the Court indicated that 'the term ''navigable'' as used in the Act is of limited import,' [and] it relied, in upholding jurisdiction, on the Corps' judgment that 'wetlands adjacent to lakes, rivers, streams, and other bodies of water may function as integral parts of the aquatic environment even when the moisture creating the wetlands does not find its source in the adjacent bodies of water.' '' 547 U.S. at 779 (Kennedy, J., concurring in the judgment) (citing *Riverside Bayview,* 474 U.S. at 133, 135). ''The implication,'' Justice Kennedy observed, ''was that wetlands' status as 'integral parts of the aquatic environment'—that is, their *significant nexus* with navigable waters—was what established the Corps' jurisdiction over them as waters of the United States.'' *Rapanos,* 547 U.S. at 779 (emphasis added); *see also id.* at 780 (''[W]etlands' ecological functions vis-á-vis other covered waters are the basis for the Corps' regulation of them.''). The Court in *SWANCC* also characterized its decision in *Riverside Bayview* as informed by the ''significant nexus between the wetlands and 'navigable waters.' '' 531 U.S. at 167.

In *Rapanos,* Justice Kennedy reasoned that *Riverside Bayview* and *SWANCC*

"establish the framework for" determining whether an assertion of regulatory jurisdiction constitutes a reasonable interpretation of "navigable waters," finding that "the connection between a nonnavigable water or wetland and a navigable water may be so close, or potentially so close, that the Corps may deem the water or wetland a 'navigable water' under the Act," and "[a]bsent a significant nexus, jurisdiction under the Act is lacking." 547 U.S. at 767. Justice Kennedy also identified many of the same valuable wetland functions as the Science Report: "Important public interests are served by the Clean Water Act in general and by the protection of wetlands in particular. To give just one example, *amici* here have noted that nutrient-rich runoff from the Mississippi River has created a hypoxic, or oxygen-depleted, 'dead zone' in the Gulf of Mexico that at times approaches the size of Massachusetts and New Jersey. Scientific evidence indicates that wetlands play a critical role in controlling and filtering runoff" *Id.* at 777 (citing Brief for Association of State Wetland Managers et al. 21–23; Brief for Environmental Law Institute 23; OTA 43, 48–52; R. Tiner, In Search of Swampland: A Wetland Sourcebook and Field Guide 93–95 (2d ed. 2005); Whitmire & Hamilton, Rapid Removal of Nitrate and Sulfate in Freshwater Wetland Sediments, 34 J. Env. Quality 2062 (2005)).

The agencies are mindful of the Supreme Court's decision in *SWANCC* regarding the specific Commerce Clause authority Congress was exercising in enacting the Clean Water Act—"its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made"—and the Court's guidance on avoiding an administrative interpretation of a statute that invokes the outer limits of Congress's power. 531 U.S. at 172; *see also id.* ("[W]e expect a clear indication that Congress intended that result."). With respect to section 404 authority over an abandoned sand and gravel pit based simply on whether it was used by migratory birds (the "Migratory Bird Rule"), the *SWANCC* Court concluded that there was not a clear statement from Congress. *Id.* at 174. By placing traditional navigable waters, the territorial seas, and interstate waters at the center of the agencies' jurisdiction and covering additional waters only where those waters significantly affect (a)(1) waters, this rule reflects the Court's guidance. Further, in construing the statute in this rule, the agencies have not only eschewed the "Migratory Bird Rule," they have deleted the provisions in the 1986 regulations that authorized assertions of jurisdiction under broader Commerce Clause authority and replaced them with the relatively permanent and significant nexus standards.

Indeed, the provisions in the 1986 regulations authorized assertions of jurisdiction far more broadly than under the relatively permanent standard and significant nexus standard in this rule. First, the regulatory text authorized the assertion of jurisdiction over "[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 including any such waters: Which are or could be used by interstate or foreign travelers for recreational or other purposes; or From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or Which are used or could be used for industrial purposes by industries in interstate commerce." 33 CFR 328.3(a)(3) (2014). This regulatory text was based on all three categories of activity that Congress may regulate using its Commerce Clause authority: (1) the channels of interstate commerce; (2) persons or things in interstate commerce; and (3) activities that substantially affect interstate commerce. *See United States* v. *Lopez,* 514 U.S. 549, 558–59 (1995). This approach thus overall was a far broader definition of "waters of the United States" than this rule, which recognizes that the Supreme Court in *SWANCC* held that Congress was not using all aspects of its Commerce Clause authority. Moreover, as discussed by the Court in *SWANCC,* the agencies stated in the preamble to the 1986 regulations that "waters of the United States" at 33 CFR 328.3(a)(3) also included waters that "are or would be used as habitat by birds protected by Migratory Bird Treaties; . . . [that] are or would be used as habitat by other migratory birds which cross state lines; . . . [that] are or would be used as habitat for endangered species; or . . . [waters] [u]sed to irrigate crops sold in interstate commerce." 51 FR 41206, 41217 (November 13, 1986). This is the 1986 preamble language that became known as the "Migratory Bird Rule" and clearly established a far greater scope of "waters of the United States" than this rule, as migratory birds use waters large and small all over the United States with no connection to a traditional navigable water, the territorial seas, or an interstate water.

The agencies also have carefully amended other provisions of the 1986 regulations not only to add the relatively permanent standard and the significant nexus standard as limitations on the scope of "waters of the United States" but to add additional limitations where the agencies were concerned assertions of jurisdiction could push the limits of the congressional authority granted to the agencies or constitutional limits. For example, in a change from the 1986 regulations, tributaries to intrastate lakes and ponds, streams, and wetlands that do not fall within other categories of the rule (paragraph (a)(5) waters in this rule, which are analogous to the "other waters" provision of the 1986 regulations) do not qualify as tributaries under this rule, nor do wetlands adjacent to such waters. As set forth in this rule, the relatively permanent standard and the significant nexus standard allow the agencies to fulfill the statute and Congress's clearly stated objective, while being carefully crafted to fall well within the authority granted to the agencies by Congress and to Congress by the Constitution. As noted above, the *SWANCC* Court itself viewed "significant nexus" as the touchstone for determining the scope of "waters of the United States" in its decision in *Riverside Bayview,* concluding the decision was informed by the "significant nexus between the wetlands and 'navigable waters.'" 531 U.S. at 167. The agencies agree with the analysis of Justice Kennedy, who explicitly addressed these constitutional concerns in *Rapanos,* stating: "In *SWANCC,* by interpreting the Act to require a significant nexus with navigable waters, the Court avoided applications—those involving waters without a significant nexus—that appeared likely, as a category, to raise constitutional difficulties and federalism concerns." 547 U.S. at 776. Moreover, the rule is consistent with decades of interpretation and implementation undisturbed by Congress.

Moreover, the *SWANCC* Court noted that the statement in the Conference Report for the Clean Water Act that the conferees "intend that the term 'navigable waters' be given the broadest possible constitutional interpretation," S. Conf. Rep. No. 92–1236, at 144 (1972), signifies Congress's intent with respect to its exertion of its commerce power over navigation. As the numerous Supreme Court decisions discussed above have found, Congress enacted the Clean Water Act to establish a comprehensive Federal law protecting

water quality. The agencies' construction of the statute must also give effect to the clearly stated objective of the Act and all the provisions of the Act designed to achieve that objective. *See* section IV.A.2 of this preamble. Thus, while the agencies must be mindful that Congress was utilizing an aspect of its commerce power, they must be similarly mindful that Congress intended to fully exercise that authority in order to comprehensively address water pollution. The agencies have concluded that the legislative history concerning the intent of Congress regarding the scope of the Clean Water Act's protections under its power over navigation confirms the appropriateness of the agencies' construction of the Clean Water Act in this rule. This rule ensures that waters, which either alone or in combination significantly affect the integrity of traditional navigable waters, the territorial seas, or interstate waters, are protected by the Clean Water Act, and thus this rule carefully balances the limits on Congress's authority and on the agencies' authority under the Act, with congressional intent to comprehensively protect water quality and to delegate the authority to do so to the agencies.

Finally, the Supreme Court has long held that authority over traditional navigable waters is not limited to either protection of navigation or authority over only the traditional navigable water. Rather, "the authority of the United States is the regulation of commerce on its waters . . . [f]lood protection, watershed development, [and] recovery of the cost of improvements through utilization of power are likewise parts of commerce control." *United States* v. *Appalachian Electric Power Co.,* 311 U.S. 377, 426 (1940); *see also Oklahoma ex rel. Phillips* v. *Guy F. Atkinson Co.,* 313 U.S. 508, 525–526 (1941) ("[J]ust as control over the non-navigable parts of a river may be essential or desirable in the interests of the navigable portions, so may the key to flood control on a navigable stream be found in whole or in part in flood control on its tributaries. . . . [T]he exercise of the granted power of Congress to regulate interstate commerce may be aided by appropriate and needful control of activities and agencies which, though intrastate, affect that commerce."). As the United States Court of Appeals for the Sixth Circuit observed after the 1972 enactment of the Clean Water Act: "It would, of course, make a mockery of [Congress's] powers if its authority to control pollution was limited to the bed of the navigable stream itself. The tributaries which join to form the river could then be used as open sewers as far as federal regulation was concerned. The navigable part of the river could become a mere conduit for upstream waste." *United States* v. *Ashland Oil & Transp. Co.,* 504 F.2d 1317, 1326 (6th Cir. 1974). The significant nexus standard included in this rule ensures that the definition of "waters of the United States" remains within the bounds of the Clean Water Act and addresses the concerns raised by the Court in *SWANCC* while also fulfilling the directive of Congress in enacting the Clean Water Act.

ii. The Relatively Permanent Standard Is Administratively Useful, But Exclusive Reliance on the Standard for All Determinations Is Inconsistent With the Objective of the Act

The agencies conclude that Federal protection is appropriate where a water meets the relatively permanent standard: waters that are relatively permanent, standing or continuously flowing waters connected to paragraph (a)(1) waters, and waters with a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters. Waters that meet this standard are a subset of the "waters of the United States" because they will virtually always significantly affect traditional navigable waters, the territorial seas, or interstate waters and therefore properly fall within the Clean Water Act's scope. However, limiting the definition of "waters of the United States" to the relatively permanent standard on its own would be inconsistent with the Act's text and objective and runs counter to scientific principles. As discussed further below, the agencies have included the relatively permanent standard in this rule because it provides efficiencies and additional clarity for regulators and the public.

Waters that meet the relatively permanent standard are within the scope of the Clean Water Act because scientific evidence supports the conclusion that tributaries of paragraph (a)(1) waters with relatively permanent, standing or continuously flowing water perform important functions that either individually, or cumulatively with similarly situated waters in the region, have significant effects on the chemical, physical, or biological integrity of paragraph (a)(1) waters. The same is true of adjacent wetlands and relatively permanent open waters with continuous surface connections to tributaries that meet the relatively permanent standard. *See* Technical Support Document sections III.A, III.B, and III.D.

Tributaries that meet the relatively permanent standard contribute consistent flow to paragraph (a)(1) waters and, with that flow, export nutrients, sediment, food resources, contaminants, and other materials that can both positively (*e.g.,* by contributing to downstream baseflow, providing food for aquatic species, and contributing to downstream aquatic habitat) and negatively (*e.g.,* by exporting too much sediment, runoff, or nutrients or exporting pollutants) affect the integrity of those paragraph (a)(1) waters. In addition, wetlands with a continuous surface connection to tributaries that meet the relatively permanent standard can and do attenuate floodwaters, trap sediment, and process and transform nutrients that might otherwise reach traditional navigable waters, the territorial seas, or interstate waters. If the agencies assessed waters that meet the relatively permanent standard (*e.g.,* tributaries that meet the relatively permanent standard or adjacent wetlands with a continuous surface connection to such tributaries) they would virtually always find evidence of strong factors, particularly hydrologic factors like flow frequency and duration, that lead to strong connections and associated effects on paragraph (a)(1) waters. Therefore, waters that meet the relatively permanent standard will virtually always meet the significant nexus standard.

The relatively permanent standard is useful for the agencies and the public because it generally requires less information gathering and assessment than the significant nexus standard. The significant nexus standard requires evaluating whether waters, alone or in combination, significantly affect the chemical, physical, or biological integrity of paragraph (a)(1) waters, *i.e.,* traditional navigable waters, the territorial seas, and interstate waters. Such an assessment requires considering the presence of functions for one or more subject waters and evaluating the strength of their effects on paragraph (a)(1) waters. In contrast, the relatively permanent standard has a more limited focus that requires considering the flow of a tributary or considering the surface connection between an adjacent wetland or open water and a relatively permanent covered water. As such, while both the significant nexus and relatively permanent standards require case-specific, fact-based inquiries before determining whether a water meets the definition of "waters of the United States," the relatively permanent standard will generally require less

assessment and thus can result in administrative efficiencies.

Standing alone as the sole test for Clean Water Act jurisdiction, however, the relatively permanent standard has no basis in the text of the statute and is contrary to the statute. Rather than a careful consideration of the Clean Water Act's specialized definitions in light of the objective of the Act, the standard's apparent exclusion of major categories of waters from the protections of the Clean Water Act, specifically with respect to tributaries that are not relatively permanent and adjacent wetlands that do not have a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters, is inconsistent with the Act's text and objective. In addition, the relatively permanent standard used alone runs counter to the science demonstrating how other categories of waters can affect the integrity of downstream waters, including traditional navigable waters, the territorial seas, and interstate waters. For example, many tributaries that flow for only a short duration in direct response to precipitation, and thus do not meet the relatively permanent standard, are regular and direct sources of freshwater for the sparse traditional navigable waters in the arid Southwest, such as portions of the Gila River. In addition, many adjacent wetlands do not have a continuous surface connection to jurisdictional waters but provide numerous flood protection and water quality benefits to traditional navigable waters, such as wetlands behind the extensive levee systems along the Mississippi River.

As discussed in section IV.A.2.c of this preamble and sections III.A.v and III.B of the Technical Support Document, there is overwhelming scientific information demonstrating the effects ephemeral streams can have on downstream waters and the effects wetlands can have on downstream waters when they do not have a continuous surface connection. The science is clear that aggregate effects of ephemeral streams ''can have substantial consequences on the integrity of the downstream waters'' and that the evidence of such downstream effects is ''strong and compelling.'' Science Report at 6–10, 6–13. The SAB review of the draft Science Report explained that ephemeral streams ''are no less important to the integrity of the downgradient waters'' than perennial or intermittent streams.[60] There is thus no scientific basis for excluding waters simply because they are not relatively permanent.

The science is also clear that wetlands may significantly affect paragraph (a)(1) waters when they have other types of surface or hydrologic connections, such as wetlands that overflow across uplands via sheetflow and flood jurisdictional waters or wetlands with less frequent surface water connections; wetlands with shallow subsurface connections to other protected waters; wetlands behind a natural berm, a beach dune, a manmade levee, or the like; or other wetlands proximate to jurisdictional waters. Such wetlands provide a number of functions, including water storage that can help reduce downstream flooding; recharging groundwater that contributes to baseflow of paragraph (a)(1) waters; improving water quality in paragraph (a)(1) waters through processes that remove, store, or transform pollutants such as nitrogen, phosphorus, and metals; and serving as unique and important habitats including for aquatic species that also utilize paragraph (a)(1) waters. *See, e.g.,* Science Report at 4–20 to 4–38.

The agencies have also concluded that there is no basis in the text of the statute to exclude waters from Clean Water Act jurisdiction solely because they do not meet the relatively permanent standard. As discussed in section IV.A.2.a of this preamble, the objective of the Clean Water Act is to restore and maintain the water quality of the nation's waters. The phrase ''waters of the United States'' is by its terms expansive and not expressly limited to relatively permanent, standing or continuously flowing bodies of water, or to wetlands with a continuous surface connection. The imposition of such limitations would disregard the science demonstrating the effects of upstream waters and wetlands on downstream paragraph (a)(1) waters. Taking science into account, the agencies agree with Justice Kennedy that the Clean Water Act intends to protect waters that do not meet the relatively permanent standard, where such waters have a significant nexus to a paragraph (a)(1) water. *Rapanos,* 547 U.S. at 773–74 (Kennedy, J., concurring in the judgment) (''Needless to say, a continuous connection is not necessary for moisture in wetlands to result from flooding—the connection might well exist only during floods.''); *see also id.* at 775 (''In many cases, moreover, filling in wetlands separated from another water by a berm can mean that floodwater, impurities, or runoff that would have been stored or contained in the wetlands will instead flow out to major waterways. With these concerns in mind, the Corps' definition of adjacency is a reasonable one, for it may be the absence of an interchange of waters prior to the dredge and fill activity that makes protection of the wetlands critical to the statutory scheme.'').

The agencies have concluded that there is no sound basis in the text of the statute to exclude tributaries solely on the basis that they are not relatively permanent, standing or continuously flowing bodies of water from the Clean Water Act. In interpreting the Clean Water Act to be limited in such a manner, the *Rapanos* plurality relied on a strained reading of the Act that is inconsistent with the text of the statute—including the statute's stated objective—the structure of the statute, the statutory history, and Supreme Court precedent interpreting the Clean Water Act.

First, the plurality stated that because one entry in a dictionary defines ''waters'' to mean ''water '[a]s found in streams and bodies forming geographical features such as oceans, rivers, [and] lakes,' or 'the flowing or moving masses, as of waves or floods, making up such streams or bodies,' '' *Rapanos,* 547 U.S. at 732 (quoting Webster's New International Dictionary 2882 (2d ed. 1954) (hereinafter, ''Webster's Second'')), the phrase ''navigable waters'' permits Corps and EPA to assert jurisdiction only over ''relatively permanent, standing or flowing bodies of water.'' *Rapanos,* 547 U.S. at 732. The plurality leans heavily on the fact that Congress defined ''navigable waters'' as ''*the* waters of the United States.'' 33 U.S.C. 1362(7) (emphasis added). But the article ''the'' and plural ''waters'' cannot bear this weight. Congress used the term ''the waters'' throughout the Clean Water Act and in usages where it would be illogical to swap in the plurality's preferred definition. For example, throughout the Act, Congress frequently refers to ''*the waters* of the contiguous zone'' and even ''*the waters* of the territorial seas, the contiguous zone, and the oceans.'' 33 U.S.C. 1343(a), (c) (emphasis added). Congress is not making a careful distinction between some of ''the waters'' of the contiguous zone and other waters of the contiguous zone based on a dictionary definition. Nor did Congress intend to single out some waters of the Great Lakes when it instructed the Administrator to ''conduct research and technical development work, and make studies, with respect to the quality of *the waters* of the Great Lakes.'' 33 U.S.C. 1254(f) (emphasis added).

[60] Letter from SAB to Gina McCarthy, Administrator, EPA (October 17, 2014) (''2014 SAB Review'') at 22–23, 54 fig. 3.

The plurality relied on one particular dictionary definition to limit the scope of the ''waters of the United States'' in a way that is neither compelled by, nor consistent with, the text of the statute. The plurality selected a dictionary, Webster's Second that was not even the most recent edition as of passage of the Clean Water Act, and thus not as reflective of common usage, and then selected a preferred definition within that dictionary. *See Rapanos,* 547 U.S. at 732. Webster's Second does not have a separate entry for ''waters'' (plural), so the plurality relied on its entry for ''water'' (singular) and within that skipped over several more apt definitions to reach its preferred one. The first definition of ''water'' within Webster's Second (1.a. of the definition) is ''[t]he liquid which descends from the clouds in rain and which forms rivers, lakes, seas, etc.,'' a definition that is substantially broader than the one chosen by the plurality. The plurality's preferred definition, ''water as found in streams and bodies forming geographical features such as oceans, rivers, and lakes,'' is halfway down the column, definition 2.c. Moreover, the definition of ''waters,'' plural, in the most contemporaneous Webster's, was also substantially broader, providing the following definition: ''the water occupying or flowing in a particular bed.'' Webster's Third New Intl. (1966). Even taking the plurality's preferred definition at face value, it does not support the relatively permanent standard. That definition includes ''water as found in streams.'' The plurality concluded that the streams referred to in the definition must be relatively permanent and thereby concluded that the ''waters of the United States'' do not include intermittent and ephemeral streams (although the plurality did not use those terms in the scientific sense and added caveats to its stated textual reading of the statute—stating that ''relatively permanent'' does not necessarily exclude waters ''that might dry up in extraordinary circumstances, such as drought'' or ''*seasonal* rivers, which contain continuous flow during some months of the year but no flow during dry months''). *Rapanos,* 547 U.S. at 732 n.5 (emphasis in original). Intermittent and ephemeral streams are, of course, ''streams''—as they are defined in the dictionary, understood in common parlance, and defined by scientists.

The agencies thus agree with Justice Kennedy that the limitations the plurality imposes on the Clean Water Act ''are without support in the language and purposes of the Act or in our cases interpreting it.'' *Rapanos,* 547 U.S. at 768. The agencies also agree that a permanent standing water or continuous flow requirement ''makes little practical sense in a statute concerned with downstream water quality.'' *Id.* at 769. And, as discussed above, ''a full reading of the dictionary definition precludes the plurality's emphasis on permanence: The term 'waters' may mean 'flood or inundation,' events that are impermanent by definition;'' it follows that ''the Corps can reasonably interpret the Act to cover the paths of such impermanent streams.'' *Id.* at 770 (quoting Webster's Second 2882).

The agencies also have concluded that *Riverside Bayview* does not support the plurality's standard for tributaries. As Justice Kennedy stated: ''To be sure, the Court there compared wetlands to 'rivers, streams, and other hydrographic features more conventionally identifiable as ' ''waters.'' ' *Rapanos,* 547 U.S. at 771 (citing *Riverside Bayview,* 474 U.S. at 131). ''It is quite a stretch to claim, however, that this mention of hydrographic features 'echoe[s]' the dictionary's reference to ' ''geographical features such as oceans, rivers, [and] lakes.'' ' *Rapanos,* 547 U.S. at 771 (citation omitted). ''In fact, the *Riverside Bayview* opinion does not cite the dictionary definition on which the plurality relies, and the phrase 'hydrographic features' could just as well refer to intermittent streams carrying substantial flow to navigable waters.'' *Id.* at 771 (citing Webster's Second 1221 (defining ''hydrography'' as ''[t]he description and study of seas, lakes, rivers, and other waters; specif[ically] . . . [t]he measurement of flow and investigation of the behavior of streams, esp[ecially] with reference to the control or utilization of their waters'')).

With respect to wetlands, the agencies have also concluded there is no sound basis in the text of the Clean Water Act or in other Supreme Court precedent for requiring that wetlands can be jurisdictional only if they satisfy the continuous surface connection requirement of the relatively permanent standard. The *Rapanos* plurality's rationale for adopting such a test rested largely on a misreading of *Riverside Bayview.* The plurality's brief discussion did not otherwise attempt to ground its relatively permanent standard in the text, history, or purpose of the Clean Water Act. In concluding that only wetlands with a continuous surface connection to other covered waters are protected by the Clean Water Act, the *Rapanos* plurality relied primarily on two related propositions that it viewed as implicit in *Riverside Bayview.* First, the plurality suggested that in *Riverside Bayview* the Clean Water Act term ''waters'' cannot easily be construed to cover wetlands, and that discharges into wetlands therefore can be regulated only when particular wetlands ''adjoined'' waters of the United States and were thus deemed ''part of'' the waters to which they are adjacent. *See* 547 U.S. at 740. Second, the plurality concluded that this requirement will be satisfied only when ''the wetland has a continuous surface connection with [the adjacent] water.'' *Id.* at 742. Those propositions are unsound and rest on a misreading of *Riverside Bayview.*

The *Rapanos* plurality quoted the *Riverside Bayview* Court's statement that, ''[o]n a purely linguistic level, it may appear unreasonable to classify 'lands,' wet or otherwise, as 'waters.' '' 547 U.S. at 740 (quoting *Riverside Bayview,* 474 U.S. at 132). In the next sentence of its opinion, however, the *Riverside Bayview* Court continues, and the *Rapanos* plurality omits, that ''[s]uch a simplistic response . . . does justice neither to the problem faced by the Corps in defining the scope of its authority under § 404(a) nor to the realities of the problem of water pollution that the Clean Water Act was intended to combat.'' 474 U.S. at 132. The *Riverside Bayview* Court concluded that ''adjacent wetlands may be defined as waters under the Act.'' *Id.* at 134. And, as explained above, the Clean Water Act's text, history, and purpose likewise confirm that adjacent wetlands are themselves ''waters'' covered by the Act.

The *Rapanos* plurality read *Riverside Bayview* as resting on the ''inherent ambiguity in drawing the boundaries of any 'waters.''' 547 U.S. at 740. The plurality also described *SWANCC* as having read *Riverside Bayview* to be ''refer[ring] to the close connection between waters and the wetlands that they gradually blend into.'' *Rapanos,* 547 U.S. at 741. The plurality concluded that ''only those wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right'' can be protected by the Clean Water Act, because only in that circumstance is it ''difficult to determine where the 'water' ends and the 'wetland' begins.'' *Id.* at 742. However, the *Rapanos* plurality misconceived the nature of the line-drawing problem in *Riverside Bayview.* The *Riverside Bayview* Court identified ''shallows, marshes, mudflats, swamps, [and] bogs'' as examples of ''areas that are not wholly aquatic but nevertheless fall far short of being dry land,'' and it

observed that "[w]here on this continuum to find the limit of 'waters' is far from obvious." 474 U.S. at 132. The line-drawing problem in *Riverside Bayview* did *not* involve identifying the boundary between a jurisdictional stream and an adjacent wetland. Rather, the line-drawing problem involved the criteria that should be used to determine whether particular types of hydrogeographic features should be regarded as "waters" under the Clean Water Act. That line-drawing problem—in essence, determining how wet is wet enough—can arise even when a particular swamp or marsh is separated by a barrier from a nearby lake or stream. After discussing at some length the regulatory definition of "wetlands" and its application to the property at issue in that case, *see id.* at 129–131, the *Riverside Bayview* Court upheld as reasonable "the Corps' approach of defining adjacent wetlands as 'waters' within the meaning of" the Clean Water Act. *Id.* at 132.

As further support for its relatively permanent standard, the *Rapanos* plurality invoked *SWANCC*'s holding that certain isolated ponds were not covered by the Clean Water Act. The *SWANCC* Court had described *Riverside Bayview* as resting on "the significant nexus between the wetlands and" the waters to which they are adjacent. 531 U.S. at 167. The *Rapanos* plurality in turn described *SWANCC* as "reject[ing] the notion that the ecological considerations upon which the Corps relied in *Riverside Bayview* . . . provided an independent basis for including entities like 'wetlands' . . . within the phrase 'the waters of the United States.'" 547 U.S. at 741 (citation omitted). In the plurality's view, "*SWANCC* found such ecological considerations irrelevant to the question whether physically isolated waters come within the Corps' jurisdiction," because the coverage inquiry for the "[i]solated ponds" at issue in that case "presented no boundary-drawing problem that would have justified the invocation of ecological factors." *Id.* at 741–742. Contrary to the *Rapanos* plurality's suggestion, the Court in *SWANCC* did not hold that the particular "ecological considerations upon which the Corps relied in *Riverside Bayview*," 547 U.S. at 741—*i.e.*, the potential importance of wetlands to the quality of adjacent waters—were irrelevant to Clean Water Act jurisdiction. Rather, the Court held that a different ecological concern, namely the potential use of the isolated ponds as habitat for migratory birds, could not justify treating those ponds as "waters of the United States." *See* 531 U.S. at 164–165, 171–172. That ecological concern was not cognizable because it was unrelated to "what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made." *Id.* at 172 (citation omitted).

Aside from its mistaken reliance on *Riverside Bayview* and *SWANCC,* the *Rapanos* plurality did not attempt to ground the relatively permanent standard in the Clean Water Act's text or history. *See* 547 U.S. at 739–742. And limiting Clean Water Act coverage to wetlands with a continuous surface connection would affirmatively undermine the Act's purpose by creating an illogical jurisdictional gap. It would categorically exclude wetlands separated from covered waters by a dike or similar barrier, even if they are closely connected by subsurface flow or periodic floods, regardless of such wetlands' ecological importance to covered waters nearby and downstream. The agencies have concluded that overwhelming scientific evidence shows that such wetlands may significantly affect paragraph (a)(1) waters. *See* Science Report 4–20 to 4–38; Technical Support Document section III.B.

Additionally, the relatively permanent standard was not briefed in *Rapanos. See* 547 U.S. at 800 (Stevens, J., dissenting). And the plurality's terse discussion of the issue did not elaborate on either aspect of that standard in any detail. The plurality stated that "relatively permanent" does not necessarily exclude waters "that might dry up in extraordinary circumstances, such as drought" or "*seasonal* rivers, which contain continuous flow during some months of the year but no flow during dry months." 547 U.S. at 732 n.5 (emphasis in original). The *Rapanos* plurality distinguished a "continuous surface connection" from "an intermittent, physically remote hydrologic connection," but gave little further guidance on the application of its test. *Id.* at 742 (plurality opinion). As long as the relatively permanent standard is understood as a useful but not exclusive standard for Clean Water Act coverage, it has not created arbitrary and harmful results.

If the relatively permanent standard were the sole standard, a small surface connection would suffice, but the presence of a levee to protect a river and its adjacent wetlands could strip the wetlands of Clean Water Act coverage since, under the relatively permanent standard, a human-made barrier such as a levee means that there is not a continuous surface connection between the river and the wetlands. This result would be irrational and contrary to the objectives of the statute. The Mississippi River, for example, features an extensive levee system built to prevent flooding. The Upper Mississippi Valley alone includes approximately 17,000 kilometers (more than 10,000 miles) of levees. Technical Support Document section III.B.ii.2. Those levees would preclude Clean Water Act coverage under the relatively permanent standard even though adjacent wetlands are often a necessary part of the flood-control project—detaining floodwaters to protect surrounding and downstream communities—and even though the wetlands maintain a hydrologic connection to the river system. *Cf.* R. Daniel Smith & Charles V. Klimas, Eng'r Rsch. & Dev. Ctr., A Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing Wetland Functions of Selected Regional Wetland Subclasses, Yazoo Basin, Lower Mississippi River Alluvial Valley 47, 48–49 (April 2002).

More broadly, the relatively permanent standard's continuous surface connection requirement could make loss of Clean Water Act jurisdiction a consequence of building a road, levee, or other barrier—even if the construction had little or no effect on the interdependent relationship between a wetland and a neighboring water. That could create perverse incentives to build or modify such barriers in a manner aimed either at destroying or preserving Federal jurisdiction.

Further, as discussed above, Congress declined to narrow the scope of "waters of the United States" when it amended the Clean Water Act in 1977. The relatively permanent standard amends the Clean Water Act to limit its scope in ways that Congress has considered doing but has repeatedly declined to do, including through legislation introduced after the *Rapanos* decision and after promulgation of the 2020 NWPR.[61] As Justice Kennedy stated:

[61] *See, e.g.,* Navigable Waters Protection Act, S. 2567, 117th Cong. (2021) (proposing to codify the 2020 NWPR as Federal legislation); Define WOTUS Act, S. 2356, 116th Cong. (2019) (proposing to revise the Clean Water Act to define "navigable waters" to include the territorial seas, interstate waters used in the transport of interstate or foreign commerce, and waters meeting the *Rapanos* plurality's standard); S.J. Res. 22, 114th Cong. (2015) (proposing to nullify the 2015 Clean Water Rule); Defense of Environment and Property Act, H.R. 3377, 113th Cong. (2013) (proposing to revise the Clean Water Act to limit "waters of the United States" to navigable-in-fact waters and "permanent or continuously flowing bodies of water that form geographical features commonly known as streams,

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"To be sure, Congress could draw a line to exclude irregular waterways, but nothing in the statute suggests it has done so. Quite the opposite." 547 U.S. at 770.

Finally, the agencies have consistently construed *Rapanos* to mean that a water is jurisdictional under the Clean Water Act if it meets either the relatively permanent standard or the significant nexus standard. The 2020 NWPR, however, interpreted the statute to primarily find waters jurisdictional only if they met the relatively permanent standard, as that standard was specifically interpreted in the 2020 NWPR. The 2020 NWPR argued that it reflected both the plurality and Kennedy opinions, which it characterized as having "sufficient commonalities . . . to help instruct the agencies on where to draw the line between Federal and State waters." 85 FR 22250, 22268 (April 21, 2020). The opinions have important differences, however. Justice Kennedy looked to the existence of a significant nexus between waters at issue and traditional navigable waters, whereas the plurality held that "waters of the United States" is limited to "relatively permanent" waters connected to traditional navigable waters, and wetlands with a "continuous surface connection" with those waters. *Rapanos,* 547 U.S. at 742. Justice Kennedy rejected these two limitations in the plurality as "without support in the language and purposes of the Act or in our cases interpreting it." *Id.* at 768; *see also id.* at 776 ("In sum the plurality's opinion is inconsistent with the Act's text, structure, and purpose."). Yet the plurality's limitation of jurisdiction to "relatively permanent" waters and those with a "continuous surface connection" to those waters pervades the 2020 NWPR. *See* 85 FR 22338–39; *see also* 2020 NWPR regulatory text at 33 CFR 328.3(a), (c)(1), (c)(6), (c)(12). The 2020 NWPR disregards the significant nexus standard, *see generally* 85 FR 22270, 22338–39 (April 21, 2020); 33 CFR 328.3, and, in doing so, restricted the scope of the statute using limitations Justice Kennedy viewed as anathema to the purpose and text of the Clean Water Act. For the reasons articulated throughout sections IV.A and IV.B of this preamble, the agencies reject the 2020 NWPR's interpretation of "waters of the United States" as inconsistent with the objective of the Clean Water Act, the science, and the case law.

While the relatively permanent standard is administratively useful and includes waters that have important effects on the water quality of paragraph (a)(1) waters, the standard excludes waters that properly fall within the Clean Water Act's protections. As a result, this rule's incorporation of jurisdictional limitations based upon the relatively permanent standard and the significant nexus standard reflects the text of the statute as a whole. Thus, with this rule, the agencies properly fulfill their congressionally delegated responsibility to construe "waters of the United States" in a manner that advances the objective of the Act.

iii. Fact-Based Standards for Determining Clean Water Act Jurisdiction Are Appropriate

The agencies have the discretion to consider defining waters as jurisdictional on a categorical basis where scientifically and legally justified (for example in this rule, paragraph (a)(1) waters and their adjacent wetlands) or a case-specific, fact-based approach (for example, in this rule, tributaries and their adjacent wetlands that meet the significant nexus standard or relatively permanent standard). While the latter does not necessarily provide the same certainty as defining waters as jurisdictional by category, case-specific determinations of the scope of Clean Water Act jurisdiction are not unusual—in fact, they are the norm. In the Supreme Court's most recent decision addressing a question about the jurisdictional scope of the Clean Water Act, although not the scope of "waters of the United States," the Court established a standard for determining jurisdiction that does not establish bright lines marking the bounds of Federal jurisdiction. Instead, like the significant nexus standard, the standard in *Maui* requires an inquiry focused on the specific facts at issue and is guided by the purposes Congress sought to achieve under the Clean Water Act. In *Maui,* the Supreme Court considered whether discharges to groundwater that reach navigable waters are jurisdictional under the Clean Water Act and thus subject to the Act's section 402 permitting program. The Court held that "the statute requires a permit when there is a direct discharge from a point source into navigable waters or when there is the *functional equivalent of a direct discharge.*" *Maui,* 140 S. Ct. at 1476. The Court explained that "[w]e think this phrase best captures, in broad terms, those circumstances in which Congress intended to require a federal permit." *Id.* The Court further explained that, in applying its broadly worded standard, "[t]he object in a given scenario will be to advance, in a manner consistent with the statute's language, the statutory purposes that Congress sought to achieve." *Id.* The Court recognized that the difficulty with its approach was that "it does not, on its own, clearly explain how to deal with middle instances," but reasoned that "there are too many potentially relevant factors applicable to factually different cases for this Court now to use more specific language." *Id.* The Court enumerated a series of factors relevant to determining whether a discharge is the "functional equivalent" of direct discharge, including the time between when the discharge occurs and when the pollutants reach the navigable water, the distance the pollutants travel to the navigable water, the nature of the material through which the pollutant travels, the extent to which the pollutant is diluted or chemically changed as it travels, the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source, the manner by or area in which the pollutant enters the navigable waters, and the degree to which the pollution (at that point) has maintained its specific identity. *Id.* at 1476–77.

The Supreme Court's "functional equivalent" standard has several key characteristics in common with the significant nexus standard and the agencies' approach in this rule. Both standards require an analysis focused on the specific facts at issue in a particular instance. Under the "functional equivalent" standard, factors that may be relevant, depending on the circumstances of a particular case, include transit time, distance traveled, the geologic substrate through which the discharges travels, the location and nature of the receiving water, and other factors. Similarly, the significant nexus standard requires consideration of scientific principles of upstream functions and effects on the integrity of paragraph (a)(1) waters and facts related to the specific waters at issue. Indeed, this rule includes a list of factors that would be considered when assessing whether waters significantly affect paragraph (a)(1) waters that is similar in nature to the factors identified by the Court that may be relevant to making a "functional equivalent" assessment. *See* section IV.C.9 of this preamble. The relatively permanent standard also

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oceans, rivers, and lakes that are connected to waters that are navigable-in-fact"); Amendment 2177, S. 3240, 112th Cong. (2012) (proposing to amend an appropriations bill to limit the Clean Water Act's definition of "waters of the United States" to navigable-in-fact waters and "permanent, standing or continuously flowing bodies of water that form geographical features commonly known as streams, oceans, rivers, and lakes that are connected to waters that are navigable-in-fact").

requires inquiry into specific facts about particular tributaries, wetlands, and open waters, although the inquiry generally requires less information-gathering and assessment than the significant nexus standard. The Court in *Maui* also explicitly rejected EPA's suggested approach, which established a bright line that categorically excluded all discharges to groundwater regardless of whether they reached navigable waters and instead adopted the ''functional equivalent'' analysis. 140 S. Ct. at 1474–75. The *Maui* Court's analysis underscores the agencies' concerns about the 2020 NWPR, which categorically excluded all ephemeral tributaries and wetlands that did not meet its very narrow definition in spite of their impact on the chemical, physical, and biological integrity of paragraph (a)(1) waters. In this rule, the agencies are rejecting that approach and resuming the use of the significant nexus standard to determine which waters have a sufficient impact on traditional navigable waters, the territorial seas, or interstate waters.

Finally, both the functional equivalent standard and the significant nexus standard should be applied while keeping in mind the purposes of the Clean Water Act. As the Court explained in *Maui,* ''[t]he underlying statutory objectives also provide guidance. Decisions should not create serious risks either of undermining state regulation of groundwater or of creating loopholes that undermine the statute's basic federal regulatory objectives.'' *Id.* at 1477. Likewise, Justice Kennedy explained that, when assessing the existence of a ''significant nexus'' between wetlands and navigable waters, ''[t]he required nexus must be assessed in terms of the statute's goals and purposes.'' *Rapanos,* 547 U.S. at 779.

The agencies recognize that in both *Rapanos* and *Maui,* the Supreme Court was clear that the agencies could promulgate regulations that further refine the case-specific jurisdictional tests. With this rule, the agencies have established limits that appropriately draw the boundary of ''waters of the United States'' by ensuring that, where upstream waters significantly affect the integrity of waters and the Federal interest is indisputable—the traditional navigable waters, the territorial seas, and interstate waters—Clean Water Act programs apply to ensure that the downstream waters are adequately protected (by protecting those upstream waters). This rule continues the use of case-specific jurisdictional tests but also provides needed clarity by establishing regulations that include definitions of key terms and specific exclusions. Moreover, the agencies have extensive experience making jurisdictional determinations using the relatively permanent standard and the significant nexus standard. Field staff have gained extensive familiarity and practical experience with the national and regionally specific field methods, literature, datasets, models, and tools that are required to make such determinations, resulting in increased efficiencies over time. *See* section IV.C.10 of this preamble. In addition, this rule increases clarity and implementability by streamlining and restructuring the 1986 regulations, and this preamble provides implementation guidance informed by sound science, implementation tools (including modern assessment tools), and other resources.

b. This Rule Reflects Full and Appropriate Consideration and Balancing of the Water Quality Objective in Section 101(a) and the Policies Relating to Responsibilities and Rights of Tribes and States Under Section 101(b) of the Clean Water Act

This rule reflects consideration of the statute as a whole, including the objective of the Clean Water Act and the policies of the Act with respect to the role of Tribes and States. As discussed in section IV.A.2.a of this preamble, the agencies must consider the objective of the Clean Water Act in interpreting the scope of the statutory term ''waters of the United States.'' In this rule, the agencies also consider the entire statute, including section 101(b) of the Clean Water Act, which provides that it is congressional policy to preserve the primary responsibilities and rights of States ''to prevent, reduce, and eliminate pollution, to plan the development and use . . . of land and water resources, and to consult with the Administrator in the exercise of [the Administrator's] authority'' under the Clean Water Act. 33 U.S.C. 1251(b). Determining where to draw the boundaries of Federal jurisdiction to ensure that the agencies advance Congress's objective while preserving and protecting the responsibilities and rights of the States is a matter of judgment assigned by Congress to the agencies.

The agencies find that this rule both advances the objective of the Clean Water Act in section 101(a) and respects the role of Tribes and States in section 101(b).[62] The rule appropriately draws the boundary of waters subject to Federal protection by limiting the scope to the protection of upstream waters that significantly affect the integrity of waters where the Federal interest is indisputable—the traditional navigable waters, the territorial seas, and interstate waters. Waters that do not implicate the Federal interest in these paragraph (a)(1) waters are not included within the scope of Federal jurisdiction. The scope and boundaries of the definition therefore reflect the agencies' considered judgment of both the Clean Water Act's objective in section 101(a) and the congressional policy relating to States' rights and responsibilities under section 101(b).

The agencies have carefully considered sections 101(a) and 101(b) as well as the agencies' analysis and application of these provisions in promulgating the 2020 NWPR. In several key respects, the agencies' consideration and weighing of these provisions in this rulemaking differs from the agencies' approach in the 2020 NWPR. The agencies explained in the preamble to the proposed rule why the agencies' revised approach represents a fuller and more appropriate consideration of these provisions than reflected in the 2020 NWPR, and the agencies reaffirm those positions. 86 FR 69399 (December 7, 2021). As discussed below, based on the text of section 101(b), the structure of section 101 and the Clean Water Act as a whole, Supreme Court precedent, and the history of Federal water pollution laws enacted by Congress up through the 1972 amendments, the construction of the Act in this rule fully and appropriately considers sections 101(a) and 101(b).

The policy in section 101(b) is both important and relevant to the agencies' defining an appropriate scope of ''waters of the United States.'' Consistent with the text of the statute and as emphasized by the Supreme Court, Federal jurisdiction under the Clean Water Act has limits. As explained above, Clean Water Act jurisdiction encompasses (and is limited to) those waters that significantly affect the indisputable Federal interest in the protection of the paragraph (a)(1) waters—*i.e.,* traditional navigable waters, the territorial seas, and interstate waters. And consistent with the section 101(b) policy, where protection (or degradation) of waters does not implicate this Federal interest, such waters fall exclusively within Tribal or

[62] While Clean Water Act section 101(b) does not specifically identify Tribes, the policy of preserving States' sovereign authority over land and water use is equally relevant to ensuring the primary authority of Tribes to address pollution and plan the development and use of Tribal land and water resources.

State regulatory authority should they choose to exercise it. However, there is no indication in any text of the statute that Congress established section 101(b) as the lynchpin of defining the scope of ''waters of the United States.'' Rather, the Clean Water Act's objective—restoring and maintaining the chemical, physical, and biological integrity of the nation's waters—is set forth in the first words of the first section of the statute. And the statute is designed to address that objective through a ''comprehensive'' Federal program of pollution control. Indeed, the text of section 101(b) is actually a recognition of States' authority to ''*prevent, reduce, and eliminate* pollution'' and provide support for the Administrator's exercise of his or her authority to advance the objective of the Clean Water Act.

The text of section 101(b) also expressly recognizes States' role in administering the Federal permitting programs under section 402 of the Clean Water Act:

> It is the policy of Congress that the States manage the construction grant program under this chapter and implement the permit programs under sections 1342 [402] and 1344 [404] of this title. It is further the policy of the Congress to support and aid research relating to the prevention, reduction, and elimination of pollution, and to provide Federal technical services and financial aid to State and interstate agencies and municipalities in connection with the prevention, reduction, and elimination of pollution.

Thus, the text of section 101(b) as a whole does not reflect a general policy of deference to State regulation to the exclusion of Federal regulation, which would be inconsistent with Congress's enactment of the Clean Water Act because of the failures of a statutory scheme that relied primarily on State enforcement of State water quality standards. S. Rep. No. 92–414, 92d Cong., 1st Sess. 7 (1971) (observing that prior statutes had been ''inadequate in every vital aspect''). Instead, section 101(b) sets forth a policy focused on preserving the responsibilities and rights of States to work to achieve the objective of the Act. Those rights and responsibilities are to prevent, reduce, and eliminate pollution generally, including, but not limited to, through their authority over any source of pollution subject to State law, consulting with the Administrator in the exercise of his or her Clean Water Act authority, and implementing the Act's regulatory permitting programs, in partnership and with technical and financial support from the Federal Government.

The agencies' interpretation and consideration of section 101(b) in this rule is consistent with Supreme Court precedent. The Supreme Court has described, on numerous occasions, section 101(b) as creating a partnership between the Federal and State governments in which the States administer programs under federally mandated standards and are allowed to set even more stringent standards. *See, e.g., Arkansas* v. *Oklahoma,* 503 U.S. 91, 101 (1992) (stating that the Act ''anticipates a partnership between the States and the Federal government'' to meet the ''shared objective'' in section 101(a), with the Federal Government setting pollutant discharge limitations and States implementing water quality standards for their respective waterbodies); *Int'l Paper Co.* v. *Ouellette,* 479 U.S. 481, 489–90 (1987) (describing section 101(b) as allowing the Federal Government to delegate administration of point source pollution permits to States and allowing States to establish more stringent discharge limitations than Federal requirements); *Train* v. *Colo. Pub. Interest Grp.,* 426 U.S. 1, 16 & n.13 (1976) (describing section 101(b) as providing States authority to develop permit programs and establish standards more stringent than those under the Clean Water Act); *see also City of Milwaukee* v. *Illinois,* 451 U.S. 304, 341 (1981) (Blackmun, J., dissenting) (describing section 101(b) as creating ''shared authority between the Federal Government and the Individual States'' that allows for the States to set more stringent standards than necessary by Federal law). While this rule does not directly establish or alter a Clean Water Act program, these decisions informed the agencies' deliberations because the definition of ''waters of the United States'' affects the scope of Clean Water Act programs.

The agencies have also carefully considered the policy in section 101(b) as it relates to the Clean Water Act's objective in section 101(a). The Clean Water Act's structure makes clear that section 101(a) sets forth the foundational purpose of the statute that must be achieved. First, section 101(a) is the opening section of the statute and is labelled the ''objective'' of the Clean Water Act. The agencies interpret its placement and its simple, declarative, and overarching statement as a powerful expression by Congress that merits substantial weight in defining the scope of jurisdiction for all of the Clean Water Act's regulatory programs. In contrast, section 101(b) is one of four congressional policies contained in section 101; the other three relate to seeking to ensure foreign countries take action to prevent, reduce, and eliminate pollution; reducing paperwork, duplication, and government delays; and State authority to allocate quantities of water within their jurisdictions. *See* 33 U.S.C. 1251(c), (f), (g). Just as none of those policies plays a central role in defining the scope of the Clean Water Act, neither should section 101(b) be given such prominence as to undermine Congress's stated objective. The prominently placed and single expression of the Clean Water Act's overarching objective in section 101(a) merits greater weight in the agencies' decision-making than any of the four congressional policies expressed in section 101 which, while important, appear subordinate to the objective—particularly given the statutory text and structure. To the extent there is ambiguity, the agencies have been delegated the authority to define ''waters of the United States'' and again conclude based on the statutory text and structure, and confirmed by the legislative history, that the overarching objective of the Act merits greater weight. The agencies have also thoroughly considered the other policies in section 101 of the Act, especially section 101(b) as discussed in this section of the preamble.

The remainder of the Clean Water Act's text also demonstrates how important this objective was to Congress. In the Clean Water Act itself, Congress refers to the objective of the Act approximately a dozen times, including in sections 104, 105, 117, 120, 217, 301, 303, 304, 305, 308, 319, 402, 516, 518, and 603. The repeated reference to the objective highlights the importance of the Clean Water Act's objective to the statute as a whole, supporting the agencies' giving substantial weight to this provision. Section 101(b), in contrast, is not referred to elsewhere in the Clean Water Act.

Congress itself defined the contours of how it expected the agencies to both achieve its objective in section 101(a) and implement its policy in section 101(b) through the rest of the provisions of the Clean Water Act. Notably, a narrow definition of ''waters of the United States'' would not uniformly boost State authority as that definition is foundational to the scope of all of the Clean Water Act's programs, including those in which the States are assigned authority. Indeed, in implementing Clean Water Act regulatory requirements, States can have more powerful and holistic tools than they would have in implementing State-only laws and regulations. For example,

section 401 requires State certification for federally licensed projects within a State's borders. A narrow definition of ''waters of the United States'' would thus actually *limit* States' ability to protect waters within their borders. Similarly, a narrow definition would limit the ability of a State to provide input during the permitting process for out-of-state section 402 and 404 permits that may affect its waters. *See* 33 U.S.C. 1341, 1342(b), 1344(h)(1)(E).

The agencies' careful balancing of section 101(a) and 101(b) in this rule is also informed by and consistent with the Court's decision in *SWANCC,* wherein the Court stated: ''Congress chose to 'recognize, preserve, and protect the primary responsibilities and rights of States . . . to plan the development and use . . . of land and water resources. . . .' We thus read the statute as written to avoid the significant constitutional and federalism questions.'' 531 U.S. at 174 (citing 33 U.S.C. 1251(b)). Justice Kennedy further explained in *Rapanos:* ''In *SWANCC,* by interpreting the Act to require a significant nexus with navigable waters, the Court avoided applications—those involving waters without a significant nexus—that appeared likely, as a category, to raise constitutional difficulties and federalism concerns.'' 547 U.S. at 776. Likewise here, this rule—by limiting jurisdiction only to those waters that significantly affect the integrity of waters where the Federal interest is indisputable (traditional navigable waters, the territorial seas, and interstate waters)—avoids constitutional and federalism concerns.

Under the Commerce Clause, Congress can regulate: (1) the channels of interstate commerce; (2) persons or things in interstate commerce; and (3) activities that substantially affect interstate commerce. *United States* v. *Lopez,* 514 U.S. 549, 558–59 (1995). Regulation of ''waters of the United States'' as interpreted by this rule is a valid exercise of Congress's power under at least the first *Lopez* category. It is a well-settled proposition that Congress's power to regulate channels of interstate commerce also includes the power to adopt ''appropriate and needful control of activities and agencies which, though intrastate, affect that commerce.'' *Rapanos,* 547 U.S. at 782–83 (citing *Oklahoma ex rel. Phillips* v. *Guy F. Atkinson Co.,* 313 U.S. 508, 525–26 (1941)). Traditional navigable waters are squarely within Congress's power to regulate under its authority over the channels of interstate commerce. And ''[i]t has long been settled that Congress has extensive authority over this Nation's waters under the Commerce Clause'' as channels of interstate commerce. *See Kaiser Aetna* v. *United States,* 444 U.S. 164, 173 (1979). Indeed, Congress has enacted ''numerous laws touching interstate waters.'' *City of Milwaukee,* 406 U.S. at 101. Congress has broad power to keep the channels of commerce free from injurious uses. *See, e.g., Pierce Cnty.* v. *Guillen,* 537 U.S. 129, 146–47 (2003); *Lopez,* 514 U.S. at 558; *Perez* v. *United States,* 402 U.S. 146, 150 (1971); *Caminetti* v. *United States,* 242 U.S. 470, 491 (1917); *The Lottery Case (Champion* v. *Ames),* 188 U.S. 321, 346–47 (1903). Thus, courts have recognized that the power over traditional navigable waters as channels of commerce includes ''the power to regulate waters to limit pollution, prevent obstructions to navigation, reduce flooding, and control watershed development.'' *United States* v. *Hubenka,* 438 F.3d 1026, 1032 (10th Cir. 2006) (citations omitted). As noted earlier, Congress directed that the Clean Water Act ''be given the broadest possible constitutional interpretation,'' S. Conf. Rep. No. 92–1236, 92d Cong., 2d Sess. 144 (1972), and the ''Commerce Clause [is] broad enough to permit congressional regulation of activities causing air or water pollution, or other environmental hazards that may have effects in more than one State.'' *Hodel* v. *Va. Surface Mining & Reclamation Ass'n,* 452 U.S. 264, 282 (1981). The Supreme Court has stated that the term ''navigable'' must be given some meaning in defining ''waters of the United States.'' *SWANCC,* 531 U.S. at 172; *Rapanos,* 547 U.S. at 779 (Kennedy, J., concurring in the judgment). The agencies' construction of the Clean Water Act does that by defining ''waters of the United States'' to include traditional navigable waters, the territorial seas, and interstate waters, and those waters that significantly affect those waters. But while Congress was utilizing only one prong of its Commerce Clause authority, that prong is nevertheless broad. Indeed, ''there is no reason to believe Congress has less power over navigable waters than over other interstate channels,'' such that Congress cannot regulate non-navigable waters in order to protect water quality in traditional navigable waters. *United States* v. *Deaton,* 332 F.3d 698, 707 (4th Cir. 2003). This rule and the significant nexus standard are squarely within the prong of Commerce Clause authority that Congress utilized in enacting the Clean Water Act and within the authority Congress delegated to the agencies under the Act. Both the rule and the standard are based on protecting traditional navigable waters, the territorial seas, and interstate waters from the effects of upstream pollution.

Finally, in considering sections 101(a) and 101(b) for purposes of interpreting the scope of ''waters of the United States,'' the agencies conclude that it is important to consider the statutory history that gave rise to this structure. Indeed, the agencies recognize that in passing the Federal Water Pollution Control Act Amendments of 1972, Congress was not acting on a blank slate—it was amending existing law that had primarily provided for States to establish water quality standards for a subset of waters. Water Quality Act of 1965, Public Law 89–234, 79 Stat. 903 (1965). Congress found the previous statute's focus on States' establishment and administration of water quality standards insufficient for the task of upgrading and protecting the quality of America's waters because States were lagging in establishing such standards and there was ''an almost total lack of enforcement.'' S. Rep. 92–414 (1971) at 5. The Clean Water Act was enacted to address these shortcomings after ''two of the important rivers [in the Sixth] circuit, the Rouge River in Dearborn, Michigan, and the Cuyahoga River in Cleveland, Ohio, reached a point of pollution by flammable materials in the last ten years that they repeatedly caught fire.'' *United States.* v. *Ashland Oil & Transp. Co.,* 504 F.2d 1317, 1326 (6th Cir. 1974). With the 1972 amendments, Congress adopted an entirely new approach to water pollution control—a prohibition of discharges of pollutants unless authorized by the Clean Water Act and a new, comprehensive, Federal regulatory scheme grounded in technology-based effluent standards applied uniformly across industries of the same type. ''The Committee recommends the change to effluent limits as the best available mechanism to control water pollution. With effluent limits, the Administrator can require the best control technology.'' S. Rep. 92–414 at 8. Congress also viewed the prohibition on discharges of pollutants unless authorized under the Act as ''establish[ing] a direct link between the Federal government and each industrial source of discharge into the navigable waters.'' *Id.* Thus, Congress viewed the Clean Water Act as a change from previous laws that centered on States and State water quality standards to a system based on a prohibition of discharges of pollutants to waters unless permitted in accordance with a Federal regulatory scheme and technology standards established by EPA. Tribes

and States play a vital role in the implementation and enforcement of the Clean Water Act, and this rule does not change that framework. Instead, this rule reinforces that framework by establishing limitations that reflect careful consideration of how best to identify those waters for which Federal regulation is necessary to ensure the protection of the waters at the core of Congress's authority and interest and those for which it is not.

In the context of the scope of ''waters of the United States,'' the Court stated that Congress ''intended to repudiate limits that had been placed on federal regulation by earlier water pollution control statutes and to exercise its powers under the Commerce Clause to regulate at least some waters that would not be deemed 'navigable' under the classical understanding of that term.'' *Riverside Bayview,* 474 U.S. at 133. More recently, the Supreme Court in *Maui* also noted that: ''Prior to the Act, Federal and State Governments regulated water pollution in large part by setting water quality standards. The Act restructures federal regulation by insisting that a person wishing to discharge *any* pollution into navigable waters first obtain EPA's permission to do so.'' 140 S. Ct. at 1468 (citations omitted).

With respect to States' responsibilities and rights under section 101(b), Justice Kennedy in *Rapanos* cited State *amici* briefs that ''note[d], among other things, that the Act protects downstream States from out-of-state pollution that they cannot themselves regulate.'' 547 U.S. at 777. Indeed, the Supreme Court has recognized that this is an important aspect of the Clean Water Act's passage. *City of Milwaukee* involved alleged discharges of inadequately treated sewage from Milwaukee, Wisconsin, sewer systems directly into Lake Michigan, which also borders Illinois. The *City of Milwaukee* Court noted that prior to passage of the Clean Water Act, these discharges would have had to be resolved through litigation, in which the courts must apply ''often vague and indeterminate nuisance concepts and maxims of equity jurisprudence.'' 451 U.S. at 317. The Clean Water Act, however, replaced this unpredictable and inefficient approach with ''a comprehensive regulatory program supervised by an expert administrative agency,'' *id.,* including a ''uniform system of interstate water pollution regulation,'' *Arkansas* v. *Oklahoma,* 503 U.S. 91, 110 (1992).

An overly narrow definition of jurisdictional waters would threaten a return to pre-1972 regime, would exclude from Federal protection waters that significantly affect paragraph (a)(1) waters, and would risk removing from the statutory scheme instances of interstate pollution the 1972 amendments were designed in part to address. Nationwide pollution controls are critical to protecting water quality in downstream States because downstream States have limited ability to control water pollution sources in upstream States. *See Int'l Paper Co.* v. *Ouellette,* 479 U.S. at 490–91. Several commenters stated that, under the 2020 NWPR, certain States were subject to harm from increased pollution flowing through interstate waters from upstream States. In addition, commenters noted that the water quality in States bordering the Great Lakes depended on adequate protection in other Great Lakes States, some of which removed clean water regulations following promulgation of the 2020 NWPR. The consequences of water pollution discharged in one State and flowing to another are also economic in nature. Such pollution also destroys or diminishes the value of water to ''public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other purposes'' protected by the Clean Water Act. 33 U.S.C. 1313(c)(2)(A).

Moreover, an overly narrow definition of ''waters of the United States'' would substantially impinge upon States' responsibilities and rights under section 401 of the Clean Water Act. It is only through that provision of the Act that States have the authority to grant, deny, or waive certification of proposed Federal licenses or permits that may discharge into waters of the United States.

By promulgating a rule interpreting the Clean Water Act to cover waters that meet the relatively permanent standard or the significant nexus standard, the agencies have appropriately construed the Act to protect those waters necessary to protect the integrity of traditional navigable waters, the territorial seas, and interstate waters, while leaving regulatory authority over all the waters that do not have the requisite connection to paragraph (a)(1) waters exclusively to the Tribes and States. This construction respects the statutory history that gave rise to the Clean Water Act and gives effect to the comprehensive nature of the Act, its objective, and the many programs and policies affected by the scope of ''waters of the United States'' designed to meet that objective. This definition also ensures that States have sole authority over waters that do not significantly affect the paragraph (a)(1) waters clearly protected by the Act.

As discussed elsewhere, this rule defines ''waters of the United States'' to include tributaries, adjacent wetlands, and paragraph (a)(5) waters that meet the relatively permanent or significant nexus standards (*see* section IV.C of this preamble). This rule advances the Clean Water Act's objective by helping restore and maintain the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters—waters of longstanding and indisputable Federal interest—by protecting them from degradation of upstream waters that significantly affect them. At the same time, consistent with section 101(b), this rule recognizes, preserves, and protects the rights and responsibilities of Tribes and States by leaving within their purview all waters that do not significantly affect the paragraph (a)(1) waters of paramount Federal interest. The specific jurisdictional standards in this rule therefore bear a relationship to the nature and extent of the Federal and Tribal and State interests at play. This line-drawing highlights the agencies' deliberate and due consideration of sections 101(a) and 101(b) in developing this rule.

4. This Rule Is Both Generally Familiar and Implementable

As described above in section IV.A of this preamble, the agencies in this rule are interpreting ''waters of the United States'' to mean the waters defined by the familiar 1986 regulations, with amendments to reflect the agencies' determination of the statutory limits on the scope of ''waters of the United States'' informed by the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court precedent, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining ''waters of the United States.'' It also reflects consideration of extensive public comment.

The agencies have extensive experience implementing the pre-2015 regulatory regime, as described further below in this section, and this experience will assist the agencies in implementing this rule. The agencies' approach to implementation of the relatively permanent and significant nexus standards is broadly consistent with the pre-2015 regulatory regime, but the agencies have clarified and refined both the regulatory text and the guidance on how the agencies intend to implement these standards in order to promote consistent Clean Water Act protections for waters. For additional

clarity, this rule includes a definition of ''significantly affect'' for purposes of applying the significant nexus standard. *See* section IV.C of this preamble.

Additionally, the agencies are codifying the two familiar and longstanding exclusions from the definition of ''waters of the United States'' for prior converted cropland and waste treatment systems and adding exclusions for features that were generally considered non-jurisdictional under the pre-2015 regulatory regime (*see* section IV.C.7 of this preamble). The features excluded under this rule were excluded by regulation or generally considered non-jurisdictional in practice under the pre-2015 regulatory regime and each of the subsequent rules defining ''waters of the United States.''

The agencies have extensive experience implementing the 1986 regulations. Moreover, the scientific and technical information available to inform the significant nexus analysis and identify waters that meet the relatively permanent standard has also markedly improved over time and become more readily available since the agencies first started implementing both standards. *See* section IV.G of this preamble. Since the Court's decision in *Rapanos,* the agencies have gained more than a decade of experience implementing the 1986 regulations consistent with the relatively permanent standard and the significant nexus standard under three different presidential Administrations, beginning with the *Rapanos* Guidance issued in 2007. The agencies have continued to implement the 1986 regulations consistent with the *Rapanos* Guidance in response to court decisions.

The agencies repromulgated the 1986 regulations in the 2019 Repeal Rule and implemented those rules nationwide until June 22, 2020, when the 2020 NWPR became effective. The agencies explained that with the 2019 Repeal Rule, they intended to ''restore the regulatory text that existed prior to the 2015 Rule'' and that the agencies would ''implement the pre-2015 Rule regulations informed by applicable agency guidance documents and consistent with Supreme Court decisions and longstanding agency practice.'' 84 FR 56626 (October 22, 2019). The agencies concluded that this approach ''will provide greater regulatory certainty and national consistency while the agencies consider public comments on the proposed [2020 NPWR].'' *Id.* at 56660. To further justify a return to the 1986 framework, the agencies noted that ''[t]he agencies, their co-regulators, and the regulated community are . . . familiar with the pre-2015 Rule regulatory regime and have amassed significant experience operating under those pre-existing regulations. Agency staff in particular have developed significant technical expertise in implementing the 1986 regulations.'' *Id.* The 2019 Repeal Rule would thus ''provide greater certainty by reinstating nationwide a longstanding regulatory framework that is familiar to and well-understood by the agencies, States, Tribes, local governments, regulated entities, and the public.'' *Id.* at 56661. Indeed, in their comments to the 2019 Repeal Rule proposal, a number of regulators and regulated parties alike expressed support for returning to the pre-2015 regulations, as implemented following *SWANCC* and *Rapanos,* due in part to their experience and familiarity with that regime.[63]

Further, in responding to comments on the 2019 Repeal Rule proposal asserting that the agencies should not return to the pre-2015 regulatory regime because that regime would reduce regulatory certainty due to the prior regime's reliance on case-specific significant nexus determinations, the agencies explained that ''[f]ollowing the Supreme Court's decisions in *SWANCC* and *Rapanos* . . . the Corps published a guidebook to assist district staff in issuing approved jurisdictional determinations. In particular, the guidebook outlines procedures and documentation used to support significant nexus determinations. This guidebook has been and continues to be publicly available and will continue to serve as a resource in issuing jurisdictional determinations under this final rule.''[64] 84 FR 56660 (October 22, 2019). Even after the 2020 NWPR's June 22, 2020, effective date, the agencies continued to implement the 2019 Repeal Rule consistent with the *Rapanos* Guidance in Colorado until April 2021 due to litigation barring implementation of the 2020 NWPR in that State.

Like the past three presidential Administrations, courts have also found that the 1986 regulations, implemented consistent with the *Rapanos* standards, provide an appropriate regulatory framework to implement the Clean Water Act. Indeed, in staying the 2015 Clean Water Rule nationwide, the Sixth Circuit found that returning to the ''familiar, if imperfect, pre-Rule regime'' was the best path forward pending judicial review of the 2015 Clean Water Rule. *In re EPA & Dep't of Def. Final Rule,* 803 F.3d 804, 808 (6th Cir. 2015), *vacated,* 713 Fed. Appx. 489 (6th Cir. 2018). In doing so, the court recognized that returning to the status quo meant returning to the pre-2015 regulatory *regime*—not the 1986 regulations. *See id.* at 806 (finding that ''the status quo at issue is the pre-[2015 Clean Water Rule] regime of federal-state collaboration that has been in place for several years, following the Supreme Court's decision in *Rapanos*''). Likewise, in vacating the 2020 NWPR, the Arizona district court found that returning to the pre-2015 regulatory regime would provide for a regime that ''is familiar to the Agencies and industry alike.'' *See Pascua Yaqui Tribe* v. *EPA,* 557 F. Supp. 3d 949, 956 (D. Ariz. 2021).

The agencies acknowledge that the need for case-specific analyses will continue under this rule for certain jurisdictional determinations, potentially raising some timeliness and consistency issues that the agencies' rules in 2015 and 2020 were designed, in part, to reduce. The agencies' experience suggests that the number of these analyses will be limited. Historically, only approximately 12% of resources assessed in approved jurisdictional determinations using the *Rapanos* Guidance required a significant nexus analysis.[65] And those significant nexus assessments often resulted in a conclusion that the resource, either alone or in combination with similarly situated waters, did not meet the significant nexus standard. Moreover, the agencies have provided more clarity in this rule by: adding limitations to the scope of the definition to the rule text; adding a definition of ''significantly affect'' that identifies the

[63] *See, e.g.,* comments submitted by American Water Works Association (August 13, 2018) (Docket ID: EPA–HQ–OW–2017–0203–15559); comments submitted by North Dakota's Department of Agriculture (July 25, 2018) (Docket ID: EPA–HQ–OW–2017–0203–15541); comments submitted by the Office of the Governor of Utah (August 9, 2018) (Docket ID: EPA–HQ–OW–2017–0203–15202) (''Recodification of the regulations that existed prior to the 2015 Rule will provide continuity and certainty for regulated entities, States, the agencies' staff, and the American public.'').

[64] For convenience, EPA decisions on jurisdiction are referred to as jurisdictional determinations throughout this document, but such decisions are not ''approved jurisdictional determinations'' as defined and governed by the Corps' regulations at 33 CFR 331.2.

[65] It is the agencies' expectation that the number of significant nexus analyses will increase under this rule due to the assessment of paragraph (a)(5) waters under the significant nexus standard, but the agencies do not expect a corresponding increase in positive jurisdictional determinations. *See* section IV.C.6 of this preamble for discussion of the agencies' intentions for implementation of paragraph (a)(5).

functions and factors to be evaluated as part of a significant nexus analysis; adding exclusions to the rule; restructuring and streamlining the 1986 regulations; and drawing on more than a decade of post-*Rapanos* implementation experience to provide additional implementation guidance and resources. These improvements, taken together, substantially reduce any inefficiencies that may be presented by the rule's case-specific approach. Finally, as discussed above, the nature of the Clean Water Act's requirements in general can be a fact-based, case-specific inquiry and is not limited to whether a water meets the definition of ''waters of the United States.'' The inquiry is an important one, for both discharges and the environment.

This rule is both consistent with the Clean Water Act's statutory text and purposes and its framework is longstanding and familiar to regulated parties and regulators alike. Moreover, all definitions of ''waters of the United States,'' including the 2020 NWPR, require some level of case-specific analysis. Implementation of this rule will be aided by improved and increased scientific and technical information and tools that both the agencies and the public can use to determine whether waters are ''waters of the United States'' (*see* section IV.G of this preamble). Accordingly, the agencies have concluded that this rule is consistent with the Clean Water Act and that its clarity and familiar regulatory framework improve its implementability.

Through the various rulemakings and court decisions relating to the definition of ''waters of the United States'' since the *Rapanos* decision in 2006, the agencies have continued implementing the 1986 regulations consistent with the *Rapanos* standards nationwide or in numerous States across the country for various periods of time, learning as they did so. This experience has allowed the agencies to further develop expertise in implementing this regime. The agencies, most often the Corps, have made hundreds of thousands of Clean Water Act approved jurisdictional determinations since the issuance of the *Rapanos* Guidance. Of those, tens of thousands have required a case-specific significant nexus determination. The agencies have made such determinations in every State in the country as well as in the U.S. territories.

With field staff located in 38 Corps District offices and 10 EPA regional offices, the agencies have over a decade of nationwide experience in making decisions regarding jurisdiction under the pre-2015 regulatory regime consistent with the relatively permanent standard and the significant nexus standard. Significant nexus determinations have been made affirmatively for waters ranging from an ephemeral stream that flows directly into a traditional navigable water used extensively for recreational boating and fishing, to wetlands adjacent to a perennial tributary and separated by a levee, to a non-relatively permanent stream that provides flow to a drinking water source, to a group of floodplain wetlands that provide important protection from floodwaters to downstream communities alongside the traditional navigable water, to headwater mountain streams that provide high quality water that supplies baseflow and reduces the harmful concentrations of pollutants in the main part of the river below. The agencies have also made many findings of no jurisdiction under the 1986 regulations when they concluded the waters in question did not meet either the relatively permanent standard or the significant nexus standard as implemented by the *Rapanos* Guidance.

Through this experience, the agencies developed wide-ranging technical expertise in assessing the hydrologic flowpaths along which water and materials are transported and transformed and that determine the degree of chemical, physical, or biological connectivity and effects to paragraph (a)(1) waters. The agencies have also become deeply familiar with the variations in climate, geology, and terrain within and among watersheds that affect the functions (such as the transformation or filtering of pollutants) performed by streams, open waters, and wetlands for paragraph (a)(1) waters.

The agencies utilize many tools and many sources of information to help support decisions on jurisdiction, including U.S. Geological Survey (USGS) and State and local topographic maps, aerial photography, satellite imagery, gage data, soil surveys, National Wetlands Inventory maps, floodplain maps, watershed studies, modeling tools, scientific literature and references, and field work. As discussed further in section IV.G of this preamble, these tools have undergone important technological advances and have become increasingly available since the *Rapanos* decision. For example, USGS, State, and local stream maps and datasets, aerial photography, gage data, watershed assessments, monitoring data, and field observations are often used to help assess the flow contributions of tributaries, including intermittent and ephemeral streams, to downstream traditional navigable waters, the territorial seas, or interstate waters. Similarly, floodplain and topographic maps from Federal, State, and local agencies, modeling tools, and field observations can be used to assess how wetlands are storing floodwaters that might otherwise affect the integrity of paragraph (a)(1) waters. Further, the agencies utilize the large body of scientific literature regarding the functions of tributaries, including tributaries with ephemeral, intermittent, and perennial flow, and of wetlands and open waters to inform their significant nexus analyses. In addition, the agencies have experience and expertise from decades of making decisions on jurisdiction that considered hydrology, ordinary high water mark (OHWM) and its associated indicators (*see* section IV.C.8.d of this preamble), biota, and other technical factors in implementing Clean Water Act programs. The agencies' immersion in the science, along with the practical expertise developed over more than a decade of case-specific determinations across the country, have helped the agencies determine which waters have a significant nexus and where to draw boundaries demarking the ''waters of the United States.''

Regulated entities and other interested parties also have substantial experience with the 1986 regulations and the two *Rapanos* standards. As the agencies have developed their expertise in implementing this regime, so have State and Tribal co-regulators and regulated entities, as well as interested citizens who may play an important role in the Act's permitting process. Individuals uncertain about the status of waters on their property may obtain a jurisdictional determination from the Corps. The Corps does not charge a fee for this service. *See* 33 CFR 325.1; Regulatory Guidance Letter 16–01 (2016).

Due in part to the familiarity of this regime, this rule will not undermine serious reliance interests in an alternative regime, including the 2020 NWPR, which the agencies have not implemented for over a year following the Arizona district court's August 30, 2021 vacatur order. The Supreme Court has held that agencies' changes in position do not require any reasons ''more substantial than those required to adopt a policy in the first instance.'' *FCC* v. *Fox Television Stations, Inc.,* 556 U.S. 502, 514 (2009). The Court acknowledged that if an agency's ''prior policy has engendered serious reliance interests,'' *id.* at 515, those interests cannot be ignored. However, the Court emphasized that even in the case of ''serious reliance interests,'' ''further

justification'' beyond a ''reasoned explanation . . . for disregarding facts and circumstances that underlay or were engendered by the prior policy'' is not needed. *Id.* at 515–16. This rule does not implicate serious reliance interests because, first, the agencies are codifying a rule similar to the definition currently being implemented nationwide. As discussed in section V.A of this preamble, this rule will establish a regime that is generally comparable to current practice, and this rule is expected to generate *de minimis* costs and benefits as compared to the pre-2015 regulatory regime that the agencies are currently implementing. Second, members of the public, Tribes, and States have been aware that the agencies might reconsider the 2020 NWPR since January 2021 and have had many opportunities to share their views with the agencies. President Biden indicated on his first day in office, following the issuance of Executive Order 13990, that this administration would be reviewing the 2020 NWPR and deciding whether to revise or replace the rule. *See* section III.B.5 of this preamble. On June 9, 2021, the agencies announced their intention to revise or replace the rule. The agencies subsequently embarked on an extensive stakeholder outreach process, including public meetings and federalism and Tribal consultations. *See* section III.C of this preamble. The agencies received over 32,000 recommendation letters from the public during pre-proposal outreach and over 114,000 comments on the proposed rule during the public comment period. The agencies also held a public hearing and multiple listening sessions with Tribal, State, and local governments during the public comment period to listen to feedback on the proposed rule from co-regulators and a variety of stakeholders.

Third, the 2020 NWPR was only in effect for approximately 14 months before it was vacated by the Arizona district court on August 30, 2021. *See Pascua Yaqui Tribe* v. *EPA,* 557 F. Supp. 3d 949 (D. Ariz. 2021). Less than a month later, another district court issued an order vacating the 2020 NWPR on September 27, 2021. *Navajo Nation* v. *Regan,* 563 F. Supp. 3d 1164 (D.N.M. 2021). And several other district courts remanded the 2020 NWPR without vacatur or without addressing vacatur in six additional cases, starting in July 2021.[66] Following the vacatur orders, the agencies clarified that the Corps will no longer rely on approved jurisdictional determinations issued under the 2020 NWPR in making new permit decisions—although so-called ''stand-alone'' approved jurisdictional determinations (*i.e.,* those that are *not* associated with a permit action) will not be reopened prior to their expiration date unless one of the criteria for revision is met or if the recipient requests that the Corps provide a new approved jurisdictional determination. *See* section IV.F of this preamble for further discussion of the status of approved jurisdictional determinations issued under prior rules.

Interested parties have thus had over a year to adapt to operating under the pre-2015 regulatory regime in the absence of the 2020 NWPR, including ample notice of the implications of the 2020 NWPR's vacatur on the validity of approved jurisdictional determinations issued thereunder. Moreover, as discussed in this section, members of the public are familiar with this rule's regulatory framework thereby minimizing the potential disruption of a change. Finally, even if serious reliance interests were at issue, which they are not, this rule provides a thorough and reasoned explanation for the changed definition of ''waters of the United States.''

5. Public Comments Received and Agency Responses

The agencies received numerous comments on the basis for the proposed rule, including comments about the proposal's consistency with the statute and Supreme Court decisions and about the proposal's approach to various categories of waters. The agencies have fully considered these timely comments and made changes to the rule to reflect the comments, as discussed below. This section contains summaries of these comments and the agencies' general responses; a more comprehensive response to these comments is in the response to comments document available in the docket for this rule at Docket ID No. EPA–HQ–OW–2021–0602.

a. Comments Regarding Consistency of the Proposed Rule With the Text of the Clean Water Act

Many commenters stated that the proposed rule is consistent with the Clean Water Act's objective in section 101(a) to restore and maintain the chemical, physical, and biological integrity of the nation's waters and provided multiple reasons to support that view, including the statutory text, legislative history, and science. Some commenters further asserted that the statute requires the agencies to regulate waters in addition to traditional navigable waters, the territorial seas, and interstate waters.

The agencies agree that the definition of ''waters of the United States'' must be designed to advance the objective of the Clean Water Act. For the reasons discussed in section IV.A.2 and IV.A.3 of this preamble, the agencies also interpret the Act based on factors other than the science and connectivity of waters, including the text of the statute as a whole and relevant Supreme Court decisions. Further, while the definition of ''waters of the United States'' is designed to advance the objective of restoring and maintaining the chemical, physical, and biological integrity of traditional navigable waters, the territorial seas, and interstate waters—*i.e.,* the paragraph (a)(1) waters—this rule covers additional waters that must be protected to safeguard paragraph (a)(1) waters. All ''waters of the United States'' receive the full protections of the Clean Water Act.

Commenters expressed various views on the import of the word ''navigable'' in the statutory term ''navigable waters.'' Some commenters asserted that the proposed rule did not give enough effect to the word ''navigable,'' while others suggested that the agencies' jurisdiction over ''waters of the United States'' is limited to traditional navigable waters. Further, some commenters stated that Congress intended to exercise only its traditional commerce power over navigation rather than the full extent of its authority under the Commerce Clause. In contrast, other commenters asserted that legislative history demonstrates Congress's intent to assert broad jurisdiction under the Clean Water Act beyond navigable-in-fact waters.

The agencies agree that while the Clean Water Act applies to ''navigable waters,'' Congress also broadly defined that term to include ''the waters of the United States.'' 33 U.S.C. 1362(7). The breadth of that definition reflects a deliberate choice. The relevant House bill would have defined ''navigable

[66] Order, *Pueblo of Laguna* v. *Regan,* No. 1:21–cv–00277, ECF No. 40 (D.N.M. Sept. 21, 2021) (declining to reach issue of vacatur in light of the *Pascua* decision); Order, *California* v. *Wheeler,* No. 3:20–cv–03005, ECF No. 271 (N.D. Cal. Sept. 16, 2021) (same); Order, *Waterkeeper All., Inc.* v. *Regan,* No. 3:18–cv–03521, ECF No. 125 (N.D. Cal. Sept. 16, 2021) (same); Order, *Conservation L. Found.* v. *EPA,* No. 1:20–cv–10820, ECF No. 122 (D. Mass. Sept. 1, 2021) (same); Order, *S.C. Coastal Conservation League* v. *Regan,* No. 2:20–cv–01687, ECF No. 147 (D.S.C. July 15, 2021) (remanding without vacating); Order, *Murray* v. *Wheeler,* No. 1:19–cv–01498, ECF No. 46 (N.D.N.Y. Sept. 7, 2021) (same).

waters'' as the ''navigable waters of the United States, including the territorial seas.'' H.R. Rep. No. 92–911, 92d Cong., 2d Sess. 356 (1972). But in conference the word ''navigable'' was deleted from that definition, and the conference report urged that the term ''be given the broadest possible constitutional interpretation.'' S. Conf. Rep. No. 92–1236, 92d Cong., 2d Sess. 144 (1972). Additionally, the agencies disagree that Clean Water Act jurisdiction is limited to traditional navigable waters, as this interpretation would render the Clean Water Act narrower than the Rivers and Harbors Act of 1899. Limiting Clean Water Act jurisdiction to traditional navigable waters is also contrary to the views of all nine Supreme Court Justices in *Rapanos* and would undo Congress's considered and deliberate choice to expand Clean Water Act jurisdiction beyond traditional navigable waters because it found the prior statutes limited to those waters insufficient. Indeed, the *Rapanos* plurality recognized that a wetland may be treated as a covered water if it has a continuous surface connection to a ''relatively permanent'' tributary that ''connect[s] to'' traditional navigable waters, without any further inquiry into the tributary's navigability or status as a link in a channel of commerce. 547 U.S. at 742. The plurality further observed that the 1977 Clean Water Act's authorization for States to administer the section 404 program for ''navigable waters . . . other than'' those used or suitable for use ''to transport interstate or foreign commerce,'' *id.* at 731 (quoting 33 U.S.C. 1344(g)(1)), ''shows that the Act's term 'navigable waters' includes something more than traditional navigable waters.'' *Id.* (citing *SWANCC,* 531 U.S. at 167; *Riverside Bayview,* 474 U.S. at 133). And neither Justice Kennedy nor the dissenting Justices in *Rapanos* endorsed such a jurisdictional limitation. *See id.* at 782–83 (Kennedy, J., concurring in the judgment); *id.* at 807–08 (Stevens, J., dissenting).

The agencies are mindful of the Supreme Court's decision in *SWANCC* regarding the specific Commerce Clause authority Congress exercised in enacting the Clean Water Act. The *SWANCC* Court observed that Congress signified its intent to exercise its commerce power over navigation with the statement in the Conference Report for the Clean Water Act that the conferees ''intend that the term 'navigable waters' be given the broadest possible constitutional interpretation.'' 531 U.S. at 168 n.3 (citing S. Conf. Rep. No. 92–1236, at 144 (1972)). This rule ensures that waters that either alone or in combination significantly affect the integrity of traditional navigable waters, the territorial seas, or interstate waters are protected under the Clean Water Act, and the Supreme Court has long held that authority over traditional navigable waters is not limited to either protection of navigation or authority over only the traditional navigable water. Rather, the Court has found that ''the authority of the United States is the regulation of commerce on its waters . . . [f]lood protection, watershed development, [and] recovery of the cost of improvements through utilization of power are likewise parts of commerce control.'' *United States* v. *Appalachian Elec. Power Co.,* 311 U.S. 377, 426 (1940); *see also Oklahoma ex rel. Phillips* v. *Guy F. Atkinson Co.,* 313 U.S. 508, 525–26 (1941) (''[J]ust as control over the non-navigable parts of a river may be essential or desirable in the interests of the navigable portions, so may the key to flood control on a navigable stream be found in whole or in part in flood control on its tributaries. . . . [T]he exercise of the granted power of Congress to regulate interstate commerce may be aided by appropriate and needful control of activities and agencies which, though intrastate, affect that commerce.'' (citations omitted)). The significant nexus standard included in this final rule ensures that the definition of ''waters of the United States'' remains well within the bounds of the Commerce Clause, consistent with the text of the statute and the intent of Congress, and informed by the decision in *SWANCC.*

Some commenters suggested that the agencies cannot rely on the Clean Water Act's statutory objective or on science to expand Federal jurisdiction beyond the authority granted to the agencies by Congress. However, this final rule does not establish jurisdiction beyond the scope of the Clean Water Act. Indeed, as discussed in section IV.A of this preamble, the agencies conclude that the objective of the Clean Water Act must be considered in defining ''waters of the United States'' and that consideration of the objective of the Act for purposes of a rule defining ''waters of the United States'' must include substantive consideration of the effects of a revised definition on the integrity of the nation's waters. And since the objective of the Clean Water Act is to protect the water quality of the nation's waters, this rule must be informed by science relevant to water quality, as discussed in section IV.A.2.a of this preamble. At the same time, the agencies do not interpret the objective of the Clean Water Act to be the only factor relevant to determining the scope of the Act; rather, the limitations established in this rule are based on the agencies' consideration of the text of the relevant provisions of the Clean Water Act and the statute as a whole, the scientific record, relevant Supreme Court case law, and the agencies' experience and technical expertise after more than 45 years of implementing the longstanding pre-2015 regulations defining ''waters of the United States.'' The agencies thus have established a definition of ''waters of the United States'' within the authority granted to the agencies by Congress.

Commenters also expressed various views about the import of Clean Water Act section 101(b). Some commenters asserted that the agencies must read sections 101(a) and 101(b) of the Clean Water Act together in a manner that recognizes States' traditional authority over their water resources and contended that the agencies did not adequately consider section 101(b) in developing the proposed rule. In contrast, other commenters asserted that section 101(b) is not intended to serve as a limit on Federal jurisdiction, and some of these commenters further suggested that the agencies improperly relied on section 101(b) to limit the scope of ''waters of the United States'' in the proposed rule. As discussed in section IV.A of this preamble and section V.A of the preamble to the proposed rule, the agencies have carefully, and appropriately, balanced consideration of sections 101(a) and 101(b) in deciding in the rulemaking which waters are subject to Clean Water Act jurisdiction.

Additionally, multiple commenters asserted that a water that is not subject to Federal jurisdiction does not necessarily lack environmental protections because such waters may be subject to Tribal, State, or local regulations. Relatedly, some commenters suggested that improving and maintaining water quality is best achieved through partnerships and that the agencies should work with State and local governments in developing a definition of ''waters of the United States.'' The agencies recognize that waters that are not jurisdictional under the Clean Water Act do not necessarily lack environmental protections under potential Tribal, State, or local laws. However, Congress enacted the Clean Water Act precisely because of the failures of a statutory scheme that relied primarily on State water quality standards. In 1948, Congress enacted the Federal Water Pollution Control Act, ch.